



# **REVISED SITE INVESTIGATION WORK PLAN**

## **One Hour Martinizing (Former) 301 Main Street Racine, Wisconsin**

**Prepared For:**

**BMP Realty, Inc.  
Racine, Wisconsin**

**January 10, 2024  
Project No. 1E-2109011**

**WDNR BRRTS No. 02-52-552198**



**GILES**  
ENGINEERING ASSOCIATES, INC.



# GILES

ENGINEERING ASSOCIATES, INC.

GEOTECHNICAL, ENVIRONMENTAL & CONSTRUCTION MATERIALS CONSULTANTS

- Dallas, TX
- Los Angeles, CA
- Manassas, VA
- Milwaukee, WI

January 10, 2024

Wisconsin Department of Natural Resources  
Remediation and Redevelopment Program  
Waukesha Office  
141 NW Barstow Street  
Waukesha, Wisconsin 53188

Attention: Ms. Shanna Laube-Anderson c/o  
Ms. Jennifer Meyer

Subject: Revised Site Investigation Work Plan  
One Hour Martinizing (Former)  
301 Main Street, Racine, Wisconsin 53403  
Project No. 1E-2109011  
WDNR BRRTS No. 02-52-552198; FID No. 252010990

Dear Ms. Laube-Anderson:

Giles Engineering Associates, Inc. Giles has prepared this Revised Site Investigation Work Plan in general accordance with the Wisconsin Administrative Code Ch. 716.09. We are submitting this Revised Site Investigation Work Plan to the Wisconsin Department of Natural Resources (WDNR) for their review and concurrence, prior to initiating the proposed scope of services and in response to the August 11, 2022, correspondence. The review fee was previously paid to the WDNR of \$700.00 on April 12, 2022. If there are any questions regarding the information contained herein, or if we can be of any additional service, please contact the undersigned at your convenience.

Respectfully submitted,

GILES ENGINEERING ASSOCIATES, INC.

Daniel K. Pelczar, P.G., C.P.G.  
Senior Project Manager

Kevin T. Bugel, P.G., C.P.G.  
Environmental Division Manager

Distribution: Wisconsin Department of Natural Resources  
Attn: Ms. Shanna Laube-Anderson (1 copy via electronic upload)

BMP Realty, Inc  
Attn: Jason Berry (1 via email, jberry1907@gmail.com)

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### 1.0 INTRODUCTION

#### 1.1 Objective and Purpose

Giles Engineering Associates, Inc. (Giles) has prepared this Revised Site Investigation Work Plan (Revised SIWP) on behalf of BMP Realty, Inc., the owner of the property located at 301 Main Street in the City of Racine, Racine County, Wisconsin (herein referred to as the "Site"). This Revised SIWP was prepared in response to a letter issued by the Wisconsin Department of Natural Resources (WDNR), dated August 11, 2022, and addressed to BMP Cleaners, Inc. The Site is a former dry cleaner facility that included one dry cleaning machine (DCM) that utilized and stored dry cleaning solvent (Tetrachloroethene, a.k.a., Perchloroethene or PCE).

The purpose of this Revised SIWP is to provide a written plan to specify the media to be sampled, the locations where the samples will be collected, and the methods and procedures to be employed during the remaining Site Investigation. The scope of services presented in the Revised SIWP were developed to evaluate the extent and magnitude of soil, groundwater, and sub-slab vapor contamination identified during an initial Site Investigation completed by Giles in 2021.

This Revised SIWP was prepared in general accordance with Wisconsin Administrative Code (WAC), Chapter (Ch.) Natural Resources (NR) 716.09. Upon completion of the scope of services presented in the Revised SIWP, the Site Investigation results and Giles conclusions and recommendations will be presented in a Site Investigation Report (SIR) as per the WAC Ch. NR 716.15. The SIR will also include a Conceptual Remediation/Mitigation Action Plan.

#### 1.2 Location and Setting

The 0.206-acre Site is in the NW  $\frac{1}{4}$ , of the SE  $\frac{1}{4}$ , of Section 9, Township 3 North, Range 23 East of U.S. Public Land Survey. Figure 1 illustrates the general location of the Site. The parcel number is 276-00-00-00-148-000.

The Site consists of a single-story multi-tenant building located on the southeast corner of Main Street and 3rd Street in the City of Racine. The property is surrounded by multi-story commercial buildings with residential spaces on the upper levels. The Root River is located approximately 420 feet west of the Site before it bends east and drains into Lake Michigan, approximately 1,000 feet north of the Site, and Lake Michigan's Reefpoint Marina is located approximately 640 feet to the east of the Site. It should be noted that the building is located on an incline, with the ground floor of the building being at grade to the west along Main Street and approximately 4 feet lower in elevation than the ground surface (parking lot/alleyway) east of the building. The building was not constructed with a basement or crawl space.



The former dry cleaner lease space was the northernmost unit within the on-Site building and is associated with the address 301 Main Street. The dry cleaner lease space had at one time been combined with the south adjoining tenant space that currently has an address of 303 Main Street. The dry cleaner's former PCE storage area is therefore now located within the south adjoining lease space (303 Main Street). Of the five tenant lease spaces within the building, the southernmost space 307 Main Street is currently occupied by Rise Up Piercing and Tattoo. This space is approximately 55 feet south of the former DCM and approximately 40 feet from the former PCE storage area. In addition, the next space at 305 Main St. is also occupied by Creative Flex Studio (a painting art business). This space is approximately 43 feet south of the former CDM and approximately 27 feet from the former PCE storage area. Units that are currently vacant include 301, 303 and 303.5.

## **2.0 PREVIOUS STUDIES**

AECOM completed preliminary sampling (initial site scoping) at the Site in 2008, and Giles subsequently completed an initial Site Investigation in 2021. The soil, groundwater, and sub-slab vapor from both investigations to date are summarized in Tables 1 through 3, respectively. The sample locations are shown on Figure 2, and Figures 3 through 5 include summaries of the soil, groundwater, and sub-slab vapor contamination.

### **2.1 AECOM Preliminary Sampling**

AECOM conducted initial site scoping for the Site in 2008. AECOM's Initial Site Investigation Scoping (SIS) document, dated July 23, 2008, stated that the investigation identified PCE-impacted soil in a boring completed outside the building along the east wall (named 301 Main). The sample was from the shallow interval, 1 to 2 feet below ground surface (bgs) and contained PCE above the WAC Ch. NR 720 Residual Contaminant Level (RCL) for groundwater protection. Additionally, a groundwater grab sample collected from the soil boring contained PCE and naphthalene, with the concentration of PCE exceeding the WAC Ch. NR 140 Preventative Action Limit (PAL). Groundwater is inferred to flow east or northeast based on surface topography and the presence of Lake Michigan and the Root River nearby the Site. The AECOM report is presented as Appendix A.

### **2.2 Giles Initial Site Investigation**

Giles continued the investigation with the collection of two sub-slab vapor samples within the former dry-cleaning facility in July of 2021 to evaluate whether contamination was present beneath the building. One sample was collected near the former DCM in the east portion of the lease space and one was collected in the central portion of the space. Review of the sample results indicated that PCE vapor was present beneath the building slab at concentrations that exceed the WDNR Sub-Slab Vapor Risk Screening Levels (VRSLs) for small commercial properties. Based on the findings of the initial sampling, Giles recommended collecting soil and groundwater samples to evaluate the initial extent of contamination.

Giles completed four soil borings within the former dry cleaner lease space. One soil boring was located near the former DCM (B-1), and the remaining three were located approximately 10 feet away to the northeast, southeast, and southwest (B-1A, B-1B, and B-1C, respectively). In addition, soil borings were completed on the east side of the building outside where PCE had



been detected during the initial site scoping investigation in 2008 (B-2) and to the north, east, and south (B-2A, B-2B, and B-2C, respectively).

Giles collected two soil samples from each of the soil boring. Review of the boring logs for the soil borings completed inside the building noted 11 to 12 feet of fill material consisting of brown sand to silty clay with some sand. Soil borings completed east of the building outside contained 4.5 to 6 feet of fill material. Native soil consisted of silty clay with trace amounts of gravel. Groundwater was encountered at approximately 7.5 feet below ground surface in the exterior soil borings; however, groundwater was not encountered in the soil borings completed within the building.

PCE was detected in the soil samples collected from each of the interior soil borings. Samples collected immediately below the floor slab contained PCE exceeding the WAC Ch. NR 720 soil RCLs for the protection to ground water pathway, and samples collected from the termination depth of the borings (12 to 14 feet bgs) contained PCE exceeding the WAC Ch. NR 720 Direct Contact RCLs for non-industrial properties.

The exterior boring B-2 was completed to replicate AECOM's previous boring. The shallow soil sample collected from B-2 contained PCE and Trichloroethene (TCE) exceeding their respective WAC Ch. NR 720 Direct Contact RCLs for non-industrial properties, and the sample from the deeper interval contained PCE exceeding the WAC Ch. NR 720 soil RCL for the protection to groundwater. The shallow soil samples collected from the three soil borings (B-2A through B-2C) completed surrounding B-2 contained PCE exceeding the WAC Ch. NR 720 RCL for groundwater protection, and PCE was not detected in the samples from (B-2A through B-2C) collected from the deeper intervals.

Temporary groundwater wells were installed within the interior soil borings near the DCM (BTW-1) and the exterior soil boring B-2 (BTW-2). Water did not accumulate within the interior well. The groundwater grab sample collected from BTW-2 contained PCE above the NR 140 Enforcement Standard (ES). In addition, the groundwater sample collected from BTW-2 contained Per- and polyfluoroalkyl substances (PFAS) exceeding the current Wisconsin Department of Health Services (WDHS) recommended Groundwater Standards. Currently, there are no WDNR WAC Ch. NR 140 standards for PFAS compounds at this time.

Of the sub-slab vapor samples collected, PCE exceeded the VRSL for vapor ports VP-1 and VP-2 which are located within the 301 Main St. unit. These concentrations exceeded both the residential and small commercial land use standards.

Giles soil boring logs and abandonment forms are included in Appendix B. The analytical laboratory reports for soil, groundwater and sub-slab vapor are included as Appendices C, D, and E, respectively. Giles Standard Operating Procedures is presented as Attachment F.

Based on the findings of the initial site investigations, Giles determined that additional soil, groundwater, sub-slab soil gas sampling and indoor air sampling would be needed to define the degree and extent of contamination. A detailed description of Giles investigation strategy, scope of services, and schedule to complete the SI activities are presented in the subsequent sections.



### 3.0 TECHNICAL APPROACH

Based on the results of the initial investigations, Giles intends to limit the subsequent site investigation to chlorinated volatile organic compounds (CVOCs) analysis, which includes PCE and its breakdown daughter products including: TCE, cis-1,2-dichloroethene (cis-1,2-DCE), trans-1,2-dichloroethene (trans-1,2-DCE), 1,1-dichloroethene (1,1-DCE), 1,2-dichloroethane (1,2-DCA), and vinyl chloride (VC). Low-level petroleum VOCs (PVOCs) had been detected in soil and groundwater samples collected from the parking lot east of the building; however, only one soil sample contained a petroleum compound above the WAC Ch. NR 720 RCLs. Benzene was exceeding the WAC Ch. NR 720 RCL for the protection to groundwater pathway in a shallow soil sample from B-2A; however, the result was “J” flagged by the laboratory as an estimated value. Given the low-level concentrations, the presence of PVOCs in the subsurface is the result of a *de minimis* surface condition resulting from the use of the area east of the building as a parking lot. It is Giles’ opinion that the detected concentrations of PVOCs in soil and groundwater do not pose a risk to human health or the environment, and do not pose a vapor intrusion risk to the surrounding buildings. The existing concrete surface acts as a barrier to direct contact and reduces infiltration from precipitation events.

The differentiation in CVOC-contaminated soil intervals between the samples collected inside the building and samples collected east of the building suggests that the CVOC contamination at the property may be the result of two separate surface spills. The spills likely resulted from product transference and/or housekeeping practices (filter media disposal).

The samples collected from the interior borings indicated that a surface spill likely traveled downward through the coarser-grained fill material beneath the building and then collected at the fill/native interface due to the low conductivity of the underlying native clay. This is supported by PCE being detected in shallow samples beneath the slab and then detected at higher concentrations near the fill/native interface, approximately 12 and 14 feet beneath the floor slab.

Concentrations of PCE in the soil samples collected east of the building were greatest in the interval immediately below the pavement. Given the elevation difference between the interior floor slab and the exterior parking lot, the contaminated interval of 12 to 14 feet beneath the building slab corresponds to a depth of approximately 7 to 9 feet beneath the parking lot surface. However, the 7 to 9 foot interval in exterior borings did not contain PCE. Therefore, the contamination in the parking lot east of the building appeared to have been the result of a surface spill and not migration of the contamination from beneath the building.

Based on the unique characteristics and challenges of investigating the contamination beneath the building and to the east of the building, the investigations of these two areas require different approaches. The proposed sample locations for the interior and exterior investigations are shown on Figure 6.

#### 3.1 Interior Investigation

The interior investigation will be limited to soil, sub-slab vapor and indoor air sampling. Groundwater sampling within the building itself; however, is not feasible due to the limitations of the sampling equipment. Water did not accumulate within the temporary well installed within the building (BTW-1) during the three and a half weeks the well was left in place. Giles utilized a cart-



mounted direct-push soil boring rig to complete the initial interior sampling. The interior borings met refusal between 12 and 14 feet beneath the building slab due to the (down-pressure) limitations of the equipment in the tight native clay. It is not possible to use larger drilling equipment inside the building due to the size of the doorways and the ceiling-height restrictions. Therefore, while additional soil samples can be collected to define the lateral extent of the contamination identified beneath the building, however, samples cannot be collected deeper than 14 feet to vertically define the extent or intersect the water table.

The vapor intrusion evaluation will be completed in a phased approach, with the sample count and locations based on the results of each previous sampling event. The first phase will include the collection of sub-slab samples from within the former dry cleaner space (western part of the unit) and the south adjoining lease space (303 Main St.). The sample distribution will be designed to establish the west and south extent of CVOC sub-slab vapor contamination and evaluate the sub-slab vapor condition beneath the former PCE storage area or potentially identify a secondary source. Based on the results of the sample collected within the south adjoining lease space, additional sub-slab samples may be collected in the lease spaces further south. If it is established that a sub-slab vapor condition is present beneath the central portion of the building, Giles will collect indoor air samples from units 301, 303, 303.5 and 305.

A sewer gas evaluation of the on-site sanitary sewer utility will also be conducted to determine if preferential pathways exist with units 301, 303, 303.5 and 305. Giles will collect sewer gas samples from either the sewer cleanouts or floor drains. This work will follow the Guidance for Documenting the Investigation of Human-made Preferential Pathways Including Utility Corridors RR-649 dated June 2021.

### **3.2 Exterior Investigation**

To provide insight into the vertical extent of contamination, Giles will complete exterior soil borings along the north side of the building. The building abuts a sidewalk known to have a number of utilities; therefore the 3rd Street Right-of-Way (ROW) is the closest accessible location for the completion of additional soil borings. Two of these three soil borings will be completed as WAC Ch. NR 141-variance pre-packed wells screens to be sampled quarterly for CVOCs and potentially PFAS. The WAC Ch. NR 141-variance pre-packed well screens will be constructed with a 1-inch diameter screen instead of a 2-inch diameter well. The variance wells will be utilized because they can be installed using direct-push equipment, which has greater maneuverability in the limited space available for the soil boring and will reduce soil spoil and wastewater generated from development/purging. Giles will also install an upgradient WAC NR 141-variance pre-packed well screen west of the building to evaluate groundwater flowing onto the property.

Additionally, four soil borings completed as WAC Ch. NR 141-variance pre-packed well screen wells will be sampled quarterly for CVOCs and potentially PFAS will be completed to the east of the building to define the extent of the PCE contamination identified in boring B-2. Soil borings will be completed 5 to 10 feet from borings B-2A through B-2C to determine the lateral extent of contamination. This tight configuration was based on the significant decrease in PCE concentrations between B-2 and the surrounding soil borings, and the location of the property lines.





Giles intends to collect groundwater samples from the groundwater monitoring well network for CVOCs analysis on a quarterly basis for a period of one year. Giles will approach sampling for PFAS from these wells in a phased approach. Giles intends to collect one PFAS sample from all wells as a starting sampling event. Should the result from this sampling event contain PFAS above the WDHS concentration limits for the PALs, Giles will collect additional samples to evaluate the extent of PFAS impacted groundwater. Based on the results of the groundwater monitoring, Giles will determine whether additional wells are necessary to define the extent of CVOCs and potentially PFAS impacted groundwater.

#### 4.0 SCOPE OF SERVICES

The following Section outlines the proposed Revised SI scope of services and briefly describes the methods and procedures for each task performed. Detailed descriptions of the methods and procedures to be implemented during this Revised SI are included in Appendix E.

- Complete additional soil sampling (up to 16 samples):
  - To define the extent of the CVOCs-impacted soil associated with the former dry cleaner space, Giles recommends that ten soil borings (two interior, eight exterior) be completed to approximately 15 feet bgs in the following configuration:
    - Complete one soil boring to 14 feet west of B-1C, towards the front of the former dry-cleaning space.
    - Complete one soil boring to 14 feet to the south of B-1B in the adjoining south leased space (303 Main St.) to define extent of contamination or identify a secondary source (PCE storage area).
      - Collect two soil samples from each interior soil boring (4 samples total) for the intervals 2 to 4 feet bgs and 12 to 14 feet bgs.
    - Complete three soil borings in the parking/driving lanes within the 3rd Street ROW to define the extent of soil contamination associated with B-1 and B-1A to the north. Permits will be required from the City of Racine to complete the borings within the 3rd Street ROW.
      - Collect two soil samples from each ROW boring (6 samples total) from the interval equivalent to where contamination was previously identified at B-1 and B-1A (approximately 12-14 feet bgs).
  - To define the soil impacts identified east of the building, Giles recommends that four soil borings be completed to approximately 15 feet bgs.
    - One soil boring will replicate boring BTW-2; however, no soil samples will be collected from this boring as samples would be redundant.
    - Three soil borings will be completed around the replicated BTW-2, approximately 5-10 feet from previous soil borings B-2A, B-2B, and B-2C.
      - Collect two soil samples from the shallow interval (2-4 feet bgs) at each boring and one just above the water table (6 samples total).



- Use a Photoionization Detector (PID) to field screen the collected soil samples for organic vapors.
- Submit the collected soil samples (16 total) from the interior and exterior borings to a Wisconsin-certified laboratory for analysis of CVOCs.
- Additional groundwater sampling (7 samples per sampling event):
  - To define the extent of the CVOC and potential PFAS impacted groundwater associated with the former dry-cleaner space, Giles recommends that seven WAC Ch. NR 141-variance pre-pack monitoring wells be installed as follows:
    - Four wells in the exterior soil borings in the parking lot behind (east) the building.
    - Two wells within the 3<sup>rd</sup> St. ROW.
    - One well on the west side of the building (upgradient from impacted area).
  - Collect groundwater samples from each of the seven wells on a quarterly basis for one year. Submit the collected groundwater samples to a Wisconsin-certified laboratory for analysis of:
    - First sampling event:
      - CVOCs and PFAS (PFAS will be shipped out of state for analysis, but the lab will have WDNR certification), and
      - Field duplicate sample limited to the BTW-2 replicated well to verify the results from the initial sampling for CVOCs only.
    - Second, third and fourth sampling events:
      - CVOCs and potentially PFAS, and
      - PFAS only if detected above WAC Ch. NR 140 PAL in previous sampling events.
      - Field duplicate sample limited to the BTW-2 replicated well to verify the results from the initial sampling for CVOCs only.
- Additional sub-slab vapor sampling (up to 5 samples):
  - To evaluate the extent of CVOC-impacted soil vapor beneath the building, up to five permanent sub-slab Vapor Pins will be installed and sampled:
    - Soil gas samples collected from the vapor points will be submitted to a Wisconsin-certified laboratory for analysis of CVOCs.
    - Initially, vapor points will be installed in the following configuration:
      - One Vapor Pin will be located at the far west end of the dry cleaner unit to determine the western extent of vapor impacts.
      - Two Vapor Pins will be located within the adjoining south lease space (303 Main St.) unit to determine southern extent (placed



- approximately within the center of the space and one in the former PCE storage area).
- If necessary, one Vapor Pin will be located within the adjoining south lease space (303.5 Main St.) unit to determine southern extent (placed approximately within the center).
- If necessary, one Vapor Pin will be located within the adjoining south lease space (305 Main St.) unit to determine southern extent (placed approximately within the center).
- Indoor air sampling (up to 4 samples):
  - Indoor air sampling will be conducted in Units 301, 303, 303.5 and 305.
    - Indoor air sampling will entail a passive Radiello (RAD-130) sampler which will be placed at the breathing level and deployed for 10 days then picked up and sent to the laboratory for CVOC analysis.
- Evaluate utility corridors (up to 4 samples):
  - Collect four vapor samples from the sanitary sewer clean outs or floor drains within Units 301, 303, 303.5 and 305.
- Abandon soil borings not completed as groundwater monitoring wells in accordance with state requirements and surface with concrete or asphalt as appropriate.
- Prepare a Sub-Slab Vapor, Indoor Air, and Utility Vapor Summary Report for distribution to building occupant within unit 305.
- Prepare Quarterly Groundwater Summary Reports following each sampling event with updated tables and Figures along with the Site Investigation Sample Results Notification Form 4400-249 (R03/14) in accordance with WAC Ch. NR 716.14.
- Prepare Site Investigation Sample Results Notification Form 4400-249 (R03/14) in accordance with WAC Ch. NR 716.14 which will include updated tables, and figures along with the laboratory's analytical results. This will be for the following media soil, sub-slab vapor utility (sewer) vapor, and indoor air.
- Prepare a Site Investigation Report in general accordance with WAC Ch. NR 716.15. Following completion of the SI field activities, Giles will prepare Site Investigation report to summarize the findings. This report will be submitted to the WDNR for review and concurrence with findings and conclusions of the SI. The SI will also include a Conceptual Remediation/Mitigation Action Plan.

#### 4.1 Site Surveying

Sampling locations will be measured in and documented on a Site Plan. Site physical features, monitoring well and direct-push boring locations, and other pertinent above/under-ground features will be included. Site elevation data will be established as a temporary benchmark for



future reference and elevations to the well top of casing and ground surface will be established for each temporary well.

#### **4.2 Investigative Waste**

Development and purge water generated during the SI will be containerized, labeled and stored outside until disposal arrangement can be arranged. Disposal of the purge/wastewater will include creating a waste profile and arranging for transport of the material to a licensed waste disposal facility.

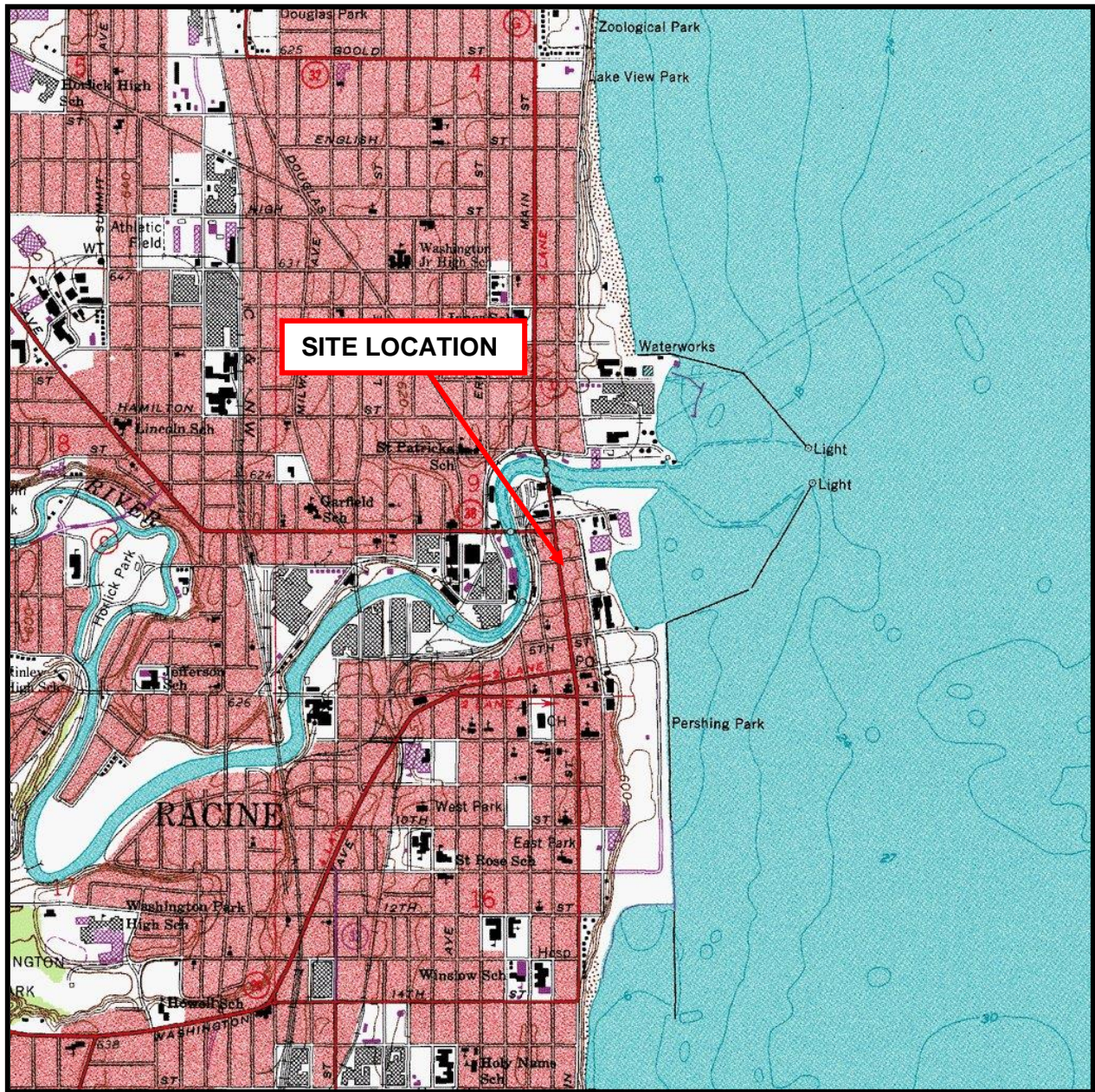
#### **5.0 SCHEDULE**

Giles anticipates two weeks to initiate the first sub-slab vapor sampling event and indoor air sampling. Initiating the utility location, drilling, and soil and groundwater sampling work is dependent upon ability to obtain a permit from the City of Racine for the ROW borings. Once permits have been procured, Giles anticipates completing the soil borings and installing the groundwater monitoring wells within four weeks. Giles anticipates a ten to fifteen working day turnaround time for laboratory results. The SI activities, as listed, are expected to take up to 14 months to complete due to the quarterly groundwater monitoring. We will provide copies of the final SIR within eight weeks after receipt of the laboratory results from the final sampling event.

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## FIGURES



Source: USGS Racine South, Wisconsin 7.5-Minute Series (topographic) Quadrangle Map (1958, revised 1976)

Scale: 1:24,000  
 Contour Interval: 10 Feet



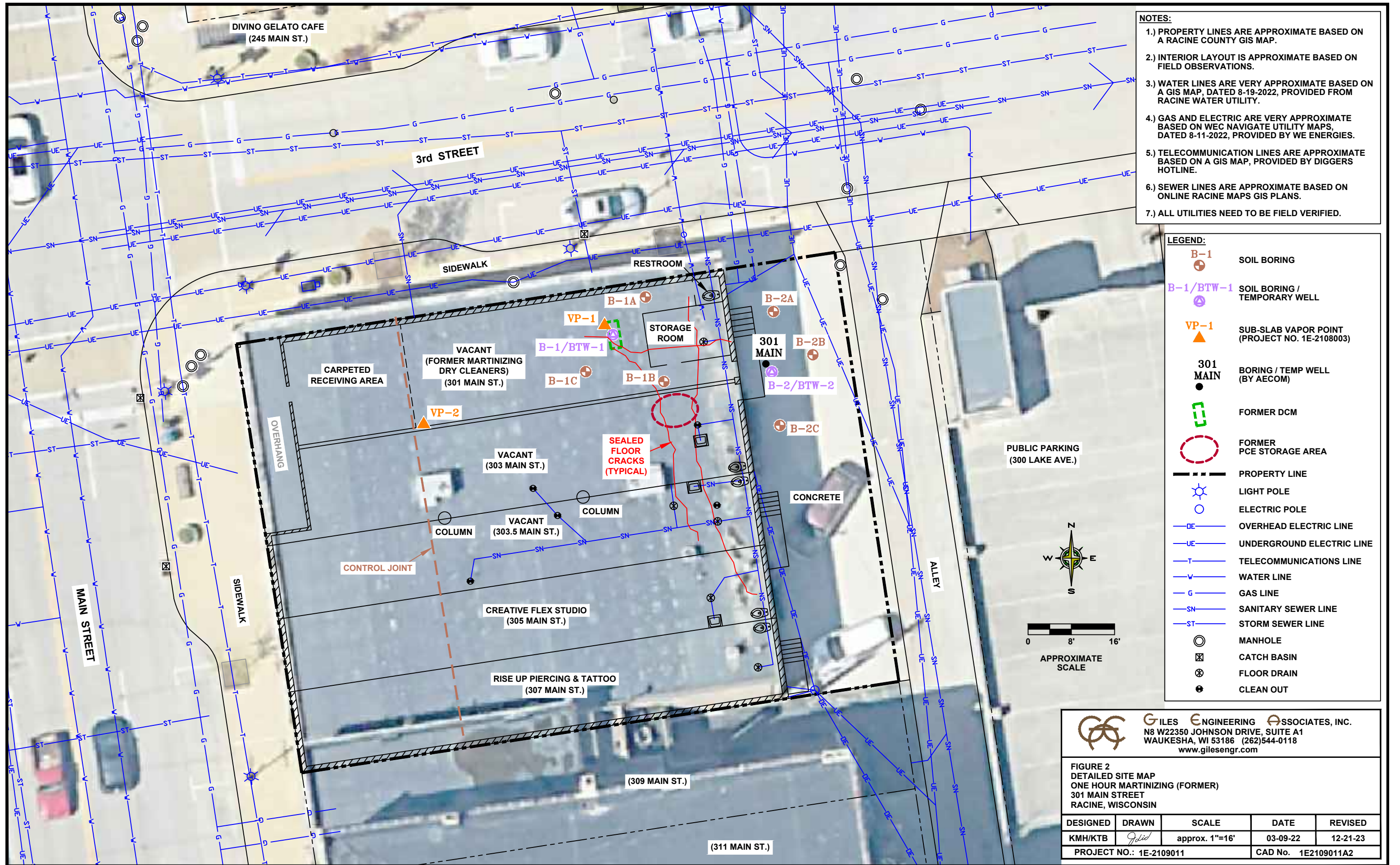
**FIGURE 1**

**SITE LOCATION**

**One Hour Martinizing (Former)  
 301 Main Street  
 Racine, Wisconsin  
 Project No. 1E-2109011**

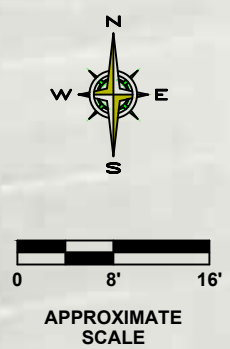


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- NOTES:**
- 1.) PROPERTY LINES ARE APPROXIMATE BASED ON A RACINE COUNTY GIS MAP.
  - 2.) INTERIOR LAYOUT IS APPROXIMATE BASED ON FIELD OBSERVATIONS.
  - 3.) WATER LINES ARE VERY APPROXIMATE BASED ON A GIS MAP, DATED 8-19-2022, PROVIDED FROM RACINE WATER UTILITY.
  - 4.) GAS AND ELECTRIC ARE VERY APPROXIMATE BASED ON WEC NAVIGATE UTILITY MAPS, DATED 8-11-2022, PROVIDED BY WE ENERGIES.
  - 5.) TELECOMMUNICATION LINES ARE APPROXIMATE BASED ON A GIS MAP, PROVIDED BY DIGGERS HOTLINE.
  - 6.) SEWER LINES ARE APPROXIMATE BASED ON ONLINE RACINE MAPS GIS PLANS.
  - 7.) ALL UTILITIES NEED TO BE FIELD VERIFIED.

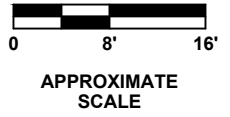
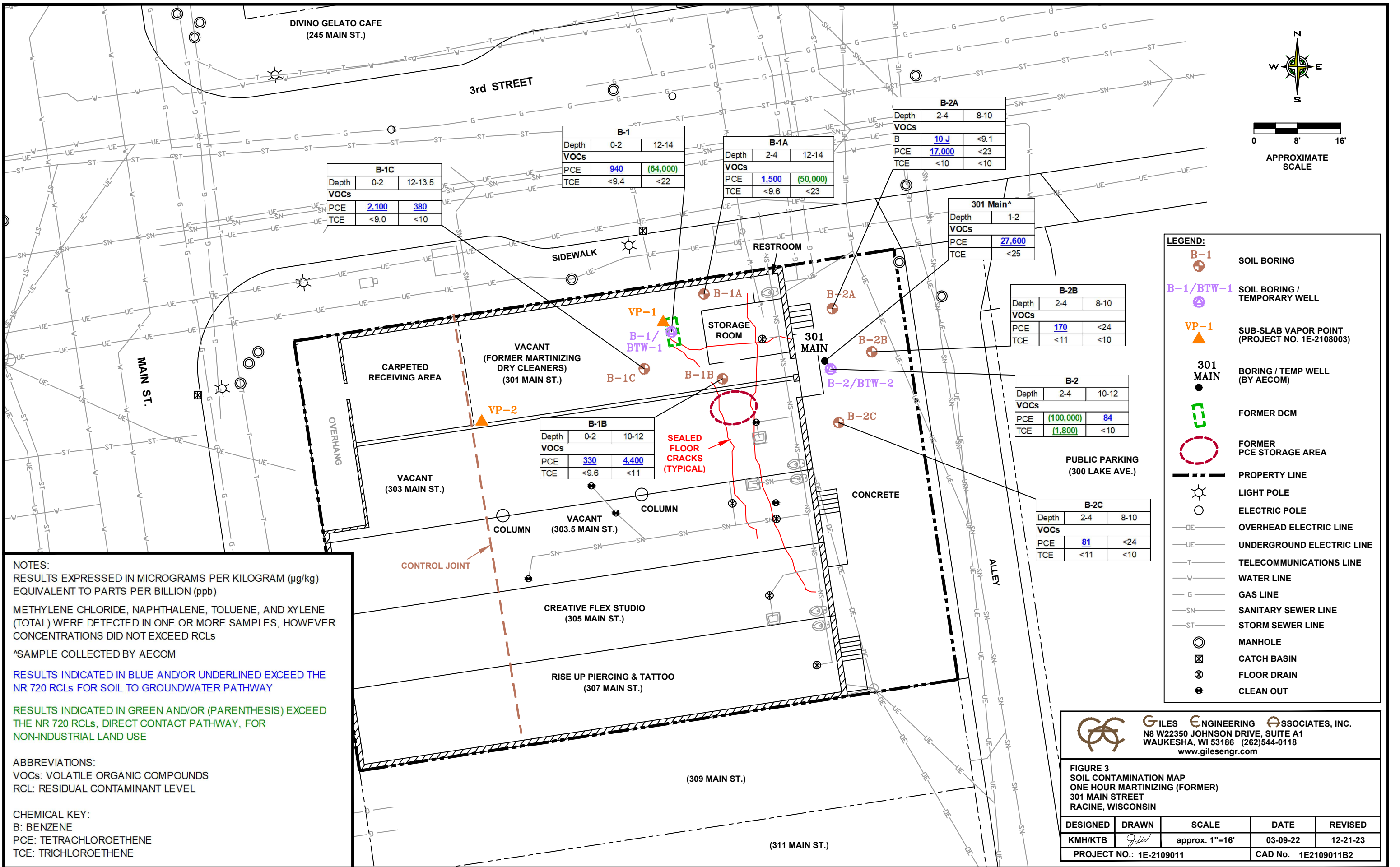
- LEGEND:**
- B-1 SOIL BORING
  - B-1/BTW-1 SOIL BORING / TEMPORARY WELL
  - VP-1 SUB-SLAB VAPOR POINT (PROJECT NO. 1E-2108003)
  - 301 MAIN BORING / TEMP WELL (BY AECOM)
  - FORMER DCM
  - FORMER PCE STORAGE AREA
  - PROPERTY LINE
  - LIGHT POLE
  - ELECTRIC POLE
  - OVERHEAD ELECTRIC LINE
  - UNDERGROUND ELECTRIC LINE
  - TELECOMMUNICATIONS LINE
  - WATER LINE
  - GAS LINE
  - SANITARY SEWER LINE
  - STORM SEWER LINE
  - MANHOLE
  - CATCH BASIN
  - FLOOR DRAIN
  - CLEAN OUT



**GILES ENGINEERING ASSOCIATES, INC.**  
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**FIGURE 2  
 DETAILED SITE MAP  
 ONE HOUR MARTINIZING (FORMER)  
 301 MAIN STREET  
 RACINE, WISCONSIN**

DESIGNED	DRAWN	SCALE	DATE	REVISED
KMH/KTB	<i>Jed</i>	approx. 1"=16'	03-09-22	12-21-23
PROJECT NO.: 1E-2109011			CAD No. 1E2109011A2	



**LEGEND:**

- B-1 SOIL BORING
- B-1/BTW-1 SOIL BORING / TEMPORARY WELL
- ▲ VP-1 SUB-SLAB VAPOR POINT (PROJECT NO. 1E-2108003)
- 301 MAIN BORING / TEMP WELL (BY AECOM)
- FORMER DCM
- FORMER PCE STORAGE AREA
- PROPERTY LINE
- ☀ LIGHT POLE
- ELECTRIC POLE
- DE— OVERHEAD ELECTRIC LINE
- UE— UNDERGROUND ELECTRIC LINE
- T— TELECOMMUNICATIONS LINE
- W— WATER LINE
- G— GAS LINE
- SN— SANITARY SEWER LINE
- ST— STORM SEWER LINE
- ⊙ MANHOLE
- ⊠ CATCH BASIN
- ⊗ FLOOR DRAIN
- CLEAN OUT

**NOTES:**  
 RESULTS EXPRESSED IN MICROGRAMS PER KILOGRAM (µg/kg) EQUIVALENT TO PARTS PER BILLION (ppb)  
 METHYLENE CHLORIDE, NAPHTHALENE, TOLUENE, AND XYLENE (TOTAL) WERE DETECTED IN ONE OR MORE SAMPLES, HOWEVER CONCENTRATIONS DID NOT EXCEED RCLs  
 ^SAMPLE COLLECTED BY AECOM  
 RESULTS INDICATED IN BLUE AND/OR UNDERLINED EXCEED THE NR 720 RCLs FOR SOIL TO GROUNDWATER PATHWAY  
 RESULTS INDICATED IN GREEN AND/OR (PARENTHESIS) EXCEED THE NR 720 RCLs, DIRECT CONTACT PATHWAY, FOR NON-INDUSTRIAL LAND USE

**ABBREVIATIONS:**  
 VOCs: VOLATILE ORGANIC COMPOUNDS  
 RCL: RESIDUAL CONTAMINANT LEVEL

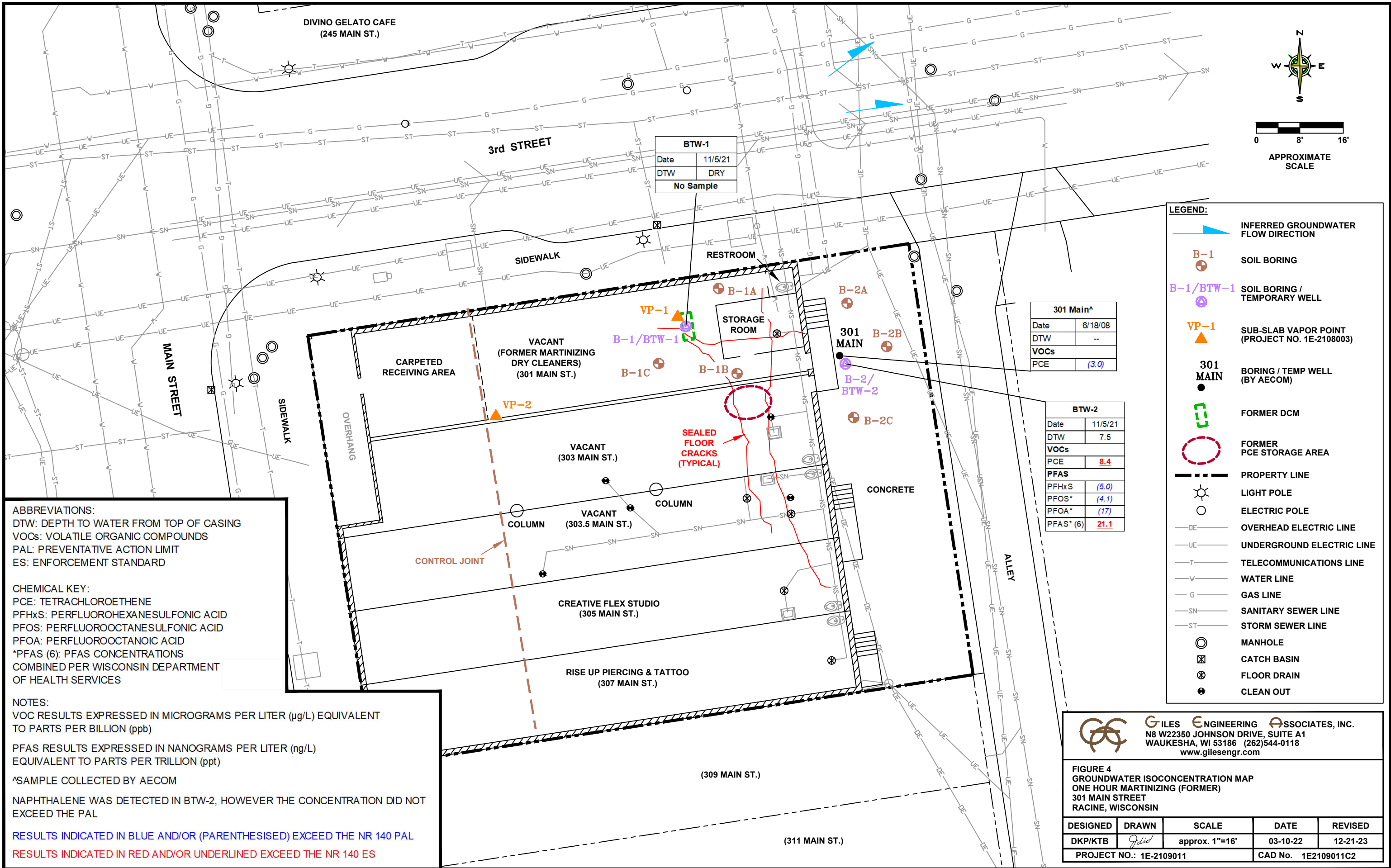
**CHEMICAL KEY:**  
 B: BENZENE  
 PCE: TETRACHLOROETHENE  
 TCE: TRICHLOROETHENE

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**FIGURE 3  
 SOIL CONTAMINATION MAP  
 ONE HOUR MARTINIZING (FORMER)  
 301 MAIN STREET  
 RACINE, WISCONSIN**

DESIGNED	DRAWN	SCALE	DATE	REVISED
KMH/KTB	<i>Jed</i>	approx. 1"=16'	03-09-22	12-21-23
PROJECT NO.: 1E-2109011			CAD No. 1E2109011B2	





DIVINO GELATO CAFE  
(245 MAIN ST.)

3rd STREET

BTW-1	
Date	11/5/21
DTW	DRY
No Sample	

301 Main <sup>a</sup>	
Date	6/18/08
DTW	--
VOCs	
PCE	(3.0)

BTW-2	
Date	11/5/21
DTW	7.5
VOCs	
PCE	<u>8.4</u>
PFAS	
PFHxS	(5.0)
PFOS <sup>*</sup>	(4.1)
PFOA <sup>*</sup>	(17)
PFAS <sup>*</sup> (6)	<u>21.1</u>

**LEGEND:**

- INFERRED GROUNDWATER FLOW DIRECTION
- B-1 SOIL BORING
- B-1/BTW-1 SOIL BORING / TEMPORARY WELL
- VP-1 SUB-SLAB VAPOR POINT (PROJECT NO. 1E-2108003)
- 301 MAIN BORING / TEMP WELL (BY AECOM)
- FORMER DCM
- FORMER PCE STORAGE AREA
- PROPERTY LINE
- LIGHT POLE
- ELECTRIC POLE
- OVERHEAD ELECTRIC LINE
- UNDERGROUND ELECTRIC LINE
- TELECOMMUNICATIONS LINE
- WATER LINE
- GAS LINE
- SANITARY SEWER LINE
- STORM SEWER LINE
- MANHOLE
- CATCH BASIN
- FLOOR DRAIN
- CLEAN OUT

**ABBREVIATIONS:**  
 DTW: DEPTH TO WATER FROM TOP OF CASING  
 VOCs: VOLATILE ORGANIC COMPOUNDS  
 PAL: PREVENTATIVE ACTION LIMIT  
 ES: ENFORCEMENT STANDARD

**CHEMICAL KEY:**  
 PCE: TETRACHLOROETHENE  
 PFHxS: PERFLUOROHXANESULFONIC ACID  
 PFOS: PERFLUOROOCTANESULFONIC ACID  
 PFOA: PERFLUOROOCTANOIC ACID  
<sup>\*</sup>PFAS (6): PFAS CONCENTRATIONS COMBINED PER WISCONSIN DEPARTMENT OF HEALTH SERVICES

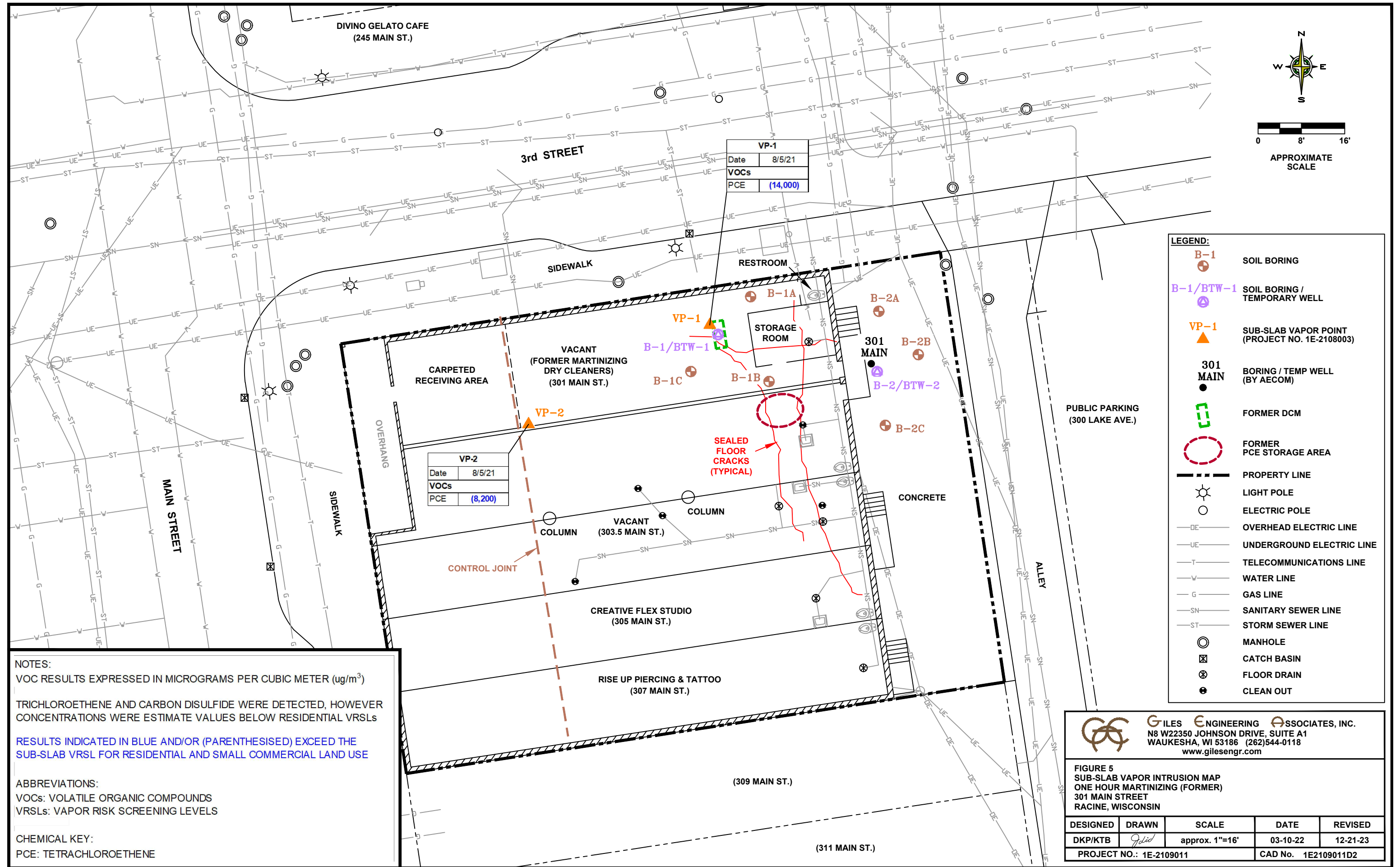
**NOTES:**  
 VOC RESULTS EXPRESSED IN MICROGRAMS PER LITER (µg/L) EQUIVALENT TO PARTS PER BILLION (ppb)  
 PFAS RESULTS EXPRESSED IN NANOGRAMS PER LITER (ng/L) EQUIVALENT TO PARTS PER TRILLION (ppt)  
<sup>a</sup>SAMPLE COLLECTED BY AECOM  
 NAPHTHALENE WAS DETECTED IN BTW-2, HOWEVER THE CONCENTRATION DID NOT EXCEED THE PAL

RESULTS INDICATED IN BLUE AND/OR (PARENTHESED) EXCEED THE NR 140 PAL  
 RESULTS INDICATED IN RED AND/OR UNDERLINED EXCEED THE NR 140 ES

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**FIGURE 4**  
**GROUNDWATER ISOCONCENTRATION MAP**  
**ONE HOUR MARTINIZING (FORMER)**  
**301 MAIN STREET**  
**RACINE, WISCONSIN**

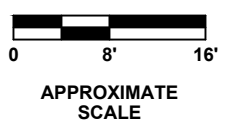
DESIGNED	DRAWN	SCALE	DATE	REVISED
DKP/KTB	<i>Giles</i>	approx. 1"=16'	03-10-22	12-21-23
PROJECT NO.: 1E-2109011			CAD No. 1E2109011C2	



DIVINO GELATO CAFE  
(245 MAIN ST.)

3rd STREET

VP-1	
Date	8/5/21
VOCs	
PCE	(14,000)



**LEGEND:**

- B-1 SOIL BORING
- B-1/BTW-1 SOIL BORING / TEMPORARY WELL
- ▲ VP-1 SUB-SLAB VAPOR POINT (PROJECT NO. 1E-2108003)
- 301 MAIN BORING / TEMP WELL (BY AECOM)
- FORMER DCM
- FORMER PCE STORAGE AREA
- PROPERTY LINE
- LIGHT POLE
- ELECTRIC POLE
- OVERHEAD ELECTRIC LINE
- UNDERGROUND ELECTRIC LINE
- TELECOMMUNICATIONS LINE
- WATER LINE
- GAS LINE
- SANITARY SEWER LINE
- STORM SEWER LINE
- MANHOLE
- CATCH BASIN
- FLOOR DRAIN
- CLEAN OUT

VP-2	
Date	8/5/21
VOCs	
PCE	(8,200)

SEALED FLOOR CRACKS (TYPICAL)

**NOTES:**  
 VOC RESULTS EXPRESSED IN MICROGRAMS PER CUBIC METER ( $\mu\text{g}/\text{m}^3$ )  
 TRICHLOROETHENE AND CARBON DISULFIDE WERE DETECTED, HOWEVER CONCENTRATIONS WERE ESTIMATE VALUES BELOW RESIDENTIAL VRSLs  
 RESULTS INDICATED IN BLUE AND/OR (PARENTHESED) EXCEED THE SUB-SLAB VRSL FOR RESIDENTIAL AND SMALL COMMERCIAL LAND USE

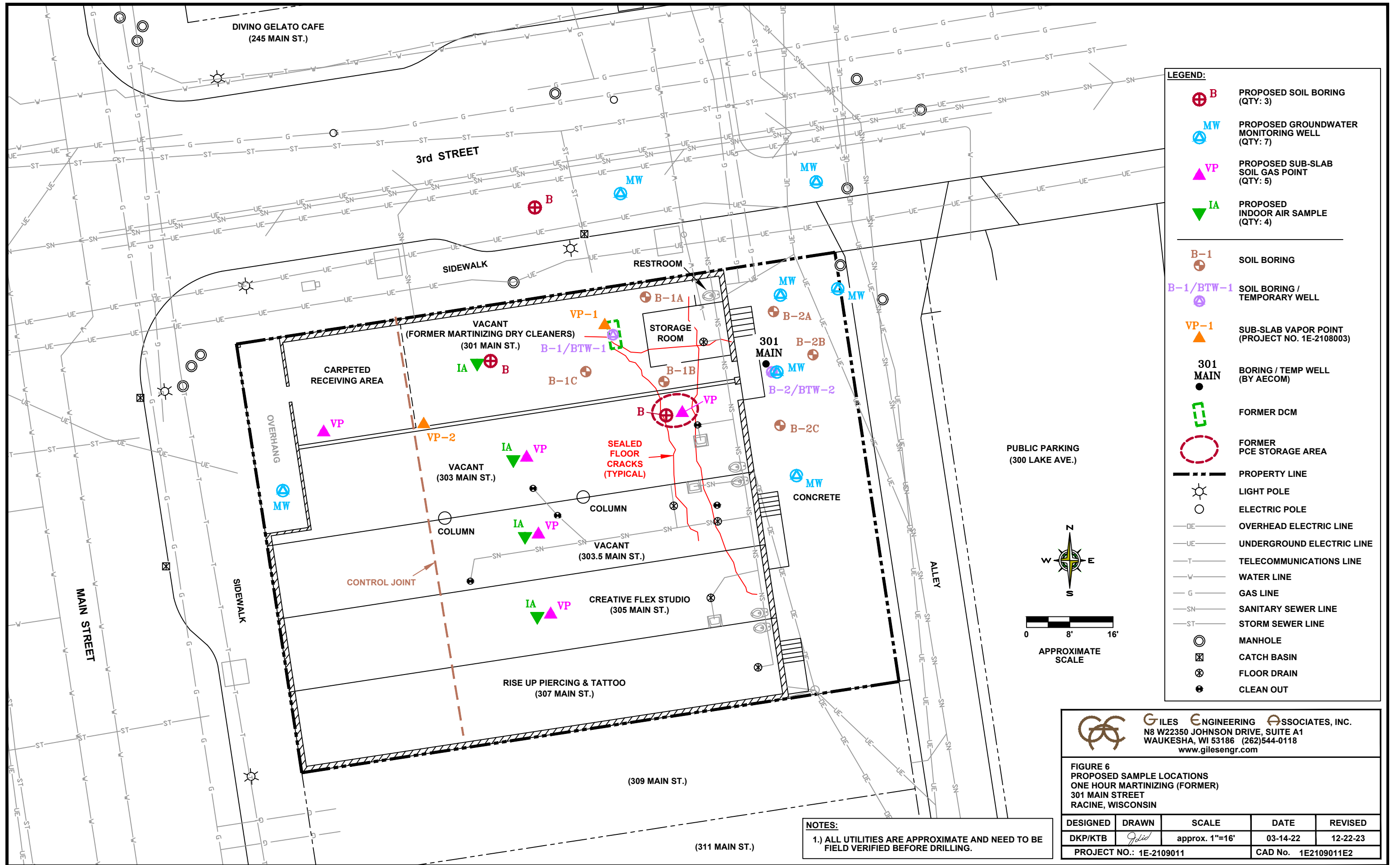
**ABBREVIATIONS:**  
 VOCs: VOLATILE ORGANIC COMPOUNDS  
 VRSLs: VAPOR RISK SCREENING LEVELS

**CHEMICAL KEY:**  
 PCE: TETRACHLOROETHENE

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**FIGURE 5**  
 SUB-SLAB VAPOR INTRUSION MAP  
 ONE HOUR MARTINIZING (FORMER)  
 301 MAIN STREET  
 RACINE, WISCONSIN

DESIGNED	DRAWN	SCALE	DATE	REVISED
DKP/KTB	<i>Jed</i>	approx. 1"=16'	03-10-22	12-21-23
PROJECT NO.: 1E-2109011			CAD No. 1E2109011D2	

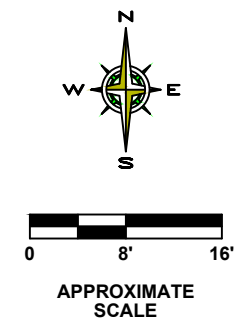


**LEGEND:**

- ⊕ B PROPOSED SOIL BORING (QTY: 3)
- ⊕ MW PROPOSED GROUNDWATER MONITORING WELL (QTY: 7)
- ▲ VP PROPOSED SUB-SLAB SOIL GAS POINT (QTY: 5)
- ▼ IA PROPOSED INDOOR AIR SAMPLE (QTY: 4)

---

- ⊕ B-1 SOIL BORING
- ⊕ B-1/BTW-1 SOIL BORING / TEMPORARY WELL
- ▲ VP-1 SUB-SLAB VAPOR POINT (PROJECT NO. 1E-2108003)
- 301 MAIN BORING / TEMP WELL (BY AECOM)
- FORMER DCM
- FORMER PCE STORAGE AREA
- PROPERTY LINE
- ☼ LIGHT POLE
- ELECTRIC POLE
- OVERHEAD ELECTRIC LINE
- UNDERGROUND ELECTRIC LINE
- TELECOMMUNICATIONS LINE
- WATER LINE
- GAS LINE
- SANITARY SEWER LINE
- STORM SEWER LINE
- ⊙ MANHOLE
- ⊗ CATCH BASIN
- ⊗ FLOOR DRAIN
- CLEAN OUT



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**FIGURE 6**  
 PROPOSED SAMPLE LOCATIONS  
 ONE HOUR MARTINIZING (FORMER)  
 301 MAIN STREET  
 RACINE, WISCONSIN

DESIGNED	DRAWN	SCALE	DATE	REVISED
DKP/KTB	<i>Jed</i>	approx. 1"=16'	03-14-22	12-22-23
PROJECT NO.: 1E-2109011			CAD No. 1E2109011E2	

**NOTES:**  
 1.) ALL UTILITIES ARE APPROXIMATE AND NEED TO BE FIELD VERIFIED BEFORE DRILLING.

## **TABLES**

**Table 1**  
**Soil Analytical Results**  
One Hour Martinizing (Former)  
301 Main Street  
Racine, Wisconsin  
BRRTS Number 02-52-552198  
Project Number 1E-2109011

Sample Location	Inside the Building								Outside the Building								NR 720 RCLs <sup>1</sup>			
	B-1		B-1A		B-1B		B-1C		301 Main^	B-2		B-2A		B-2B		B-2C		Soil to Groundwater Pathway	Direct Contact Pathway <sup>2</sup>	
Sample Depth (feet bgs)	0-2	12-14	2-4	12-14	0-2	10-12	0-2	12-13.5	1-2	2-4	10-12	2-4	8-10	2-4	8-10	2-4	8-10		Soil to Groundwater Pathway	Non-Industrial Land Use
Sample Date	10/12/21	10/12/21	10/12/21	10/12/21	10/12/21	10/12/21	10/12/21	10/12/21	6/18/08	10/12/21	10/12/21	10/12/21	10/12/21	10/12/21	10/12/21	10/12/21	10/12/21	Non-Industrial Land Use		Industrial Land Use
Saturated/Unsaturated (S or U)	U	U	U	U	U	U	U	U	U	U	S	U	S	U	S	U	S			
Fill/Native (F or N)	F	N	F	N	F	F	F	N	F	F	N	F	N	F	N	F	N			
PID (instrument units)	1.7	84.2	4.6	30.5	2.2	2.2	5.3	2.3	0	35.0	3.0	8.2	3.2	6.3	3.8	6.7	3.4			
Detected VOCs (µg/kg)																				
Benzene	<8.4	<19	<8.6	<21	<8.5	<9.7	<8.0	<9.2	--	<20	<9.3	<u>10 J</u>	<9.1	<9.9	<9.3	<9.4	<9.3	<b>5.1</b>	<b>1,600</b>	<b>7,070</b>
Methylene Chloride**	100 J	<220	120 J	280 J	110 J	110 J	98 J	<100	<25	220 J	110 J	<100	100 J	160 J	140 J	150 J	<100	<b>2.6</b>	<b>61,800</b>	<b>1,150,000</b>
Naphthalene	<19	<44	<20	<47	<19	<22	<18	<21	<25	60 J B	<21	24 J B	<21	59 J	S	<21	<21	<b>658</b>	<b>5,520</b>	<b>24,100</b>
Tetrachloroethene (PCE)	<u>940</u>	<u>(64,000)</u>	<u>1,500</u>	<u>(50,000)</u>	<u>330</u>	<u>4,400</u>	<u>2,100</u>	<u>380</u>	<u>27,600</u>	<u>(100,000)</u>	<u>84</u>	<u>17,000</u>	<23	<u>170</u>	<24	<u>81</u>	<24	<b>4.5</b>	<b>33,000</b>	<b>145,000</b>
Toluene	<8.5	<20	17	<21	<8.6	<9.7	<8.0	<9.2	--	38	<9.4	9.4 J	<9.2	<10	<9.4	<9.4	<9.4	<b>1,107</b>	<b>818,000</b>	<b>818,000</b>
Trichloroethene (TCE)	<9.4	<22	<9.6	<23	<9.6	<11	<9.0	<10	<25	<u>(1,800)</u>	<10	<10	<10	<11	<10	<11	<10	<b>3.6</b>	<b>1,260</b>	<b>8,410</b>
Xylenes, Total	<13	<29	<13	<31	<13	<15	<12	<14	--	36 J	<14	<14	<14	<15	<14	<14	<14	<b>3,960</b>	<b>260,000</b>	<b>260,000</b>

**Notes:**  
<sup>1</sup>Wisconsin Administrative Code Natural Resources Chapter (NR) 720 Residual Contaminant Levels (RCLs) obtained from the Wisconsin Department of Natural Resources (WDNR) "RCL spreadsheet", last updated December 2018.  
<sup>2</sup>Direct Contact RCLs only apply to soil samples collected within four feet of the ground surface  
**PID:** Photoionization Detector  
**VOCs:** Volatile Organic Compounds  
**µg/kg:** Micrograms per kilogram; equivalent to parts per billion (ppb)  
**J:** Result is an estimate value (detected between the laboratory method detection limit and reporting limit)  
**B:** Analyte detected in the laboratory method blank  
\*\*The analytical laboratory report (J206744-1) stated that the detected concentrations of methylene chloride were due to suspected laboratory contamination  
<xx.x: Result detected below the method detection limit of x  
xx.x: Underlined results exceed the Soil to Groundwater Pathway RCL  
(xxx.x): Parenthesized results exceed the Non-Industrial Direct Contact RCL

**Table 2**  
**Groundwater Analytical Results**

One Hour Martinizing (Former)  
301 Main Street  
Racine, Wisconsin  
BRRTS Number 02-52-552198  
Project Number 1E-2109011

Sample Location	BTW-1	301 Main^	BTW-2	NR 140 <sup>1</sup> (µg/L)	
Sample Date	11/5/21	6/18/08	11/5/21	PAL	ES
Depth to Water (Ft below TOC)	DRY	--	7.5		
<b>Detected VOCs (µg/L)</b>					
Naphthalene	--	5.5	0.44 J	<b>10</b>	<b>100</b>
Tetrachloroethene (PCE)	--	<i>(3.0)</i>	<u>8.4</u>	<b>0.5</b>	<b>5</b>

**Notes:**

<sup>1</sup>Wisconsin Administrative Code Natural Resources Chapter (NR) 140 Public Health Groundwater Quality Standards, updated January 2020

**PAL:** Preventive Action Limit

**ES:** Enforcement Standard

**TOC:** Top of Casing

**VOCs:** Volatile Organic Compounds

**µg/L:** Micrograms per Liter; equivalent to parts per billion (ppb)

**J:** Result is an estimate value (detected between the laboratory method detection limit and reporting limit)

-- : No sample collected

*(xx.x)* : Italic/parenthesized results exceed the NR 140 Preventive Action Limit

**xx.x** : Bold/underlined results exceed the NR 140 Enforcement Standard

^Sample Collected by AECOM

**Table 2 (Continued)**  
**Groundwater Analytical Results - PFAS**

One Hour Martinizing (Former)  
 301 Main Street  
 Racine, Wisconsin  
 BRRTS Number 02-52-552198  
 Project Number 1E-2109011

Sample Location	BTW-1	BTW-2	Proposed NR 140 Standards <sup>1</sup> (ng/L)	
Sample Date	11/5/2021	11/5/21	PAL	ES
Depth to Water (Ft below TOC)	DRY	7.5		
<b>Detected PFAS (ng/L)</b>				
6:2 FTS (Fluorotelomer sulfonic acid)	--	6.9	NS	NS
PFBS (Perfluorobutanesulfonic acid)	--	1.4 J	90,000	450,000
PFBA (Perfluorobutanoic acid)	--	6.6	2,000	10,000
PFHpA (Perfluoroheptanoic acid)	--	5.0	NS	NS
PFHxS (Perfluorohexanesulfonic acid)	--	(5.0)	4	40
PFHxA (Perfluorohexanoic acid)	--	9.5	30,000	150,000
PFNA (Perfluorononanoic acid)	--	0.47 J	3	30
PFOS** (Perfluorooctanesulfonic acid)	--	(4.1)	2	20
PFOA** (Perfluorooctanoic acid)	--	(17)	2	20
PFPeS (Perfluoropentanesulfonic acid)	--	0.40 J	NS	NS
PFPeA (Perfluoropentanoic acid)	--	8.3	NS	NS
PFAS (6)**	--	<u>21.1</u>	2	20

**Notes:**

<sup>1</sup>Wisconsin Department of Health Services (DHS) recommended Groundwater Standards (Cycle 10 [June 2019] and Cycle 11 [November 2020]).

**PAL:** Preventive Action Limit

**ES:** Enforcement Standard

**TOC:** Top of Casing

**PFAS:** Per- and Poly-fluoroalkyl Substances

**ng/L:** Nanograms per Liter; equivalent to parts per trillion (ppt)

\*\*DHS recommends a combined standard for NEtFOSE, NEtFOSAA, NEtFOSA, FOSA, PFOS, and PFOA

**J:** Result is an estimate value (detected between the laboratory method detection limit and reporting limit)

-- : No sample collected

**NS:** No Standard Established

<xx.x: Result concentration was detected below the method detection limit of x

(xx.x) : Italic/parenthesized results exceed the proposed NR 140 Preventive Action Limit

xx.x: Bold/underlined results exceed the proposed NR 140 Enforcement Standard

**Table 3**  
**Soil Gas Analytical Results**

One Hour Martinizing (Former)  
301 Main Street  
Racine, Wisconsin  
BRRTS Number 02-52-552198  
Project Number 1E-2108003

Sample Location	VP-1	VP-2	Sub-Slab VRSL <sup>^</sup> (µg/m <sup>3</sup> )		
			Land Use		
Sample Depth	Sub-slab	Sub-slab	Residential	Small Commercial	Large Commercial / Industrial
Sample Date	8/5/2021	8/5/2021			
<b>Detected VOCs (µg/m<sup>3</sup>)</b>					
Carbon disulfide	27 JB	19 JB	24,000	100,000	310,000
Tetrachloroethene (PCE)	(14,000)	(8,200)	1,400	5,800	18,000
Trichloroethene (TCE)	67 J	21 J	70	290	880

**Notes:**

**VRSL:** Vapor Risk Screening Level

**VOCs:** Volatile Organic Compounds

**µg/m<sup>3</sup>:** Micrograms per cubic meter

**NS:** No Established Standard

**J:** Result is an estimate value (detected between the laboratory method detection limit and reporting limit)

**B:** Compound was detected in the method blank and in the sample

**(xx.x):** Parenthesized results exceed the sub-slab VRSL for both Residential and Small Commercial land use

<sup>^</sup>VRSLs were obtained/calculated from the Wisconsin Vapor Quick Look-Up Table based on the May 2021 US EPA Regional Screening Levels. VRSLs are based on a Target Risk for Carcinogens of  $1 \times 10^{-5}$  and a Target Hazard Quotient for Non-Carcinogens of 1.



## **APPENDIX A**

**Results of the Initial Site Investigation Scoping for the  
property located at 301 S. Main St., Racine, Wisconsin  
(AECOM, July 23, 2008)**

**STS**

11425 W. Lake Park Drive, Suite 100, Milwaukee, Wisconsin 53224  
T 414.359.3030 F 414.359.0822

July 23, 2008

Mr. Douglas Berry  
One Hour Martenizing  
3319 Nobb Hill Drive  
Racine, WI 53406

RE: Results of the Initial Site Investigation Scoping for the property located at 301 S. Main Street, Racine, Wisconsin – STS Project No. 200802257-Phase 400

Dear Mr. Berry:

STS is pleased to provide this letter report with the results of the Initial Site Investigation Scoping (SIS) for the above referenced property in Racine, Wisconsin. The initial SIS activities were conducted according to the STS Proposal No. 200801240 dated March 13, 2008 that was authorized on May 5, 2008. This SIS letter report contains a brief summary of the information collected during the site investigation and includes our interpretations, conclusions and recommendations regarding this information.

**Overview**

The facility located at 301S. Main Street is an active dry cleaning establishment. The building is located on the southeast corner of the intersection of 3<sup>rd</sup> Street and Main Street. An alley is present on the east side of the building. Access to the building is from the west-facing store front on Main Street and an east-facing personnel door on the alley side of the building. Between the alley and the building there is space for parking for four vehicles.

The SIS was performed to evaluate if a release associated with the dry cleaning operations present at the subject property has occurred.

**Procedures**

The scope of work for the SIS consisted of the following activities:

- Advancement of one soil boring using hydraulic probe methods to a depth of 20 feet below ground surface. The boring was placed near the exterior of the building on the alley side of the store where raw material transfers and storage of filters and used solvent may have occurred.
- Collection of soil samples for soil classification and photoionization detector (PID) screening. PID screening was used to screen for the presence of volatile organic compounds (VOCs). One soil sample from the boring was submitted for laboratory analyses for VOCs.
- Installation of one temporary well in the probe hole and collection of one groundwater sample for laboratory analysis for VOCs.
- Abandonment of the borehole upon completion of sampling and analysis in accordance with Wisconsin Administrative Code (WAC) NR 141.
- Preparation of this letter report discussing the procedures and results.

## SIS Results

The soil boring location was located at the exterior of the building on the alley side of the building immediately adjacent to the concrete step access to the rear of the facility. An initial soil probe was advanced but met with refusal (likely on old foundations) at 13.5 feet which was above the water table. This borehole was abandoned and another attempt was made approximately 7 feet north of the first attempt. This second soil probe was advanced to 20 feet below ground surface.

During probing, soil samples were collected at five-foot intervals for soil classification and screening. The soil samples were screened with a photoionization detector (PID) for the possible presence of VOCs. Elevated PID readings (i.e., all PID readings were less than one instrument unit), staining or odors were not observed except for the interval at approximately 6 feet bgs. Fill materials consisting of bricks and sand with a tarry odor were noted. Below six feet the soil was silty clay to the total boring depth of 20 feet.

The soil sample for laboratory analysis was collected from a depth of one to two feet below ground surface for laboratory analysis. A soil boring log and borehole abandonment form were completed and are also attached.

The temporary well was installed to 20 feet below ground surface in the probe hole. The well screen was placed from 10 to 20 feet below ground surface. The well was subsequently sampled for VOCs.

The soil and groundwater samples were submitted to Pace Analytical Laboratory in Green Bay, Wisconsin using standard chain of custody procedures. The laboratory analytical report is also attached.

Soil analytical results are compared to Residual Contaminant Levels (RCLs) developed by using Wisconsin default inputs to a US Environmental Protection Agency calculations web page for determining soil screening levels. The RCL values are shown on Table 1 with the tabulated laboratory analytical results for soil.

Groundwater analytical results are compared to NR 140.10 WAC, Table 1, Groundwater Quality Public Health Enforcement Standards (ESs) and Preventive Action Limits (PALs). Wisconsin has two levels of groundwater quality standards. The first level, the PAL, is a concentration that is 10% (for carcinogenic, mutagenic or teratogenic compounds) to 20% of the enforcement standard. Remedial action is not always required if a PAL is exceeded. The ES is a health-risk based concentration and exceedances of ESs require further subsurface investigation, remedial action and/or natural attenuation monitoring. The PAL and ES values are shown on Table 1 with the tabulated laboratory analytical results for groundwater.

Soil Analytical Results: The results of the laboratory analysis for a selected list of VOCs are included as Table 1. One VOC was detected in the soil sample. Tetrachloroethene was detected at 27,600 micrograms per kilogram. This concentration is above the established residual contaminant level for non-industrial direct contact, non-industrial inhalation exposure and the soil to groundwater pathway.

Groundwater Analytical Results: Two VOCs were detected in the groundwater sample. Tetrachloroethene was detected at a concentration of 3 micrograms per liter which exceeds the PAL, but is below the ES. Naphthalene was detected in the groundwater at 5.5 micrograms per liter. This concentration is below the established groundwater quality standards. Naphthalene is not an ordinary component of modern day dry cleaning solutions, but may be associated with other historic petroleum-based dry cleaning solvents or the tarry odor observed in the soil at 6 feet bgs. The results of the laboratory analyses for a selected list of VOCs are also included on Table 1.

STS submitted a trip blank along with the soil and groundwater sample for quality assurance/quality control. The trip blank sample detected methylene chloride at 0.93 micrograms per liter. Methylene chloride was not detected in the groundwater sample. The detected concentration in the trip blank is likely a laboratory artifact because methylene chloride is used by the laboratory during analysis and is a common laboratory contaminant. The methylene chloride detection is not related to site conditions.

Based on these results, soil and groundwater have been adversely affected by the dry cleaning operation and further investigation of soil and groundwater is warranted. You may have an obligation to report these findings as a release to the WDNR and should consult environmental counsel for a legal opinion regarding statutory reporting requirements. You may be eligible for reimbursement of investigation and cleanup costs under the Wisconsin Dry

Cleaner Environmental Response Fund (DERF). We recommend you consider enrolling the site in the DERF program.

General Qualifications

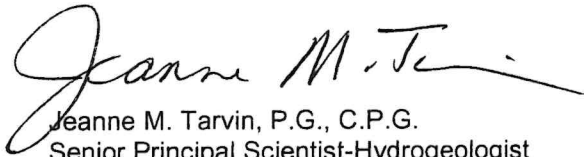
General qualifications to this report are included as an attachment.

We appreciate the opportunity to be of service to you, and we look forward to continuing working with you on other projects. Please contact the undersigned if you have any questions or comments regarding this report.

Sincerely,



Lanette L. Altenbach, P.G., C.P.G.  
Senior Project Scientist - Hydrogeologist



Jeanne M. Tarvin, P.G., C.P.G.  
Senior Principal Scientist-Hydrogeologist

Attachments

Table 1 – Soil and Groundwater Laboratory Analytical Results  
Figure 1 – Sample Location Map  
General Qualifications  
WDNR Form 4400-5B, Soil Boring Log  
WDNR Form 3300-5, Borehole Abandonment Form  
Pace Analytical Laboratory – Laboratory Reports

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**Table 1**  
**Soil and Groundwater Laboratory Analytical Results- Select Volatile Organic Compounds**  
 301 S. Main Street, Racine, WI  
 STS Project 200802257

<b>Soil Analytical Results</b>																	
Sample Location and Depth of Sample in feet bgs	Sample Date	1,1,1,2-Tetrachloroethane (ug/kg)	1,1,1-Trichloroethane (ug/kg)	1,1,2,2-Tetrachloroethane (ug/kg)	1,1,2-Trichloroethane (ug/kg)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/kg)	1,2-Dichloroethane (ug/lg)	Carbon Tetrachloride (ug/kg)	Chloroethane (ug/kg)	cis-1,2-Dichloroethene (ug/kg)	Methylene Chloride (ug/kg)	Naphthalene (ug/kg)	Tetrachloroethene (ug/kg)	trans-1,2-Dichloroethene (ug/kg)	Trichloroethene (ug/kg)	Vinyl chloride (ug/kg)
301 MAIN 1-2'	6-18-08	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	27600 <sup>ACE</sup>	<25	<25	<25
<b>Residual Contaminant Levels</b>																	
Direct Contact-Non-Industrial		2,460	3,130,000	319	1,120	3.13E+06	782,000	702D	491	--	156,000	8,520	60000E	1,230	313,000	160	42.6
Direct Contact-Industrial		110,000	2.04E+08	14,300	50,200	2.04E+08	5.11E+07	31,400	22,000	--	1.02E+07	382,000	4000000E	55,000	2.04E+07	7,150	1,910
Inhalation - Non-Industrial		1,200	1,200,000	110	180	470,000	110,000	71	60	--	--	2,500	63,000	1,900	--	13	52
Inhalation - Industrial		21,000	1,200,000	1,800	3,100	1.80E+06	750,000	1,200	1,000	--	--	42,000	440,000	33,000	--	220	870
Soil to Groundwater Pathway		157	280	0.09	1.9	349	10	4.9D	5	--	55	1.6	400E	4.1	98	3.7	0.13

Notes for Soil Results:

<sup>A</sup> Parameter exceeds NR 720 Generic RCL for Non-Industrial Direct Contact.

ug/kg=micrograms per kilogram

<sup>B</sup> Parameter exceeds NR 720 Generic RCL for Industrial Direct Contact.

-- No Generic RCL established.

<sup>C</sup> Parameter exceeds NR 720 Generic RCL for Non-Industrial Inhalation Pathway.

<sup>D</sup> Analyte detected between the method detection limit and reporting limit.

<sup>D</sup> Parameter exceeds NR 720 Generic RCL for Industrial Inhalation Pathway.

<sup>E</sup> Parameter exceeds NR 720 Generic RCL for Groundwater Pathway.

Generic RCLs not included in Wisconsin Administrative Code or Guidance are calculated from the US EPA Soil Screening Level Web Page and the default values contained in *Determining Residual Contaminant Levels using the EPA Soil Screening Level Web Site* WDNR PUB-RR-682 on May 12, 2006

<b>Groundwater Analytical Results</b>																	
Well Location	Sample Date	1,1,1,2-Tetrachloroethane (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	1,2-Dichloroethane (ug/L)	Carbon Tetrachloride (ug/L)	Chloroethane (ug/L)	cis-1,2-Dichloroethene (ug/L)	Methylene Chloride (ug/L)	Naphthalene (ug/L)	Tetrachloroethene (ug/L)	trans-1,2-Dichloroethene (ug/L)	Trichloroethene (ug/L)	Vinyl chloride (ug/L)
301 MAIN	6-18-08	<0.92	<0.90	<0.20	<0.12	<0.75	<0.57	<0.20	<0.49	0.97	0.83	<0.10	5.5	<u>3.0</u>	0.89	<0.18	<0.18
TRIP BLANK	6-18-08	<0.92	<0.90	<0.20	<0.12	<0.75	<0.57	<0.20	<0.49	0.97	0.83	<b>0.93<sup>J</sup></b>	<0.11	<0.15	0.89	<0.18	<0.18
PAL		7	40	0.02	0.5	85	0.7	0.5	0.5	80	7	0.5	10	0.5	20	0.5	0.02
ES		70	200	0.2	5	850	7	5	5	400	70	5	100	5	100	5	0.2

Notes for Groundwater Results:

ug/L = micrograms per liter

PAL - Preventive Action Limit, Wisconsin Administrative Code NR 140.10 Table 1, January 2007, exceedances are underlined italics.

ES - Enforcement Standard, Wisconsin Administrative Code NR 140.10 Table 1, January 2007, exceedances are **bold**.

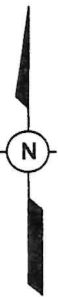
<sup>J</sup> Analyte detected between the method detection limit and reporting limit.



Legend

- 301 Main Sample Location and Sample ID

Source: Google Earth and STS Field notes



**STS | AECOM**

11425 W. Lake Park Drive  
 Suite 100, Milwaukee, WI 53224  
 T 414.359.3030  
[www.sts.aecom.com](http://www.sts.aecom.com)

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**SAMPLE LOCATION**

**301 MAIN STREET  
 RACINE, WISCONSIN**

Drawn: LLA 7/16/08

Checked: BJB 7/17/08

Approved: JMT 7/17/08

PROJECT NUMBER 200802257

FIGURE NUMBER 1

### **General Qualifications**

The purpose of this environmental assessment is to investigate possible soil and/or groundwater impacts, and related liabilities, associated with past and current property uses. The extent of the investigation is limited to the area and location described in this report.

STS has prepared this report at the request of its client. STS assumes responsibility for the accuracy of the report's content, subject to what is stated elsewhere in this section. STS recommends the report be used only for the purpose intended by the client and STS, as stated in the report. STS disclaims responsibility for the application or interpretation of the results by anyone other than the client. Reliance on the contents of this report by anyone other than the client, without the prior expressed written consent of STS, is done at the sole risk of the user.

The results, conclusions, and recommendations presented in this report are based on the data obtained from a limited number of soil boring locations and at the soil sample and groundwater sample locations as indicated in this report. Variations in conditions can occur between these boring, soil sample, and groundwater sample locations. In addition, seasonal and annual fluctuations of the groundwater table, which may influence the distribution of contaminants, can occur. Actual groundwater flow rates may vary from those estimated in this report based on soil conditions.

This report has been prepared in conformance with the care and skill ordinarily exercised by reputable members of the professional engineering community practicing under similar conditions at the same time in the same or similar locality. No other warranty of any kind, expressed or implied, at common law or created by statute, is extended, made, or intended.

Compliance with the recommendations and/or suggestions contained in this report in no way assures the elimination of hazards or the fulfillment of a property owner's obligation under local, state, or federal laws or any modifications or changes thereto. It is the responsibility of the property owner to notify authorities of any conditions that are in violation of current regulatory standards, laws or regulations. Your decision regarding the regulatory agency you notify and the selection of the cleanup program you enter, if appropriate, may affect your ability to seek cost recovery from responsible parties or to benefit from the proceeds of insurance policies. We recommend you contact legal counsel to obtain professional legal advice related to reporting.

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

Facility/Project Name <b>One Hour Martinizing - 200802257</b>			License/Permit/Monitoring Number		Boring Number <b>301 S. Main</b>	
Boring Drilled By: Name of crew chief (first, last) and Firm <b>Dusty On-Site Environmental Services, Inc.</b>			Date Drilling Started <b>6/18/2008</b>		Date Drilling Completed <b>6/18/2008</b>	Drilling Method <b>geoprobe</b>
WI Unique Well No.	DNR Well ID No.	Common Well Name <b>301 S. Main</b>	Final Static Water Level <b>Feet MSL</b>		Surface Elevation <b>Feet MSL</b>	Borehole Diameter <b>2.0 inches</b>
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/> State Plane <b>N, E S/C/N</b>			Lat <b>_____</b> Long <b>_____</b>		Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
Facility ID		County <b>Racine</b>	County Code <b>52</b>	Civil Town/City/ or Village <b>City of Racine</b>		

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments	
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200		
1 GP	60 30		0-2	Asphalt	Asphalt			0.0							
				Fill: Clayey Silt, little sand, trace gravel and brick fragments - moist	Fill										
2 GP	60 39		2-6	Fill: Silty Sand, some bricks - brown to tan to reddish brown - tar odor from 5.0' to 7.0' - moist PID = 18.3 at 6 feet bgs	Fill			0.0							
				Silty Clay - gray - moist											
3 GP	60 60		6-10		CL			0.0							
4 GP	60 60		10-16		CL			0.0							
				End of Boring. Boring advanced to 20.0 ft. by GeoProbe. Groundwater monitoring well installed to 20.0 ft. on 6/18/08. Boring backfilled with bentonite.											

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

Signature	Firm <b>STS</b>	Tel: Fax:
-----------	-----------------	--------------

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.



Notice: Please complete Form 3300-5 and return it to the appropriate DNR office and bureau. Completion of this report 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 this form 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 this form is not intended to be used for any other purpose. NOTE: See the instructions for more information.

Route to:  Drinking Water  Watershed/Wastewater  Waste Management  Remediation/Redevelopment  Other \_\_\_\_\_

(1) GENERAL INFORMATION		(2) FACILITY /OWNER INFORMATION	
WI Unique Well No.	DNR Well ID No.	County Racine	Facility Name One Hour Martinizing - 200802257
Common Well Name <u>301 S. Main</u> Gov't Lot (if applicable)		Facility ID	License/Permit/Monitoring No.
Grid Location NW 1/4 of SE 1/4 of Sec. <u>9</u> ; T. <u>3</u> N; R. <u>23</u> <input checked="" type="checkbox"/> E <input type="checkbox"/> W _____ ft. <input type="checkbox"/> N. <input type="checkbox"/> S., _____ ft. <input type="checkbox"/> E. <input type="checkbox"/> W.		Street Address of Well <u>301 S. Main</u>	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Well Location <input type="checkbox"/>		City, Village, or Town City of Racine	
Lat _____ ° _____ ' _____ " Long _____ ° _____ ' _____ " or		Present Well Owner	
State Plane _____ ft. N. _____ ft. E. <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Zone		Original Owner	
Reason For Abandonment		Street Address or Route of Owner	
WI Unique Well No. of Replacement Well		City, State, Zip Code	

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION	(4) PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL
Original Construction Date <u>6/18/2008</u>	Pump & Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable
<input type="checkbox"/> Monitoring Well	Liner(s) Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable
<input type="checkbox"/> Water Well	Screen Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable
<input checked="" type="checkbox"/> Drillhole / Borehole	Casing Left in Place? <input type="checkbox"/> Yes <input type="checkbox"/> No
If a Well Construction Report is available, please attach.	Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Construction Type:	Did Sealing Material Rise to Surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug	Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<input checked="" type="checkbox"/> Other (Specify) <u>Soil Probe</u>	If Yes, Was Hole Retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No
Formation Type:	Required Method of Placing Sealing Material
<input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock	<input type="checkbox"/> Conductor Pipe - Gravity <input type="checkbox"/> Conductor Pipe - Pumped
Total Well Depth (ft) <u>20.0</u> Casing Diameter (in.) _____	<input checked="" type="checkbox"/> Screened & Poured <input type="checkbox"/> Other (Explain)
(From ground surface) Casing Depth (ft.) _____	(Bentonite Chips)
Lower Drillhole Diameter (in.) _____	Sealing Materials
Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	<input type="checkbox"/> Neat Cement Grout
If Yes, To What Depth? _____ Feet	<input type="checkbox"/> Sand-Cement (Concrete) Grout
Depth to Water (Feet) _____	<input type="checkbox"/> Concrete
	<input type="checkbox"/> Clay-Sand Slurry
	<input type="checkbox"/> Bentonite-Sand Slurry
	<input type="checkbox"/> Chipped Bentonite
	For monitoring wells and monitoring well boreholes only
	<input type="checkbox"/> Bentonite Chips
	<input checked="" type="checkbox"/> Granular Bentonite
	<input type="checkbox"/> Bentonite-Cement Grout
	<input type="checkbox"/> Bentonite - Sand Slurry

(5) Sealing Material Used	From (Ft.)	To (Ft.)	Mix Ratio or Mud Weight
Granular Bentonite	Surface	20.0	

(6) Comments \_\_\_\_\_

(7) Name of Person or Firm Doing Sealing Work STS		Date of Abandonment 6/18/08
Signature of Person Doing Work		Date Signed
Street or Route		Telephone Number
City, State, Zip Code		

FOR DNR OR COUNTY USE ONLY	
Date Received	Noted By
Comments	

June 27, 2008

Lanette Altenbach  
STS Consultants, LTD.  
11425 West Lake Park Drive  
Milwaukee, WI 53224

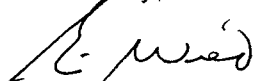
RE: Project: 200802257  
Pace Project No.: 405374

Dear Lanette Altenbach:

Enclosed are the analytical results for sample(s) received by the laboratory on June 20, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

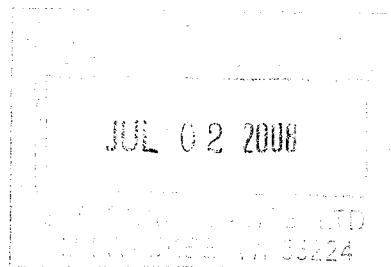
Sincerely,



Eric Wied

eric.wied@pacelabs.com  
Project Manager

Enclosures



**REPORT OF LABORATORY ANALYSIS**

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## CERTIFICATIONS

Project: 200802257  
Pace Project No.: 405374

---

### Green Bay Certification IDs

Florida (NELAP) Certification #: E87948  
Illinois Certification #: 200050  
California Certification #: 06246CA  
New York Certification #: 11888  
North Dakota Certification #: R-150  
North Carolina Certification #: 503

Minnesota Certification #: 055-999-334  
South Carolina Certification #: 83006001  
Wisconsin Certification #: 405132750  
Wisconsin DATCP Certification #: 105-444  
Kentucky Certification #: 82  
Louisiana Certification #: 04168

### Green Bay Volatiles Certification IDs

Florida (NELAP) Certification #: E87951  
California Certification #: 06247CA  
Illinois Certification #: 200051  
New York Certification #: 11887  
North Dakota Certification #: R-200  
North Carolina Certification #: 503

Minnesota Certification #: 055-999-334  
South Carolina Certification #: 83006001  
Wisconsin Certification #: 405132750  
Wisconsin DATCP Certification #: 105-444  
Kentucky Certification #: 83  
Louisiana Certification #: 04169

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### SAMPLE SUMMARY

Project: 200802257  
Pace Project No.: 405374

Lab ID	Sample ID	Matrix	Date Collected	Date Received
405374001	8516 DURAND 1-2'	Solid	06/18/08 00:00	06/20/08 08:45
405374002	8516 DURAND 8-9'	Solid	06/18/08 00:00	06/20/08 08:45
405374003	2801 DURAND 1-2'	Solid	06/18/08 00:00	06/20/08 08:45
405374004	2801 DURAND 2 1-2'	Solid	06/18/08 00:00	06/20/08 08:45
405374005	2801 DURAND 2 8-10'	Solid	06/18/08 00:00	06/20/08 08:45
405374006	4606 WASHINGTON 1-3'	Solid	06/18/08 00:00	06/20/08 08:45
405374007	4606 WASHINGTON 10-12'	Solid	06/18/08 00:00	06/20/08 08:45
405374008	301 MAIN 1-2'	Solid	06/18/08 00:00	06/20/08 08:45
405374009	3406 DOUGLAS 1-2'	Solid	06/18/08 00:00	06/20/08 08:45
405374010	3406 DOUGLAS 8-9'	Solid	06/18/08 00:00	06/20/08 08:45
405374011	301 MAIN	Water	06/18/08 00:00	06/20/08 08:45
405374012	4606 WASHINGTON	Water	06/18/08 00:00	06/20/08 08:45
405374013	MEOH BLANK	Solid	06/18/08 00:00	06/20/08 08:45
405374014	TRIP BLANK	Water	06/18/08 00:00	06/20/08 08:45

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### SAMPLE ANALYTE COUNT

Project: 200802257  
Pace Project No.: 405374

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
405374001	8516 DURAND 1-2'	ASTM D2974-87	AG	1	PASI-G
		EPA 8260	JJB	64	PASI-G
405374002	8516 DURAND 8-9'	ASTM D2974-87	AG	1	PASI-G
		EPA 8260	JJB	64	PASI-G
405374003	2801 DURAND 1-2'	ASTM D2974-87	AG	1	PASI-G
		EPA 8260	JJB	64	PASI-G
405374004	2801 DURAND 2 1-2'	ASTM D2974-87	AG	1	PASI-G
		EPA 8260	JJB	64	PASI-G
405374005	2801 DURAND 2 8-10'	ASTM D2974-87	AG	1	PASI-G
		EPA 8260	JJB	64	PASI-G
405374006	4606 WASHINGTON 1-3'	ASTM D2974-87	AG	1	PASI-G
		EPA 8260	JJB	64	PASI-G
405374007	4606 WASHINGTON 10-12'	ASTM D2974-87	AG	1	PASI-G
		EPA 8260	JJB	64	PASI-G
405374008	301 MAIN 1-2'	ASTM D2974-87	AG	1	PASI-G
		EPA 8260	JJB	64	PASI-G
405374009	3406 DOUGLAS 1-2'	ASTM D2974-87	AG	1	PASI-G
		EPA 8260	JJB	64	PASI-G
405374010	3406 DOUGLAS 8-9'	ASTM D2974-87	AG	1	PASI-G
		EPA 8260	JJB	64	PASI-G
405374011	301 MAIN	EPA 8260	JJS	64	PASI-G
405374012	4606 WASHINGTON	EPA 8260	JJS	64	PASI-G
405374013	MEOH BLANK	EPA 8260	JJB	64	PASI-G
405374014	TRIP BLANK	EPA 8260	JJS	64	PASI-G

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: 200802257  
Pace Project No.: 405374

Sample: 8516 DURAND 1-2' Lab ID: 405374001 Collected: 06/18/08 00:00 Received: 06/20/08 08:45 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Benzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	75-27-4	W
Bromoform	<25.9	ug/kg	60.0	25.9	1	06/24/08 10:03	06/24/08 16:33	75-25-2	W
Bromomethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	74-83-9	W
n-Butylbenzene	<40.4	ug/kg	60.0	40.4	1	06/24/08 10:03	06/24/08 16:33	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	56-23-5	L3,W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	108-90-7	W
Chloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	75-00-3	W
Chloroform	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	106-43-4	W
1,2-Dibromo-3-chloropropane	<82.3	ug/kg	250	82.3	1	06/24/08 10:03	06/24/08 16:33	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	74-95-3	W
1,2-Dichlorobenzene	<44.4	ug/kg	60.0	44.4	1	06/24/08 10:03	06/24/08 16:33	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	100-41-4	W
Hexachloro-1,3-butadiene	<26.4	ug/kg	60.0	26.4	1	06/24/08 10:03	06/24/08 16:33	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	100-42-5	W

### ANALYTICAL RESULTS

Project: 200802257

Pace Project No.: 405374

Sample: 8516 DURAND 1-2' Lab ID: 405374001 Collected: 06/18/08 00:00 Received: 06/20/08 08:45 Matrix: Solid  
Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	79-34-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	87-61-6	W
1,2,4-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	75-69-4	W
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	75-01-4	W
m&p-Xylene	<25.0	ug/kg	120	25.0	1	06/24/08 10:03	06/24/08 16:33	1330-20-7	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:33	95-47-6	W
Dibromofluoromethane (S)	130	%	64-140		1	06/24/08 10:03	06/24/08 16:33	1868-53-7	
Toluene-d8 (S)	107	%	67-139		1	06/24/08 10:03	06/24/08 16:33	2037-26-5	
4-Bromofluorobenzene (S)	110	%	64-133		1	06/24/08 10:03	06/24/08 16:33	460-00-4	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87							
Percent Moisture	19.5	%	0.10	0.10	1		06/23/08 12:17		

### ANALYTICAL RESULTS

Project: 200802257  
Pace Project No.: 405374

Sample: 8516 DURAND 8-9' Lab ID: 405374002 Collected: 06/18/08 00:00 Received: 06/20/08 08:45 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Benzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	75-27-4	W
Bromoform	<25.9	ug/kg	60.0	25.9	1	06/24/08 10:03	06/24/08 16:55	75-25-2	W
Bromomethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	74-83-9	W
n-Butylbenzene	<40.4	ug/kg	60.0	40.4	1	06/24/08 10:03	06/24/08 16:55	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	56-23-5	L3,W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	108-90-7	W
Chloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	75-00-3	W
Chloroform	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	106-43-4	W
1,2-Dibromo-3-chloropropane	<82.3	ug/kg	250	82.3	1	06/24/08 10:03	06/24/08 16:55	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	74-95-3	W
1,2-Dichlorobenzene	<44.4	ug/kg	60.0	44.4	1	06/24/08 10:03	06/24/08 16:55	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	75-35-4	W
cis-1,2-Dichloroethene	40.8J	ug/kg	68.8	28.7	1	06/24/08 10:03	06/24/08 16:55	156-59-2	
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	100-41-4	W
Hexachloro-1,3-butadiene	<26.4	ug/kg	60.0	26.4	1	06/24/08 10:03	06/24/08 16:55	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	100-42-5	W

Date: 06/27/2008 10:46 AM

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: 200802257  
Pace Project No.: 405374

**Sample: 8516 DURAND 8-9'      Lab ID: 405374002      Collected: 06/18/08 00:00      Received: 06/20/08 08:45      Matrix: Solid**  
**Results reported on a "dry-weight" basis**

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260    Preparation Method: EPA 5035/5030B									
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	79-34-5	W
Tetrachloroethene	90.6	ug/kg	68.8	28.7	1	06/24/08 10:03	06/24/08 16:55	127-18-4	
Toluene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	87-61-6	W
1,2,4-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	79-00-5	W
Trichloroethene	38.3J	ug/kg	68.8	28.7	1	06/24/08 10:03	06/24/08 16:55	79-01-6	
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	75-69-4	W
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	75-01-4	W
m&p-Xylene	<25.0	ug/kg	120	25.0	1	06/24/08 10:03	06/24/08 16:55	1330-20-7	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 16:55	95-47-6	W
Dibromofluoromethane (S)	117	%	64-140		1	06/24/08 10:03	06/24/08 16:55	1868-53-7	
Toluene-d8 (S)	100	%	67-139		1	06/24/08 10:03	06/24/08 16:55	2037-26-5	
4-Bromofluorobenzene (S)	104	%	64-133		1	06/24/08 10:03	06/24/08 16:55	460-00-4	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	12.8	%	0.10	0.10	1		06/23/08 12:17		

### ANALYTICAL RESULTS

Project: 200802257  
Pace Project No.: 405374

Sample: 2801 DURAND 1-2' Lab ID: 405374003 Collected: 06/18/08 00:00 Received: 06/20/08 08:45 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Benzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	75-27-4	W
Bromoform	<25.9	ug/kg	60.0	25.9	1	06/24/08 10:03	06/24/08 17:18	75-25-2	W
Bromomethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	74-83-9	W
n-Butylbenzene	<40.4	ug/kg	60.0	40.4	1	06/24/08 10:03	06/24/08 17:18	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	56-23-5	L3,W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	108-90-7	W
Chloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	75-00-3	W
Chloroform	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	106-43-4	W
1,2-Dibromo-3-chloropropane	<82.3	ug/kg	250	82.3	1	06/24/08 10:03	06/24/08 17:18	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	74-95-3	W
1,2-Dichlorobenzene	<44.4	ug/kg	60.0	44.4	1	06/24/08 10:03	06/24/08 17:18	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	100-41-4	W
Hexachloro-1,3-butadiene	<26.4	ug/kg	60.0	26.4	1	06/24/08 10:03	06/24/08 17:18	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	100-42-5	W

Date: 06/27/2008 10:46 AM

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: 200802257

Pace Project No.: 405374

Sample: 2801 DURAND 1-2' Lab ID: 405374003 Collected: 06/18/08 00:00 Received: 06/20/08 08:45 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	79-34-5	W
Tetrachloroethene	445	ug/kg	68.5	28.5	1	06/24/08 10:03	06/24/08 17:18	127-18-4	
Toluene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	87-61-6	W
1,2,4-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	79-00-5	W
Trichloroethene	31.3J	ug/kg	68.5	28.5	1	06/24/08 10:03	06/24/08 17:18	79-01-6	
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	75-69-4	W
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	75-01-4	W
m&p-Xylene	<25.0	ug/kg	120	25.0	1	06/24/08 10:03	06/24/08 17:18	1330-20-7	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:18	95-47-6	W
Dibromofluoromethane (S)	129	%	64-140		1	06/24/08 10:03	06/24/08 17:18	1868-53-7	
Toluene-d8 (S)	107	%	67-139		1	06/24/08 10:03	06/24/08 17:18	2037-26-5	
4-Bromofluorobenzene (S)	112	%	64-133		1	06/24/08 10:03	06/24/08 17:18	460-00-4	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87							
Percent Moisture	12.4	%	0.10	0.10	1		06/23/08 12:17		

### ANALYTICAL RESULTS

Project: 200802257  
Pace Project No.: 405374

Sample: 2801 DURAND 2 1-2' Lab ID: 405374004 Collected: 06/18/08 00:00 Received: 06/20/08 08:45 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Benzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	75-27-4	W
Bromoform	<25.9	ug/kg	60.0	25.9	1	06/24/08 10:03	06/24/08 17:40	75-25-2	W
Bromomethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	74-83-9	W
n-Butylbenzene	<40.4	ug/kg	60.0	40.4	1	06/24/08 10:03	06/24/08 17:40	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	56-23-5	L3,W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	108-90-7	W
Chloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	75-00-3	W
Chloroform	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	106-43-4	W
1,2-Dibromo-3-chloropropane	<82.3	ug/kg	250	82.3	1	06/24/08 10:03	06/24/08 17:40	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	74-95-3	W
1,2-Dichlorobenzene	<44.4	ug/kg	60.0	44.4	1	06/24/08 10:03	06/24/08 17:40	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	100-41-4	W
Hexachloro-1,3-butadiene	<26.4	ug/kg	60.0	26.4	1	06/24/08 10:03	06/24/08 17:40	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	100-42-5	W

### ANALYTICAL RESULTS

Project: 200802257  
Pace Project No.: 405374

Sample: 2801 DURAND 2 1-2' Lab ID: 405374004 Collected: 06/18/08 00:00 Received: 06/20/08 08:45 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	79-34-5	W
Tetrachloroethene	5440	ug/kg	71.0	29.6	1	06/24/08 10:03	06/24/08 17:40	127-18-4	
Toluene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	87-61-6	W
1,2,4-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	75-69-4	W
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	75-01-4	W
m&p-Xylene	<25.0	ug/kg	120	25.0	1	06/24/08 10:03	06/24/08 17:40	1330-20-7	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 17:40	95-47-6	W
Dibromofluoromethane (S)	116	%	64-140		1	06/24/08 10:03	06/24/08 17:40	1868-53-7	
Toluene-d8 (S)	96	%	67-139		1	06/24/08 10:03	06/24/08 17:40	2037-26-5	
4-Bromofluorobenzene (S)	99	%	64-133		1	06/24/08 10:03	06/24/08 17:40	460-00-4	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87							
Percent Moisture	15.5	%	0.10	0.10	1		06/23/08 12:17		

## ANALYTICAL RESULTS

Project: 200802257  
Pace Project No.: 405374

Sample: 2801 DURAND 2 8-10' Lab ID: 405374005 Collected: 06/18/08 00:00 Received: 06/20/08 08:45 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Benzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	75-27-4	W
Bromoform	<25.9	ug/kg	60.0	25.9	1	06/24/08 10:03	06/24/08 18:02	75-25-2	W
Bromomethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	74-83-9	W
n-Butylbenzene	<40.4	ug/kg	60.0	40.4	1	06/24/08 10:03	06/24/08 18:02	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	56-23-5	L3,W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	108-90-7	W
Chloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	75-00-3	W
Chloroform	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	106-43-4	W
1,2-Dibromo-3-chloropropane	<82.3	ug/kg	250	82.3	1	06/24/08 10:03	06/24/08 18:02	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	74-95-3	W
1,2-Dichlorobenzene	<44.4	ug/kg	60.0	44.4	1	06/24/08 10:03	06/24/08 18:02	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	100-41-4	W
Hexachloro-1,3-butadiene	<26.4	ug/kg	60.0	26.4	1	06/24/08 10:03	06/24/08 18:02	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	100-42-5	W

Date: 06/27/2008 10:46 AM

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### ANALYTICAL RESULTS

Project: 200802257  
Pace Project No.: 405374

Sample: 2801 DURAND 2 8-10' Lab ID: 405374005 Collected: 06/18/08 00:00 Received: 06/20/08 08:45 Matrix: Solid  
Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	79-34-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	87-61-6	W
1,2,4-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	75-69-4	W
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	75-01-4	W
m&p-Xylene	<25.0	ug/kg	120	25.0	1	06/24/08 10:03	06/24/08 18:02	1330-20-7	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:02	95-47-6	W
Dibromofluoromethane (S)	119	%	64-140		1	06/24/08 10:03	06/24/08 18:02	1868-53-7	
Toluene-d8 (S)	97	%	67-139		1	06/24/08 10:03	06/24/08 18:02	2037-26-5	
4-Bromofluorobenzene (S)	101	%	64-133		1	06/24/08 10:03	06/24/08 18:02	460-00-4	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	12.1	%	0.10	0.10	1		06/23/08 12:18		

### ANALYTICAL RESULTS

Project: 200802257  
Pace Project No.: 405374

Sample: 4606 WASHINGTON 1-3' Lab ID: 405374006 Collected: 06/18/08 00:00 Received: 06/20/08 08:45 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Benzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	75-27-4	W
Bromoform	<25.9	ug/kg	60.0	25.9	1	06/24/08 10:03	06/24/08 18:24	75-25-2	W
Bromomethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	74-83-9	W
n-Butylbenzene	<40.4	ug/kg	60.0	40.4	1	06/24/08 10:03	06/24/08 18:24	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	56-23-5	L3,W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	108-90-7	W
Chloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	75-00-3	W
Chloroform	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	106-43-4	W
1,2-Dibromo-3-chloropropane	<82.3	ug/kg	250	82.3	1	06/24/08 10:03	06/24/08 18:24	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	74-95-3	W
1,2-Dichlorobenzene	<44.4	ug/kg	60.0	44.4	1	06/24/08 10:03	06/24/08 18:24	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	100-41-4	W
Hexachloro-1,3-butadiene	<26.4	ug/kg	60.0	26.4	1	06/24/08 10:03	06/24/08 18:24	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	100-42-5	W

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### REPORT OF LABORATORY ANALYSIS

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**ANALYTICAL RESULTS**

Project: 200802257  
Pace Project No.: 405374

Sample: 4606 WASHINGTON 1-3' Lab ID: 405374006 Collected: 06/18/08 00:00 Received: 06/20/08 08:45 Matrix: Solid  
Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b> Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	79-34-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	87-61-6	W
1,2,4-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	75-69-4	W
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	75-01-4	W
m&p-Xylene	<25.0	ug/kg	120	25.0	1	06/24/08 10:03	06/24/08 18:24	1330-20-7	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:24	95-47-6	W
Dibromofluoromethane (S)	145	%	64-140		1	06/24/08 10:03	06/24/08 18:24	1868-53-7	S3
Toluene-d8 (S)	123	%	67-139		1	06/24/08 10:03	06/24/08 18:24	2037-26-5	
4-Bromofluorobenzene (S)	125	%	64-133		1	06/24/08 10:03	06/24/08 18:24	460-00-4	
<b>Percent Moisture</b> Analytical Method: ASTM D2974-87									
Percent Moisture	20.6	%	0.10	0.10	1		06/23/08 12:18		

### ANALYTICAL RESULTS

Project: 200802257  
Pace Project No.: 405374

Sample: 4606 WASHINGTON 10-12' Lab ID: 405374007 Collected: 06/18/08 00:00 Received: 06/20/08 08:45 Matrix: Solid  
Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Benzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	75-27-4	W
Bromoform	<25.9	ug/kg	60.0	25.9	1	06/24/08 10:03	06/24/08 18:46	75-25-2	W
Bromomethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	74-83-9	W
n-Butylbenzene	<40.4	ug/kg	60.0	40.4	1	06/24/08 10:03	06/24/08 18:46	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	56-23-5	L3,W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	108-90-7	W
Chloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	75-00-3	W
Chloroform	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	106-43-4	W
1,2-Dibromo-3-chloropropane	<82.3	ug/kg	250	82.3	1	06/24/08 10:03	06/24/08 18:46	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	74-95-3	W
1,2-Dichlorobenzene	<44.4	ug/kg	60.0	44.4	1	06/24/08 10:03	06/24/08 18:46	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	100-41-4	W
Hexachloro-1,3-butadiene	<26.4	ug/kg	60.0	26.4	1	06/24/08 10:03	06/24/08 18:46	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	100-42-5	W

Date: 06/27/2008 10:46 AM

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: 200802257  
Pace Project No.: 405374

Sample: 4606 WASHINGTON 10-12' Lab ID: 405374007 Collected: 06/18/08 00:00 Received: 06/20/08 08:45 Matrix: Solid  
Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	79-34-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	87-61-6	W
1,2,4-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	75-69-4	W
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	75-01-4	W
m&p-Xylene	<25.0	ug/kg	120	25.0	1	06/24/08 10:03	06/24/08 18:46	1330-20-7	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/24/08 10:03	06/24/08 18:46	95-47-6	W
Dibromofluoromethane (S)	115	%	64-140		1	06/24/08 10:03	06/24/08 18:46	1868-53-7	
Toluene-d8 (S)	96	%	67-139		1	06/24/08 10:03	06/24/08 18:46	2037-26-5	
4-Bromofluorobenzene (S)	99	%	64-133		1	06/24/08 10:03	06/24/08 18:46	460-00-4	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87							
Percent Moisture	12.8	%	0.10	0.10	1		06/23/08 12:18		

### ANALYTICAL RESULTS

Project: 200802257  
Pace Project No.: 405374

Sample: 3406 DOUGLAS 1-2' Lab ID: 405374009 Collected: 06/18/08 00:00 Received: 06/20/08 08:45 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b> Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Benzene	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	71-43-2	W
Bromobenzene	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	108-86-1	W
Bromochloromethane	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	74-97-5	W
Bromodichloromethane	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	75-27-4	W
Bromoform	<27.5	ug/kg	63.8	27.5	1	06/25/08 10:50	06/25/08 15:01	75-25-2	W
Bromomethane	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	74-83-9	W
n-Butylbenzene	<43.0	ug/kg	63.8	43.0	1	06/25/08 10:50	06/25/08 15:01	104-51-8	W
sec-Butylbenzene	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	135-98-8	W
tert-Butylbenzene	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	98-06-6	W
Carbon tetrachloride	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	56-23-5	W
Chlorobenzene	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	108-90-7	W
Chloroethane	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	75-00-3	W
Chloroform	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	67-66-3	W
Chloromethane	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	74-87-3	W
2-Chlorotoluene	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	95-49-8	W
4-Chlorotoluene	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	106-43-4	W
1,2-Dibromo-3-chloropropane	<87.6	ug/kg	266	87.6	1	06/25/08 10:50	06/25/08 15:01	96-12-8	W
Dibromochloromethane	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	124-48-1	W
1,2-Dibromoethane (EDB)	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	106-93-4	W
Dibromomethane	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	74-95-3	W
1,2-Dichlorobenzene	<47.2	ug/kg	63.8	47.2	1	06/25/08 10:50	06/25/08 15:01	95-50-1	W
1,3-Dichlorobenzene	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	541-73-1	W
1,4-Dichlorobenzene	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	106-46-7	W
Dichlorodifluoromethane	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	75-71-8	W
1,1-Dichloroethane	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	75-34-3	W
1,2-Dichloroethane	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	107-06-2	W
1,1-Dichloroethene	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	75-35-4	W
cis-1,2-Dichloroethene	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	156-59-2	W
trans-1,2-Dichloroethene	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	156-60-5	W
1,2-Dichloropropane	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	78-87-5	W
1,3-Dichloropropane	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	142-28-9	W
2,2-Dichloropropane	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	594-20-7	W
1,1-Dichloropropene	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	563-58-6	W
cis-1,3-Dichloropropene	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	10061-01-5	W
trans-1,3-Dichloropropene	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	10061-02-6	W
Diisopropyl ether	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	108-20-3	W
Ethylbenzene	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	100-41-4	W
Hexachloro-1,3-butadiene	<28.1	ug/kg	63.8	28.1	1	06/25/08 10:50	06/25/08 15:01	87-68-3	W
Isopropylbenzene (Cumene)	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	98-82-8	W
p-Isopropyltoluene	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	99-87-6	W
Methylene Chloride	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	75-09-2	R1,W
Methyl-tert-butyl ether	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	1634-04-4	W
Naphthalene	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	91-20-3	W
n-Propylbenzene	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	103-65-1	W
Styrene	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	100-42-5	W

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### REPORT OF LABORATORY ANALYSIS

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**ANALYTICAL RESULTS**

Project: 200802257  
Pace Project No.: 405374

Sample: 3406 DOUGLAS 1-2' Lab ID: 405374009 Collected: 06/18/08 00:00 Received: 06/20/08 08:45 Matrix: Solid  
Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
1,1,1,2-Tetrachloroethane	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	630-20-6	W
1,1,2,2-Tetrachloroethane	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	79-34-5	W
Tetrachloroethene	114	ug/kg	76.5	31.9	1	06/25/08 10:50	06/25/08 15:01	127-18-4	
Toluene	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	108-88-3	W
1,2,3-Trichlorobenzene	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	87-61-6	W
1,2,4-Trichlorobenzene	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	120-82-1	W
1,1,1-Trichloroethane	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	71-55-6	W
1,1,2-Trichloroethane	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	79-00-5	W
Trichloroethene	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	79-01-6	W
Trichlorofluoromethane	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	75-69-4	W
1,2,3-Trichloropropane	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	96-18-4	W
1,2,4-Trimethylbenzene	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	95-63-6	W
1,3,5-Trimethylbenzene	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	108-67-8	W
Vinyl chloride	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	75-01-4	W
m&p-Xylene	<26.6	ug/kg	128	26.6	1	06/25/08 10:50	06/25/08 15:01	1330-20-7	W
o-Xylene	<26.6	ug/kg	63.8	26.6	1	06/25/08 10:50	06/25/08 15:01	95-47-6	W
Dibromofluoromethane (S)	113	%	64-140		1	06/25/08 10:50	06/25/08 15:01	1868-53-7	
Toluene-d8 (S)	112	%	67-139		1	06/25/08 10:50	06/25/08 15:01	2037-26-5	
4-Bromofluorobenzene (S)	105	%	64-133		1	06/25/08 10:50	06/25/08 15:01	460-00-4	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	16.5	%	0.10	0.10	1		06/23/08 12:18		

## ANALYTICAL RESULTS

Project: 200802257

Pace Project No.: 405374

**Sample: 3406 DOUGLAS 8-9' Lab ID: 405374010 Collected: 06/18/08 00:00 Received: 06/20/08 08:45 Matrix: Solid**

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Benzene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	75-27-4	W
Bromoform	<25.9	ug/kg	60.0	25.9	1	06/25/08 10:50	06/25/08 15:24	75-25-2	W
Bromomethane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	74-83-9	W
n-Butylbenzene	<40.4	ug/kg	60.0	40.4	1	06/25/08 10:50	06/25/08 15:24	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	56-23-5	W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	108-90-7	W
Chloroethane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	75-00-3	W
Chloroform	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	106-43-4	W
1,2-Dibromo-3-chloropropane	<82.3	ug/kg	250	82.3	1	06/25/08 10:50	06/25/08 15:24	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	74-95-3	W
1,2-Dichlorobenzene	<44.4	ug/kg	60.0	44.4	1	06/25/08 10:50	06/25/08 15:24	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	75-35-4	W
cis-1,2-Dichloroethene	233	ug/kg	69.3	28.9	1	06/25/08 10:50	06/25/08 15:24	156-59-2	
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	100-41-4	W
Hexachloro-1,3-butadiene	<26.4	ug/kg	60.0	26.4	1	06/25/08 10:50	06/25/08 15:24	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	75-09-2	R1,W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	100-42-5	W

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### ANALYTICAL RESULTS

Project: 200802257  
Pace Project No.: 405374

**Sample: 3406 DOUGLAS 8-9'      Lab ID: 405374010      Collected: 06/18/08 00:00      Received: 06/20/08 08:45      Matrix: Solid**  
**Results reported on a "dry-weight" basis**

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	79-34-5	W
Tetrachloroethene	395	ug/kg	69.3	28.9	1	06/25/08 10:50	06/25/08 15:24	127-18-4	
Toluene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	87-61-6	W
1,2,4-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	75-69-4	W
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	75-01-4	W
m&p-Xylene	<25.0	ug/kg	120	25.0	1	06/25/08 10:50	06/25/08 15:24	1330-20-7	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 15:24	95-47-6	W
Dibromofluoromethane (S)	114	%	64-140		1	06/25/08 10:50	06/25/08 15:24	1868-53-7	
Toluene-d8 (S)	111	%	67-139		1	06/25/08 10:50	06/25/08 15:24	2037-26-5	
4-Bromofluorobenzene (S)	108	%	64-133		1	06/25/08 10:50	06/25/08 15:24	460-00-4	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87							
Percent Moisture	13.4	%	0.10	0.10	1		06/23/08 12:18		

## ANALYTICAL RESULTS

Project: 200802257  
Pace Project No.: 405374

Sample: 301 MAIN Lab ID: 405374011 Collected: 06/18/08 00:00 Received: 06/20/08 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Benzene	<0.41	ug/L	1.0	0.41	1		06/24/08 13:26	71-43-2	
Bromobenzene	<0.82	ug/L	1.0	0.82	1		06/24/08 13:26	108-86-1	
Bromochloromethane	<0.97	ug/L	1.0	0.97	1		06/24/08 13:26	74-97-5	
Bromodichloromethane	<0.56	ug/L	1.9	0.56	1		06/24/08 13:26	75-27-4	
Bromoform	<0.94	ug/L	3.1	0.94	1		06/24/08 13:26	75-25-2	
Bromomethane	<0.91	ug/L	3.0	0.91	1		06/24/08 13:26	74-83-9	
n-Butylbenzene	<0.93	ug/L	1.0	0.93	1		06/24/08 13:26	104-51-8	
sec-Butylbenzene	<0.89	ug/L	1.0	0.89	1		06/24/08 13:26	135-98-8	
tert-Butylbenzene	<0.97	ug/L	1.0	0.97	1		06/24/08 13:26	98-06-6	
Carbon tetrachloride	<0.49	ug/L	1.0	0.49	1		06/24/08 13:26	56-23-5	
Chlorobenzene	<0.41	ug/L	1.0	0.41	1		06/24/08 13:26	108-90-7	
Chloroethane	<0.97	ug/L	1.0	0.97	1		06/24/08 13:26	75-00-3	
Chloroform	<0.37	ug/L	1.2	0.37	1		06/24/08 13:26	67-66-3	
Chloromethane	<0.24	ug/L	0.80	0.24	1		06/24/08 13:26	74-87-3	
2-Chlorotoluene	<0.85	ug/L	1.0	0.85	1		06/24/08 13:26	95-49-8	
4-Chlorotoluene	<0.74	ug/L	1.0	0.74	1		06/24/08 13:26	106-43-4	
1,2-Dibromo-3-chloropropane	<0.87	ug/L	2.9	0.87	1		06/24/08 13:26	96-12-8	
Dibromochloromethane	<0.81	ug/L	1.0	0.81	1		06/24/08 13:26	124-48-1	
1,2-Dibromoethane (EDB)	<0.56	ug/L	1.9	0.56	1		06/24/08 13:26	106-93-4	
Dibromomethane	<0.60	ug/L	1.0	0.60	1		06/24/08 13:26	74-95-3	
1,2-Dichlorobenzene	<0.83	ug/L	1.0	0.83	1		06/24/08 13:26	95-50-1	
1,3-Dichlorobenzene	<0.87	ug/L	1.0	0.87	1		06/24/08 13:26	541-73-1	
1,4-Dichlorobenzene	<0.95	ug/L	1.0	0.95	1		06/24/08 13:26	106-46-7	
Dichlorodifluoromethane	<0.99	ug/L	1.0	0.99	1		06/24/08 13:26	75-71-8	
1,1-Dichloroethane	<0.75	ug/L	1.0	0.75	1		06/24/08 13:26	75-34-3	
1,2-Dichloroethane	<0.36	ug/L	1.0	0.36	1		06/24/08 13:26	107-06-2	
1,1-Dichloroethene	<0.57	ug/L	1.0	0.57	1		06/24/08 13:26	75-35-4	
cis-1,2-Dichloroethene	<0.83	ug/L	1.0	0.83	1		06/24/08 13:26	156-59-2	
trans-1,2-Dichloroethene	<0.89	ug/L	1.0	0.89	1		06/24/08 13:26	156-60-5	
1,2-Dichloropropane	<0.46	ug/L	1.0	0.46	1		06/24/08 13:26	78-87-5	
1,3-Dichloropropane	<0.61	ug/L	2.0	0.61	1		06/24/08 13:26	142-28-9	
2,2-Dichloropropane	<0.62	ug/L	1.0	0.62	1		06/24/08 13:26	594-20-7	
1,1-Dichloropropene	<0.75	ug/L	1.0	0.75	1		06/24/08 13:26	563-58-6	
cis-1,3-Dichloropropene	<0.19	ug/L	0.63	0.19	1		06/24/08 13:26	10061-01-5	
trans-1,3-Dichloropropene	<0.19	ug/L	0.63	0.19	1		06/24/08 13:26	10061-02-6	
Diisopropyl ether	<0.76	ug/L	1.0	0.76	1		06/24/08 13:26	108-20-3	
Ethylbenzene	<0.54	ug/L	1.0	0.54	1		06/24/08 13:26	100-41-4	
Hexachloro-1,3-butadiene	<0.67	ug/L	1.0	0.67	1		06/24/08 13:26	87-68-3	
Isopropylbenzene (Cumene)	<0.59	ug/L	1.0	0.59	1		06/24/08 13:26	98-82-8	
p-Isopropyltoluene	<0.67	ug/L	1.0	0.67	1		06/24/08 13:26	99-87-6	
Methylene Chloride	<0.43	ug/L	1.4	0.43	1		06/24/08 13:26	75-09-2	
Methyl-tert-butyl ether	<0.61	ug/L	2.0	0.61	1		06/24/08 13:26	1634-04-4	
Naphthalene	5.5	ug/L	5.0	0.74	1		06/24/08 13:26	91-20-3	
n-Propylbenzene	<0.81	ug/L	1.0	0.81	1		06/24/08 13:26	103-65-1	
Styrene	<0.86	ug/L	1.0	0.86	1		06/24/08 13:26	100-42-5	
1,1,1,2-Tetrachloroethane	<0.92	ug/L	1.0	0.92	1		06/24/08 13:26	630-20-6	

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### ANALYTICAL RESULTS

Project: 200802257  
Pace Project No.: 405374

Sample: 301 MAIN      Lab ID: 405374011      Collected: 06/18/08 00:00      Received: 06/20/08 08:45      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
1,1,2,2-Tetrachloroethane	<0.20	ug/L	0.67	0.20 *	1		06/24/08 13:26	79-34-5	
Tetrachloroethene	3.0	ug/L	1.0	0.45	1		06/24/08 13:26	127-18-4	
Toluene	<0.67	ug/L	1.0	0.67	1		06/24/08 13:26	108-88-3	
1,2,3-Trichlorobenzene	<0.74	ug/L	1.0	0.74	1		06/24/08 13:26	87-61-6	
1,2,4-Trichlorobenzene	<0.97	ug/L	1.0	0.97	1		06/24/08 13:26	120-82-1	
1,1,1-Trichloroethane	<0.90	ug/L	1.0	0.90	1		06/24/08 13:26	71-55-6	
1,1,2-Trichloroethane	<0.42	ug/L	1.4	0.42	1		06/24/08 13:26	79-00-5	
Trichloroethene	<0.48	ug/L	1.0	0.48	1		06/24/08 13:26	79-01-6	
Trichlorofluoromethane	<0.79	ug/L	1.0	0.79	1		06/24/08 13:26	75-69-4	
1,2,3-Trichloropropane	<0.99	ug/L	1.0	0.99	1		06/24/08 13:26	96-18-4	
1,2,4-Trimethylbenzene	<0.97	ug/L	1.0	0.97	1		06/24/08 13:26	95-63-6	
1,3,5-Trimethylbenzene	<0.83	ug/L	1.0	0.83	1		06/24/08 13:26	108-67-8	
Vinyl chloride	<0.18	ug/L	0.60	0.18	1		06/24/08 13:26	75-01-4	
m&p-Xylene	<1.8	ug/L	2.0	1.8	1		06/24/08 13:26	1330-20-7	
o-Xylene	<0.83	ug/L	1.0	0.83	1		06/24/08 13:26	95-47-6	
4-Bromofluorobenzene (S)	103	%	64-132		1		06/24/08 13:26	460-00-4	
Dibromofluoromethane (S)	102	%	68-122		1		06/24/08 13:26	1868-53-7	
Toluene-d8 (S)	100	%	73-127		1		06/24/08 13:26	2037-26-5	

### ANALYTICAL RESULTS

Project: 200802257  
Pace Project No.: 405374

Sample: 301 MAIN 1-2' Lab ID: 405374008 Collected: 06/18/08 00:00 Received: 06/20/08 08:45 Matrix: Solid  
Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Benzene	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	71-43-2	W
Bromobenzene	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	108-86-1	W
Bromochloromethane	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	74-97-5	W
Bromodichloromethane	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	75-27-4	W
Bromoform	<207	ug/kg	480	207	8	06/24/08 10:03	06/24/08 19:09	75-25-2	W
Bromomethane	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	74-83-9	W
n-Butylbenzene	<323	ug/kg	480	323	8	06/24/08 10:03	06/24/08 19:09	104-51-8	W
sec-Butylbenzene	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	135-98-8	W
tert-Butylbenzene	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	98-06-6	W
Carbon tetrachloride	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	56-23-5	L3,W
Chlorobenzene	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	108-90-7	W
Chloroethane	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	75-00-3	W
Chloroform	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	67-66-3	W
Chloromethane	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	74-87-3	W
2-Chlorotoluene	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	95-49-8	W
4-Chlorotoluene	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	106-43-4	W
1,2-Dibromo-3-chloropropane	<658	ug/kg	2000	658	8	06/24/08 10:03	06/24/08 19:09	96-12-8	W
Dibromochloromethane	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	124-48-1	W
1,2-Dibromoethane (EDB)	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	106-93-4	W
Dibromomethane	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	74-95-3	W
1,2-Dichlorobenzene	<355	ug/kg	480	355	8	06/24/08 10:03	06/24/08 19:09	95-50-1	W
1,3-Dichlorobenzene	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	541-73-1	W
1,4-Dichlorobenzene	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	106-46-7	W
Dichlorodifluoromethane	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	75-71-8	W
1,1-Dichloroethane	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	75-34-3	W
1,2-Dichloroethane	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	107-06-2	W
1,1-Dichloroethene	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	75-35-4	W
cis-1,2-Dichloroethene	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	156-59-2	W
trans-1,2-Dichloroethene	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	156-60-5	W
1,2-Dichloropropane	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	78-87-5	W
1,3-Dichloropropane	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	142-28-9	W
2,2-Dichloropropane	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	594-20-7	W
1,1-Dichloropropene	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	563-58-6	W
cis-1,3-Dichloropropene	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	10061-01-5	W
trans-1,3-Dichloropropene	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	10061-02-6	W
Diisopropyl ether	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	108-20-3	W
Ethylbenzene	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	100-41-4	W
Hexachloro-1,3-butadiene	<211	ug/kg	480	211	8	06/24/08 10:03	06/24/08 19:09	87-68-3	W
Isopropylbenzene (Cumene)	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	98-82-8	W
p-Isopropyltoluene	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	99-87-6	W
Methylene Chloride	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	75-09-2	W
Methyl-tert-butyl ether	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	1634-04-4	W
Naphthalene	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	91-20-3	W
n-Propylbenzene	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	103-65-1	W
Styrene	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	100-42-5	W

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### ANALYTICAL RESULTS

Project: 200802257  
Pace Project No.: 405374

**Sample: 301 MAIN 1-2'      Lab ID: 405374008      Collected: 06/18/08 00:00      Received: 06/20/08 08:45      Matrix: Solid**  
**Results reported on a "dry-weight" basis**

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
1,1,1,2-Tetrachloroethane	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	630-20-6	W
1,1,2,2-Tetrachloroethane	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	79-34-5	W
Tetrachloroethene	27600	ug/kg	536	223	8	06/24/08 10:03	06/24/08 19:09	127-18-4	
Toluene	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	108-88-3	W
1,2,3-Trichlorobenzene	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	87-61-6	W
1,2,4-Trichlorobenzene	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	120-82-1	W
1,1,1-Trichloroethane	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	71-55-6	W
1,1,2-Trichloroethane	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	79-00-5	W
Trichloroethene	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	79-01-6	W
Trichlorofluoromethane	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	75-69-4	W
1,2,3-Trichloropropane	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	96-18-4	W
1,2,4-Trimethylbenzene	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	95-63-6	W
1,3,5-Trimethylbenzene	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	108-67-8	W
Vinyl chloride	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	75-01-4	W
m&p-Xylene	<200	ug/kg	960	200	8	06/24/08 10:03	06/24/08 19:09	1330-20-7	W
o-Xylene	<200	ug/kg	480	200	8	06/24/08 10:03	06/24/08 19:09	95-47-6	W
Dibromofluoromethane (S)	120	%	64-140		8	06/24/08 10:03	06/24/08 19:09	1868-53-7	
Toluene-d8 (S)	89	%	67-139		8	06/24/08 10:03	06/24/08 19:09	2037-26-5	
4-Bromofluorobenzene (S)	87	%	64-133		8	06/24/08 10:03	06/24/08 19:09	460-00-4	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87							
Percent Moisture	10.4	%	0.10	0.10	1		06/23/08 12:18		

### ANALYTICAL RESULTS

Project: 200802257  
Pace Project No.: 405374

**Sample: 4606 WASHINGTON**      **Lab ID: 405374012**      Collected: 06/18/08 00:00      Received: 06/20/08 08:45      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Benzene	<0.41	ug/L	1.0	0.41	1		06/24/08 17:44	71-43-2	
Bromobenzene	<0.82	ug/L	1.0	0.82	1		06/24/08 17:44	108-86-1	
Bromochloromethane	<0.97	ug/L	1.0	0.97	1		06/24/08 17:44	74-97-5	
Bromodichloromethane	<0.56	ug/L	1.9	0.56	1		06/24/08 17:44	75-27-4	
Bromoform	<0.94	ug/L	3.1	0.94	1		06/24/08 17:44	75-25-2	
Bromomethane	<0.91	ug/L	3.0	0.91	1		06/24/08 17:44	74-83-9	
n-Butylbenzene	<0.93	ug/L	1.0	0.93	1		06/24/08 17:44	104-51-8	
sec-Butylbenzene	<0.89	ug/L	1.0	0.89	1		06/24/08 17:44	135-98-8	
tert-Butylbenzene	<0.97	ug/L	1.0	0.97	1		06/24/08 17:44	98-06-6	
Carbon tetrachloride	<0.49	ug/L	1.0	0.49	1		06/24/08 17:44	56-23-5	
Chlorobenzene	<0.41	ug/L	1.0	0.41	1		06/24/08 17:44	108-90-7	
Chloroethane	<0.97	ug/L	1.0	0.97	1		06/24/08 17:44	75-00-3	
Chloroform	<0.37	ug/L	1.2	0.37	1		06/24/08 17:44	67-66-3	
Chloromethane	<0.24	ug/L	0.80	0.24	1		06/24/08 17:44	74-87-3	
2-Chlorotoluene	<0.85	ug/L	1.0	0.85	1		06/24/08 17:44	95-49-8	
4-Chlorotoluene	<0.74	ug/L	1.0	0.74	1		06/24/08 17:44	106-43-4	
1,2-Dibromo-3-chloropropane	<0.87	ug/L	2.9	0.87	1		06/24/08 17:44	96-12-8	
Dibromochloromethane	<0.81	ug/L	1.0	0.81	1		06/24/08 17:44	124-48-1	
1,2-Dibromoethane (EDB)	<0.56	ug/L	1.9	0.56	1		06/24/08 17:44	106-93-4	
Dibromomethane	<0.60	ug/L	1.0	0.60	1		06/24/08 17:44	74-95-3	
1,2-Dichlorobenzene	<0.83	ug/L	1.0	0.83	1		06/24/08 17:44	95-50-1	
1,3-Dichlorobenzene	<0.87	ug/L	1.0	0.87	1		06/24/08 17:44	541-73-1	
1,4-Dichlorobenzene	<0.95	ug/L	1.0	0.95	1		06/24/08 17:44	106-46-7	
Dichlorodifluoromethane	<0.99	ug/L	1.0	0.99	1		06/24/08 17:44	75-71-8	
1,1-Dichloroethane	<0.75	ug/L	1.0	0.75	1		06/24/08 17:44	75-34-3	
1,2-Dichloroethane	<0.36	ug/L	1.0	0.36	1		06/24/08 17:44	107-06-2	
1,1-Dichloroethene	<0.57	ug/L	1.0	0.57	1		06/24/08 17:44	75-35-4	
cis-1,2-Dichloroethene	<0.83	ug/L	1.0	0.83	1		06/24/08 17:44	156-59-2	
trans-1,2-Dichloroethene	<0.89	ug/L	1.0	0.89	1		06/24/08 17:44	156-60-5	
1,2-Dichloropropane	<0.46	ug/L	1.0	0.46	1		06/24/08 17:44	78-87-5	
1,3-Dichloropropane	<0.61	ug/L	2.0	0.61	1		06/24/08 17:44	142-28-9	
2,2-Dichloropropane	<0.62	ug/L	1.0	0.62	1		06/24/08 17:44	594-20-7	
1,1-Dichloropropene	<0.75	ug/L	1.0	0.75	1		06/24/08 17:44	563-58-6	
cis-1,3-Dichloropropene	<0.19	ug/L	0.63	0.19	1		06/24/08 17:44	10061-01-5	
trans-1,3-Dichloropropene	<0.19	ug/L	0.63	0.19	1		06/24/08 17:44	10061-02-6	
Diisopropyl ether	<0.76	ug/L	1.0	0.76	1		06/24/08 17:44	108-20-3	
Ethylbenzene	<0.54	ug/L	1.0	0.54	1		06/24/08 17:44	100-41-4	
Hexachloro-1,3-butadiene	<0.67	ug/L	1.0	0.67	1		06/24/08 17:44	87-68-3	
Isopropylbenzene (Cumene)	<0.59	ug/L	1.0	0.59	1		06/24/08 17:44	98-82-8	
p-Isopropyltoluene	<0.67	ug/L	1.0	0.67	1		06/24/08 17:44	99-87-6	
Methylene Chloride	<0.43	ug/L	1.4	0.43	1		06/24/08 17:44	75-09-2	
Methyl-tert-butyl ether	<0.61	ug/L	2.0	0.61	1		06/24/08 17:44	1634-04-4	
Naphthalene	<0.74	ug/L	5.0	0.74	1		06/24/08 17:44	91-20-3	
n-Propylbenzene	<0.81	ug/L	1.0	0.81	1		06/24/08 17:44	103-65-1	
Styrene	<0.86	ug/L	1.0	0.86	1		06/24/08 17:44	100-42-5	
1,1,1,2-Tetrachloroethane	<0.92	ug/L	1.0	0.92	1		06/24/08 17:44	630-20-6	

Date: 06/27/2008 10:46 AM

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: 200802257  
Pace Project No.: 405374

Sample: 4606 WASHINGTON Lab ID: 405374012 Collected: 06/18/08 00:00 Received: 06/20/08 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
1,1,2,2-Tetrachloroethane	<0.20	ug/L	0.67	0.20	1		06/24/08 17:44	79-34-5	
Tetrachloroethene	<0.45	ug/L	1.0	0.45	1		06/24/08 17:44	127-18-4	
Toluene	<0.67	ug/L	1.0	0.67	1		06/24/08 17:44	108-88-3	
1,2,3-Trichlorobenzene	<0.74	ug/L	1.0	0.74	1		06/24/08 17:44	87-61-6	
1,2,4-Trichlorobenzene	<0.97	ug/L	1.0	0.97	1		06/24/08 17:44	120-82-1	
1,1,1-Trichloroethane	<0.90	ug/L	1.0	0.90	1		06/24/08 17:44	71-55-6	
1,1,2-Trichloroethane	<0.42	ug/L	1.4	0.42	1		06/24/08 17:44	79-00-5	
Trichloroethene	<0.48	ug/L	1.0	0.48	1		06/24/08 17:44	79-01-6	
Trichlorofluoromethane	<0.79	ug/L	1.0	0.79	1		06/24/08 17:44	75-69-4	
1,2,3-Trichloropropane	<0.99	ug/L	1.0	0.99	1		06/24/08 17:44	96-18-4	
1,2,4-Trimethylbenzene	<0.97	ug/L	1.0	0.97	1		06/24/08 17:44	95-63-6	
1,3,5-Trimethylbenzene	<0.83	ug/L	1.0	0.83	1		06/24/08 17:44	108-67-8	
Vinyl chloride	<0.18	ug/L	0.60	0.18	1		06/24/08 17:44	75-01-4	
m&p-Xylene	<1.8	ug/L	2.0	1.8	1		06/24/08 17:44	1330-20-7	
o-Xylene	<0.83	ug/L	1.0	0.83	1		06/24/08 17:44	95-47-6	
4-Bromofluorobenzene (S)	104	%	64-132		1		06/24/08 17:44	460-00-4	
Dibromofluoromethane (S)	102	%	68-122		1		06/24/08 17:44	1868-53-7	
Toluene-d8 (S)	100	%	73-127		1		06/24/08 17:44	2037-26-5	

### ANALYTICAL RESULTS

Project: 200802257

Pace Project No.: 405374

**Sample: MEOH BLANK**      **Lab ID: 405374013**      Collected: 06/18/08 00:00      Received: 06/20/08 08:45      Matrix: Solid

*Results reported on a "wet-weight" basis*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b> Analytical Method: EPA 8260      Preparation Method: EPA 5035/5030B									
Benzene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	75-27-4	W
Bromoform	<25.9	ug/kg	60.0	25.9	1	06/25/08 10:50	06/25/08 14:15	75-25-2	W
Bromomethane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	74-83-9	W
n-Butylbenzene	<40.4	ug/kg	60.0	40.4	1	06/25/08 10:50	06/25/08 14:15	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	98-06-6	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	56-23-5	W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	108-90-7	W
Chloroethane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	75-00-3	W
Chloroform	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	106-43-4	W
1,2-Dibromo-3-chloropropane	<82.3	ug/kg	250	82.3	1	06/25/08 10:50	06/25/08 14:15	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	74-95-3	W
1,2-Dichlorobenzene	<44.4	ug/kg	60.0	44.4	1	06/25/08 10:50	06/25/08 14:15	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	100-41-4	W
Hexachloro-1,3-butadiene	<26.4	ug/kg	60.0	26.4	1	06/25/08 10:50	06/25/08 14:15	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	75-09-2	R1,W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	100-42-5	W

### ANALYTICAL RESULTS

Project: 200802257  
Pace Project No.: 405374

Sample: MEOH BLANK Lab ID: 405374013 Collected: 06/18/08 00:00 Received: 06/20/08 08:45 Matrix: Solid  
Results reported on a "wet-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	79-34-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	87-61-6	W
1,2,4-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	79-01-6	W
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	75-69-4	W
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	75-01-4	W
m&p-Xylene	<25.0	ug/kg	120	25.0	1	06/25/08 10:50	06/25/08 14:15	1330-20-7	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/25/08 10:50	06/25/08 14:15	95-47-6	W
Dibromofluoromethane (S)	113	%	64-140		1	06/25/08 10:50	06/25/08 14:15	1868-53-7	
Toluene-d8 (S)	102	%	67-139		1	06/25/08 10:50	06/25/08 14:15	2037-26-5	
4-Bromofluorobenzene (S)	108	%	64-133		1	06/25/08 10:50	06/25/08 14:15	460-00-4	

### ANALYTICAL RESULTS

Project: 200802257  
Pace Project No.: 405374

Sample: TRIP BLANK Lab ID: 405374014 Collected: 06/18/08 00:00 Received: 06/20/08 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Benzene	<0.41	ug/L	1.0	0.41	1		06/24/08 09:09	71-43-2	
Bromobenzene	<0.82	ug/L	1.0	0.82	1		06/24/08 09:09	108-86-1	
Bromochloromethane	<0.97	ug/L	1.0	0.97	1		06/24/08 09:09	74-97-5	
Bromodichloromethane	<0.56	ug/L	1.9	0.56	1		06/24/08 09:09	75-27-4	
Bromoform	<0.94	ug/L	3.1	0.94	1		06/24/08 09:09	75-25-2	
Bromomethane	<0.91	ug/L	3.0	0.91	1		06/24/08 09:09	74-83-9	
n-Butylbenzene	<0.93	ug/L	1.0	0.93	1		06/24/08 09:09	104-51-8	
sec-Butylbenzene	<0.89	ug/L	1.0	0.89	1		06/24/08 09:09	135-98-8	
tert-Butylbenzene	<0.97	ug/L	1.0	0.97	1		06/24/08 09:09	98-06-6	
Carbon tetrachloride	<0.49	ug/L	1.0	0.49	1		06/24/08 09:09	56-23-5	
Chlorobenzene	<0.41	ug/L	1.0	0.41	1		06/24/08 09:09	108-90-7	
Chloroethane	<0.97	ug/L	1.0	0.97	1		06/24/08 09:09	75-00-3	
Chloroform	<0.37	ug/L	1.2	0.37	1		06/24/08 09:09	67-66-3	
Chloromethane	<0.24	ug/L	0.80	0.24	1		06/24/08 09:09	74-87-3	
2-Chlorotoluene	<0.85	ug/L	1.0	0.85	1		06/24/08 09:09	95-49-8	
4-Chlorotoluene	<0.74	ug/L	1.0	0.74	1		06/24/08 09:09	106-43-4	
1,2-Dibromo-3-chloropropane	<0.87	ug/L	2.9	0.87	1		06/24/08 09:09	96-12-8	
Dibromochloromethane	<0.81	ug/L	1.0	0.81	1		06/24/08 09:09	124-48-1	
1,2-Dibromoethane (EDB)	<0.56	ug/L	1.9	0.56	1		06/24/08 09:09	106-93-4	
Dibromomethane	<0.60	ug/L	1.0	0.60	1		06/24/08 09:09	74-95-3	
1,2-Dichlorobenzene	<0.83	ug/L	1.0	0.83	1		06/24/08 09:09	95-50-1	
1,3-Dichlorobenzene	<0.87	ug/L	1.0	0.87	1		06/24/08 09:09	541-73-1	
1,4-Dichlorobenzene	<0.95	ug/L	1.0	0.95	1		06/24/08 09:09	106-46-7	
Dichlorodifluoromethane	<0.99	ug/L	1.0	0.99	1		06/24/08 09:09	75-71-8	
1,1-Dichloroethane	<0.75	ug/L	1.0	0.75	1		06/24/08 09:09	75-34-3	
1,2-Dichloroethane	<0.36	ug/L	1.0	0.36	1		06/24/08 09:09	107-06-2	
1,1-Dichloroethene	<0.57	ug/L	1.0	0.57	1		06/24/08 09:09	75-35-4	
cis-1,2-Dichloroethene	<0.83	ug/L	1.0	0.83	1		06/24/08 09:09	156-59-2	
trans-1,2-Dichloroethene	<0.89	ug/L	1.0	0.89	1		06/24/08 09:09	156-60-5	
1,2-Dichloropropane	<0.46	ug/L	1.0	0.46	1		06/24/08 09:09	78-87-5	
1,3-Dichloropropane	<0.61	ug/L	2.0	0.61	1		06/24/08 09:09	142-28-9	
2,2-Dichloropropane	<0.62	ug/L	1.0	0.62	1		06/24/08 09:09	594-20-7	
1,1-Dichloropropene	<0.75	ug/L	1.0	0.75	1		06/24/08 09:09	563-58-6	
cis-1,3-Dichloropropene	<0.19	ug/L	0.63	0.19	1		06/24/08 09:09	10061-01-5	
trans-1,3-Dichloropropene	<0.19	ug/L	0.63	0.19	1		06/24/08 09:09	10061-02-6	
Diisopropyl ether	<0.76	ug/L	1.0	0.76	1		06/24/08 09:09	108-20-3	
Ethylbenzene	<0.54	ug/L	1.0	0.54	1		06/24/08 09:09	100-41-4	
Hexachloro-1,3-butadiene	<0.67	ug/L	1.0	0.67	1		06/24/08 09:09	87-68-3	
Isopropylbenzene (Cumene)	<0.59	ug/L	1.0	0.59	1		06/24/08 09:09	98-82-8	
p-Isopropyltoluene	<0.67	ug/L	1.0	0.67	1		06/24/08 09:09	99-87-6	
Methylene Chloride	0.93J	ug/L	1.4	0.43	1		06/24/08 09:09	75-09-2	
Methyl-tert-butyl ether	<0.61	ug/L	2.0	0.61	1		06/24/08 09:09	1634-04-4	
Naphthalene	<0.74	ug/L	5.0	0.74	1		06/24/08 09:09	91-20-3	
n-Propylbenzene	<0.81	ug/L	1.0	0.81	1		06/24/08 09:09	103-65-1	
Styrene	<0.86	ug/L	1.0	0.86	1		06/24/08 09:09	100-42-5	
1,1,1,2-Tetrachloroethane	<0.92	ug/L	1.0	0.92	1		06/24/08 09:09	630-20-6	

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### ANALYTICAL RESULTS

Project: 200802257  
Pace Project No.: 405374

Sample: TRIP BLANK      Lab ID: 405374014      Collected: 06/18/08 00:00      Received: 06/20/08 08:45      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
1,1,2,2-Tetrachloroethane	<0.20	ug/L	0.67	0.20	1		06/24/08 09:09	79-34-5	
Tetrachloroethene	<0.45	ug/L	1.0	0.45	1		06/24/08 09:09	127-18-4	
Toluene	<0.67	ug/L	1.0	0.67	1		06/24/08 09:09	108-88-3	
1,2,3-Trichlorobenzene	<0.74	ug/L	1.0	0.74	1		06/24/08 09:09	87-61-6	
1,2,4-Trichlorobenzene	<0.97	ug/L	1.0	0.97	1		06/24/08 09:09	120-82-1	
1,1,1-Trichloroethane	<0.90	ug/L	1.0	0.90	1		06/24/08 09:09	71-55-6	
1,1,2-Trichloroethane	<0.42	ug/L	1.4	0.42	1		06/24/08 09:09	79-00-5	
Trichloroethene	<0.48	ug/L	1.0	0.48	1		06/24/08 09:09	79-01-6	
Trichlorofluoromethane	<0.79	ug/L	1.0	0.79	1		06/24/08 09:09	75-69-4	
1,2,3-Trichloropropane	<0.99	ug/L	1.0	0.99	1		06/24/08 09:09	96-18-4	
1,2,4-Trimethylbenzene	<0.97	ug/L	1.0	0.97	1		06/24/08 09:09	95-63-6	
1,3,5-Trimethylbenzene	<0.83	ug/L	1.0	0.83	1		06/24/08 09:09	108-67-8	
Vinyl chloride	<0.18	ug/L	0.60	0.18	1		06/24/08 09:09	75-01-4	
m&p-Xylene	<1.8	ug/L	2.0	1.8	1		06/24/08 09:09	1330-20-7	
o-Xylene	<0.83	ug/L	1.0	0.83	1		06/24/08 09:09	95-47-6	
4-Bromofluorobenzene (S)	103	%	64-132		1		06/24/08 09:09	460-00-4	
Dibromofluoromethane (S)	102	%	68-122		1		06/24/08 09:09	1868-53-7	
Toluene-d8 (S)	99	%	73-127		1		06/24/08 09:09	2037-26-5	

### QUALITY CONTROL DATA

Project: 200802257  
Pace Project No.: 405374

QC Batch:	PMST/1464	Analysis Method:	ASTM D2974-87
QC Batch Method:	ASTM D2974-87	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples:	405374001, 405374002, 405374003, 405374004, 405374005, 405374006, 405374007, 405374008, 405374009, 405374010		

SAMPLE DUPLICATE: 43382

Parameter	Units	405428001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	33.5	35.4	6	10	

### QUALITY CONTROL DATA

Project: 200802257  
Pace Project No.: 405374

QC Batch: MSV/1983 Analysis Method: EPA 8260  
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV  
Associated Lab Samples: 405374011, 405374012, 405374014

METHOD BLANK: 43593

Associated Lab Samples: 405374011, 405374012, 405374014

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.92	1.0	
1,1,1-Trichloroethane	ug/L	<0.90	1.0	
1,1,2,2-Tetrachloroethane	ug/L	<0.20	0.67	
1,1,2-Trichloroethane	ug/L	<0.42	1.4	
1,1-Dichloroethane	ug/L	<0.75	1.0	
1,1-Dichloroethene	ug/L	<0.57	1.0	
1,1-Dichloropropene	ug/L	<0.75	1.0	
1,2,3-Trichlorobenzene	ug/L	<0.74	1.0	
1,2,3-Trichloropropane	ug/L	<0.99	1.0	
1,2,4-Trichlorobenzene	ug/L	<0.97	1.0	
1,2,4-Trimethylbenzene	ug/L	<0.97	1.0	
1,2-Dibromo-3-chloropropane	ug/L	<0.87	2.9	
1,2-Dibromoethane (EDB)	ug/L	<0.56	1.9	
1,2-Dichlorobenzene	ug/L	<0.83	1.0	
1,2-Dichloroethane	ug/L	<0.36	1.0	
1,2-Dichloropropane	ug/L	<0.46	1.0	
1,3,5-Trimethylbenzene	ug/L	<0.83	1.0	
1,3-Dichlorobenzene	ug/L	<0.87	1.0	
1,3-Dichloropropane	ug/L	<0.61	2.0	
1,4-Dichlorobenzene	ug/L	<0.95	1.0	
2,2-Dichloropropane	ug/L	<0.62	1.0	
2-Chlorotoluene	ug/L	<0.85	1.0	
4-Chlorotoluene	ug/L	<0.74	1.0	
Benzene	ug/L	<0.41	1.0	
Bromobenzene	ug/L	<0.82	1.0	
Bromochloromethane	ug/L	<0.97	1.0	
Bromodichloromethane	ug/L	<0.56	1.9	
Bromoform	ug/L	<0.94	3.1	
Bromomethane	ug/L	<0.91	3.0	
Carbon tetrachloride	ug/L	<0.49	1.0	
Chlorobenzene	ug/L	<0.41	1.0	
Chloroethane	ug/L	<0.97	1.0	
Chloroform	ug/L	<0.37	1.2	
Chloromethane	ug/L	<0.24	0.80	
cis-1,2-Dichloroethene	ug/L	<0.83	1.0	
cis-1,3-Dichloropropene	ug/L	<0.19	0.63	
Dibromochloromethane	ug/L	<0.81	1.0	
Dibromomethane	ug/L	<0.60	1.0	
Dichlorodifluoromethane	ug/L	<0.99	1.0	
Diisopropyl ether	ug/L	<0.76	1.0	
Ethylbenzene	ug/L	<0.54	1.0	
Hexachloro-1,3-butadiene	ug/L	<0.67	1.0	
Isopropylbenzene (Cumene)	ug/L	<0.59	1.0	

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### QUALITY CONTROL DATA

Project: 200802257

Pace Project No.: 405374

METHOD BLANK: 43593

Associated Lab Samples: 405374011, 405374012, 405374014

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
m&p-Xylene	ug/L	<1.8	2.0	
Methyl-tert-butyl ether	ug/L	<0.61	2.0	
Methylene Chloride	ug/L	<0.43	1.4	
n-Butylbenzene	ug/L	<0.93	1.0	
n-Propylbenzene	ug/L	<0.81	1.0	
Naphthalene	ug/L	<0.74	5.0	
o-Xylene	ug/L	<0.83	1.0	
p-Isopropyltoluene	ug/L	<0.67	1.0	
sec-Butylbenzene	ug/L	<0.89	1.0	
Styrene	ug/L	<0.86	1.0	
tert-Butylbenzene	ug/L	<0.97	1.0	
Tetrachloroethene	ug/L	<0.45	1.0	
Toluene	ug/L	<0.67	1.0	
trans-1,2-Dichloroethene	ug/L	<0.89	1.0	
trans-1,3-Dichloropropene	ug/L	<0.19	0.63	
Trichloroethene	ug/L	<0.48	1.0	
Trichlorofluoromethane	ug/L	<0.79	1.0	
Vinyl chloride	ug/L	<0.18	0.60	
4-Bromofluorobenzene (S)	%	103	64-132	
Dibromofluoromethane (S)	%	101	68-122	
Toluene-d8 (S)	%	100	73-127	

LABORATORY CONTROL SAMPLE & LCSD: 43594

43595

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/L	50	55.0	56.3	110	113	75-128	2	20	
1,1,2,2-Tetrachloroethane	ug/L	50	48.5	47.3	97	95	67-125	2	20	
1,1,2-Trichloroethane	ug/L	50	50.8	50.9	102	102	75-125	4	20	
1,1-Dichloroethane	ug/L	50	54.8	56.5	110	113	71-130	3	20	
1,1-Dichloroethene	ug/L	50	52.7	55.8	105	112	75-125	6	20	
1,2-Dichloroethane	ug/L	50	54.7	55.3	109	111	71-132	1	20	
1,2-Dichloropropane	ug/L	50	52.3	52.5	105	105	73-125	3	20	
Benzene	ug/L	50	53.1	54.8	106	110	75-125	3	20	
Bromodichloromethane	ug/L	50	52.9	54.1	106	108	75-125	2	20	
Bromoform	ug/L	50	44.0	45.1	88	90	75-125	3	20	
Bromomethane	ug/L	50	53.8	57.7	108	115	66-125	7	20	
Carbon tetrachloride	ug/L	50	54.7	56.7	109	113	75-125	4	20	
Chlorobenzene	ug/L	50	50.4	50.8	101	102	75-125	7	20	
Chloroethane	ug/L	50	55.3	56.4	111	113	72-126	2	20	
Chloroform	ug/L	50	52.7	54.0	105	108	75-125	2	20	
Chloromethane	ug/L	50	50.0	51.6	100	103	46-143	3	20	
cis-1,2-Dichloroethene	ug/L	50	52.3	53.1	105	106	75-125	2	20	
cis-1,3-Dichloropropene	ug/L	50	52.8	53.6	106	107	75-125	1	20	
Dibromochloromethane	ug/L	50	48.4	49.4	97	99	75-125	2	20	
Ethylbenzene	ug/L	50	51.2	51.9	102	104	75-125	1	20	

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### QUALITY CONTROL DATA

Project: 200802257  
Pace Project No.: 405374

LABORATORY CONTROL SAMPLE & LCSD: 43594			43595							
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
m&p-Xylene	ug/L	100	102	103	102	103	75-125	1	20	
Methylene Chloride	ug/L	50	53.0	53.8	106	108	75-125	1	20	
o-Xylene	ug/L	50	50.0	51.0	100	102	75-125	2	20	
Styrene	ug/L	50	48.5	48.5	97	97	75-125	.1	20	
Tetrachloroethene	ug/L	50	51.0	51.4	102	103	75-130	.7	20	
Toluene	ug/L	50	50.6	51.2	101	102	75-125	1	20	
trans-1,2-Dichloroethene	ug/L	50	53.1	54.0	106	108	75-125	2	20	
trans-1,3-Dichloropropene	ug/L	50	51.6	51.8	103	104	75-125	.4	20	
Trichloroethene	ug/L	50	52.8	52.7	106	105	75-125	.2	20	
Vinyl chloride	ug/L	50	54.4	55.7	109	111	65-130	3	20	
4-Bromofluorobenzene (S)	%				103	104	64-132			
Dibromofluoromethane (S)	%				100	102	68-122			
Toluene-d8 (S)	%				99	100	73-127			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 43710			43711									
Parameter	Units	405421001	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual	
		Result										
1,1,1-Trichloroethane	ug/L	<0.90	50	50	54.8	54.9	110	110	70-130	.08	30	
1,1,2,2-Tetrachloroethane	ug/L	<0.20	50	50	48.0	48.9	96	98	70-130	2	30	
1,1,2-Trichloroethane	ug/L	<0.42	50	50	50.7	50.1	101	100	70-130	1	30	
1,1-Dichloroethane	ug/L	<0.75	50	50	54.8	54.7	110	109	70-130	.2	30	
1,1-Dichloroethene	ug/L	<0.57	50	50	53.0	53.3	106	107	70-135	.5	30	
1,2-Dichloroethane	ug/L	<0.36	50	50	54.2	55.1	108	110	70-130	2	30	
1,2-Dichloropropane	ug/L	<0.46	50	50	51.6	52.2	103	104	70-130	1	30	
Benzene	ug/L	<0.41	50	50	52.8	53.2	106	106	70-130	.7	30	
Bromodichloromethane	ug/L	<0.56	50	50	53.6	52.2	107	104	70-130	3	30	
Bromoform	ug/L	<0.94	50	50	44.4	44.6	89	89	70-130	.5	30	
Bromomethane	ug/L	<0.91	50	50	57.3	58.3	115	117	63-147	2	30	
Carbon tetrachloride	ug/L	<0.49	50	50	54.6	54.5	109	109	70-131	.1	30	
Chlorobenzene	ug/L	<0.41	50	50	50.4	50.0	101	100	70-130	.7	30	
Chloroethane	ug/L	<0.97	50	50	55.4	54.6	111	109	67-138	1	30	
Chloroform	ug/L	<0.37	50	50	52.4	52.8	105	106	70-130	.7	30	
Chloromethane	ug/L	<0.24	50	50	50.3	49.4	101	99	43-150	2	30	
cis-1,2-Dichloroethene	ug/L	<0.83	50	50	51.3	51.4	103	103	70-130	.2	30	
cis-1,3-Dichloropropene	ug/L	<0.19	50	50	53.4	52.8	107	106	70-130	1	30	
Dibromochloromethane	ug/L	<0.81	50	50	49.6	49.1	99	98	70-130	1	30	
Ethylbenzene	ug/L	<0.54	50	50	51.3	50.4	102	100	70-136	2	30	
m&p-Xylene	ug/L	<1.8	100	100	102	100	102	100	70-137	2	30	
Methylene Chloride	ug/L	<0.43	50	50	52.8	53.2	106	106	70-130	.7	30	
o-Xylene	ug/L	<0.83	50	50	49.6	49.5	99	99	70-130	.1	30	
Styrene	ug/L	<0.86	50	50	47.3	47.2	95	94	70-130	.007	30	
Tetrachloroethene	ug/L	<0.45	50	50	50.3	50.3	101	101	70-130	.1	30	
Toluene	ug/L	<0.67	50	50	50.5	50.2	101	100	70-130	.5	30	
trans-1,2-Dichloroethene	ug/L	<0.89	50	50	52.5	53.3	105	107	70-130	2	30	
trans-1,3-Dichloropropene	ug/L	<0.19	50	50	50.6	51.0	101	102	70-130	.6	30	
Trichloroethene	ug/L	<0.48	50	50	53.3	52.0	107	104	70-130	2	30	

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**QUALITY CONTROL DATA**

Project: 200802257  
Pace Project No.: 405374

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 43710			43711									
Parameter	Units	405421001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
Vinyl chloride	ug/L	<0.18	50	50	54.8	54.4	110	109	62-138	.7	30	
4-Bromofluorobenzene (S)	%						104	103	64-132			
Dibromofluoromethane (S)	%						101	101	68-122			
Toluene-d8 (S)	%						100	99	73-127			

### QUALITY CONTROL DATA

Project: 200802257  
Pace Project No.: 405374

QC Batch: MSV/2011 Analysis Method: EPA 8260  
QC Batch Method: EPA 5035/5030B Analysis Description: 8260 MSV Med Level Normal List  
Associated Lab Samples: 405374001, 405374002, 405374003, 405374004, 405374005, 405374006, 405374007, 405374008

METHOD BLANK: 44117

Associated Lab Samples: 405374001, 405374002, 405374003, 405374004, 405374005, 405374006, 405374007, 405374008

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<25.0	60.0	
1,1,1-Trichloroethane	ug/kg	<25.0	60.0	
1,1,2,2-Tetrachloroethane	ug/kg	<25.0	60.0	
1,1,2-Trichloroethane	ug/kg	<25.0	60.0	
1,1-Dichloroethane	ug/kg	<25.0	60.0	
1,1-Dichloroethene	ug/kg	<25.0	60.0	
1,1-Dichloropropene	ug/kg	<25.0	60.0	
1,2,3-Trichlorobenzene	ug/kg	<25.0	60.0	
1,2,3-Trichloropropane	ug/kg	<25.0	60.0	
1,2,4-Trichlorobenzene	ug/kg	<25.0	60.0	
1,2,4-Trimethylbenzene	ug/kg	<25.0	60.0	
1,2-Dibromo-3-chloropropane	ug/kg	<82.3	250	
1,2-Dibromoethane (EDB)	ug/kg	<25.0	60.0	
1,2-Dichlorobenzene	ug/kg	<44.4	60.0	
1,2-Dichloroethane	ug/kg	<25.0	60.0	
1,2-Dichloropropane	ug/kg	<25.0	60.0	
1,3,5-Trimethylbenzene	ug/kg	<25.0	60.0	
1,3-Dichlorobenzene	ug/kg	<25.0	60.0	
1,3-Dichloropropane	ug/kg	<25.0	60.0	
1,4-Dichlorobenzene	ug/kg	<25.0	60.0	
2,2-Dichloropropane	ug/kg	<25.0	60.0	
2-Chlorotoluene	ug/kg	<25.0	60.0	
4-Chlorotoluene	ug/kg	<25.0	60.0	
Benzene	ug/kg	<25.0	60.0	
Bromobenzene	ug/kg	<25.0	60.0	
Bromochloromethane	ug/kg	<25.0	60.0	
Bromodichloromethane	ug/kg	<25.0	60.0	
Bromoform	ug/kg	<25.9	60.0	
Bromomethane	ug/kg	<25.0	60.0	
Carbon tetrachloride	ug/kg	<25.0	60.0	
Chlorobenzene	ug/kg	<25.0	60.0	
Chloroethane	ug/kg	<25.0	60.0	
Chloroform	ug/kg	<25.0	60.0	
Chloromethane	ug/kg	<25.0	60.0	
cis-1,2-Dichloroethene	ug/kg	<25.0	60.0	
cis-1,3-Dichloropropene	ug/kg	<25.0	60.0	
Dibromochloromethane	ug/kg	<25.0	60.0	
Dibromomethane	ug/kg	<25.0	60.0	
Dichlorodifluoromethane	ug/kg	<25.0	60.0	
Diisopropyl ether	ug/kg	<25.0	60.0	
Ethylbenzene	ug/kg	<25.0	60.0	
Hexachloro-1,3-butadiene	ug/kg	<26.4	60.0	
Isopropylbenzene (Cumene)	ug/kg	<25.0	60.0	

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**QUALITY CONTROL DATA**

Project: 200802257  
Pace Project No.: 405374

METHOD BLANK: 44117

Associated Lab Samples: 405374001, 405374002, 405374003, 405374004, 405374005, 405374006, 405374007, 405374008

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
m&p-Xylene	ug/kg	<25.0	120	
Methyl-tert-butyl ether	ug/kg	<25.0	60.0	
Methylene Chloride	ug/kg	<25.0	60.0	
n-Butylbenzene	ug/kg	<40.4	60.0	
n-Propylbenzene	ug/kg	<25.0	60.0	
Naphthalene	ug/kg	<25.0	60.0	
o-Xylene	ug/kg	<25.0	60.0	
p-Isopropyltoluene	ug/kg	<25.0	60.0	
sec-Butylbenzene	ug/kg	<25.0	60.0	
Styrene	ug/kg	<25.0	60.0	
tert-Butylbenzene	ug/kg	<25.0	60.0	
Tetrachloroethene	ug/kg	<25.0	60.0	
Toluene	ug/kg	<25.0	60.0	
trans-1,2-Dichloroethene	ug/kg	<25.0	60.0	
trans-1,3-Dichloropropene	ug/kg	<25.0	60.0	
Trichloroethene	ug/kg	<25.0	60.0	
Trichlorofluoromethane	ug/kg	<25.0	60.0	
Vinyl chloride	ug/kg	<25.0	60.0	
4-Bromofluorobenzene (S)	%	103	64-133	
Dibromofluoromethane (S)	%	110	64-140	
Toluene-d8 (S)	%	106	67-139	

LABORATORY CONTROL SAMPLE & LCSD: 44118

44119

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2950	2990	118	120	75-125	1	20	
1,1,2,2-Tetrachloroethane	ug/kg	2500	2320	2300	93	92	75-125	1	20	
1,1,2-Trichloroethane	ug/kg	2500	2410	2440	96	98	75-125	1	20	
1,1-Dichloroethane	ug/kg	2500	2680	2750	107	110	75-125	2	20	
1,1-Dichloroethene	ug/kg	2500	2980	2950	119	118	54-149	1	20	
1,2-Dichloroethane	ug/kg	2500	3020	3070	121	123	75-125	2	20	
1,2-Dichloropropane	ug/kg	2500	2430	2380	97	95	75-125	2	20	
Benzene	ug/kg	2500	2230	2250	89	90	75-125	.6	20	
Bromodichloromethane	ug/kg	2500	2820	2780	113	111	75-125	1	20	
Bromoform	ug/kg	2500	2920	2900	117	116	72-125	.6	20	
Bromomethane	ug/kg	2500	3240	3100	130	124	40-159	4	20	
Carbon tetrachloride	ug/kg	2500	3110	3260	125	130	75-125	5	20	
Chlorobenzene	ug/kg	2500	2540	2520	101	101	75-125	.8	20	
Chloroethane	ug/kg	2500	3240	3240	130	130	40-179	.002	20	
Chloroform	ug/kg	2500	2720	2710	109	109	75-125	.03	20	
Chloromethane	ug/kg	2500	2260	2250	90	90	42-125	.7	20	
cis-1,2-Dichloroethene	ug/kg	2500	2410	2530	97	101	75-125	5	20	
cis-1,3-Dichloropropene	ug/kg	2500	2760	2670	110	107	75-125	3	20	
Dibromochloromethane	ug/kg	2500	2780	2900	111	116	75-125	4	20	
Ethylbenzene	ug/kg	2500	2780	2810	111	112	75-125	1	20	

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### QUALITY CONTROL DATA

Project: 200802257  
Pace Project No.: 405374

LABORATORY CONTROL SAMPLE & LCSD: 44118		44119								
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
m&p-Xylene	ug/kg	5000	5560	5530	111	111	75-127	.5	20	
Methylene Chloride	ug/kg	2500	2730	2670	109	107	58-144	2	20	
o-Xylene	ug/kg	2500	2790	2770	111	111	75-125	.4	20	
Styrene	ug/kg	2500	2540	2500	102	100	75-130	2	20	
Tetrachloroethene	ug/kg	2500	2660	2720	107	109	75-125	2	20	
Toluene	ug/kg	2500	2510	2520	100	101	75-125	.7	20	
trans-1,2-Dichloroethene	ug/kg	2500	2840	2920	114	117	75-125	3	20	
trans-1,3-Dichloropropene	ug/kg	2500	2750	2840	110	113	75-125	3	20	
Trichloroethene	ug/kg	2500	2760	2670	110	107	75-125	3	20	
Vinyl chloride	ug/kg	2500	2520	2540	101	102	49-125	.8	20	
4-Bromofluorobenzene (S)	%				106	107	64-133			
Dibromofluoromethane (S)	%				110	111	64-140			
Toluene-d8 (S)	%				106	106	67-139			

### QUALITY CONTROL DATA

Project: 200802257

Pace Project No.: 405374

QC Batch: MSV/2016

Analysis Method: EPA 8260

QC Batch Method: EPA 5035/5030B

Analysis Description: 8260 MSV Med Level Normal List

Associated Lab Samples: 405374009, 405374010, 405374013

METHOD BLANK: 44823

Associated Lab Samples: 405374009, 405374010, 405374013

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<25.0	60.0	
1,1,1-Trichloroethane	ug/kg	<25.0	60.0	
1,1,1,2,2-Tetrachloroethane	ug/kg	<25.0	60.0	
1,1,2-Trichloroethane	ug/kg	<25.0	60.0	
1,1-Dichloroethane	ug/kg	<25.0	60.0	
1,1-Dichloroethene	ug/kg	<25.0	60.0	
1,1-Dichloropropene	ug/kg	<25.0	60.0	
1,2,3-Trichlorobenzene	ug/kg	<25.0	60.0	
1,2,3-Trichloropropane	ug/kg	<25.0	60.0	
1,2,4-Trichlorobenzene	ug/kg	<25.0	60.0	
1,2,4-Trimethylbenzene	ug/kg	<25.0	60.0	
1,2-Dibromo-3-chloropropane	ug/kg	<82.3	250	
1,2-Dibromoethane (EDB)	ug/kg	<25.0	60.0	
1,2-Dichlorobenzene	ug/kg	<44.4	60.0	
1,2-Dichloroethane	ug/kg	<25.0	60.0	
1,2-Dichloropropane	ug/kg	<25.0	60.0	
1,3,5-Trimethylbenzene	ug/kg	<25.0	60.0	
1,3-Dichlorobenzene	ug/kg	<25.0	60.0	
1,3-Dichloropropane	ug/kg	<25.0	60.0	
1,4-Dichlorobenzene	ug/kg	<25.0	60.0	
2,2-Dichloropropane	ug/kg	<25.0	60.0	
2-Chlorotoluene	ug/kg	<25.0	60.0	
4-Chlorotoluene	ug/kg	<25.0	60.0	
Benzene	ug/kg	<25.0	60.0	
Bromobenzene	ug/kg	<25.0	60.0	
Bromochloromethane	ug/kg	<25.0	60.0	
Bromodichloromethane	ug/kg	<25.0	60.0	
Bromoform	ug/kg	<25.9	60.0	
Bromomethane	ug/kg	<25.0	60.0	
Carbon tetrachloride	ug/kg	<25.0	60.0	
Chlorobenzene	ug/kg	<25.0	60.0	
Chloroethane	ug/kg	<25.0	60.0	
Chloroform	ug/kg	<25.0	60.0	
Chloromethane	ug/kg	<25.0	60.0	
cis-1,2-Dichloroethene	ug/kg	<25.0	60.0	
cis-1,3-Dichloropropene	ug/kg	<25.0	60.0	
Dibromochloromethane	ug/kg	<25.0	60.0	
Dibromomethane	ug/kg	<25.0	60.0	
Dichlorodifluoromethane	ug/kg	<25.0	60.0	
Diisopropyl ether	ug/kg	<25.0	60.0	
Ethylbenzene	ug/kg	<25.0	60.0	
Hexachloro-1,3-butadiene	ug/kg	<26.4	60.0	
Isopropylbenzene (Cumene)	ug/kg	<25.0	60.0	

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### QUALITY CONTROL DATA

Project: 200802257

Pace Project No.: 405374

METHOD BLANK: 44823

Associated Lab Samples: 405374009, 405374010, 405374013

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
m&p-Xylene	ug/kg	<25.0	120	
Methyl-tert-butyl ether	ug/kg	<25.0	60.0	
Methylene Chloride	ug/kg	<25.0	60.0	
n-Butylbenzene	ug/kg	<40.4	60.0	
n-Propylbenzene	ug/kg	<25.0	60.0	
Naphthalene	ug/kg	<25.0	60.0	
o-Xylene	ug/kg	<25.0	60.0	
p-Isopropyltoluene	ug/kg	<25.0	60.0	
sec-Butylbenzene	ug/kg	<25.0	60.0	
Styrene	ug/kg	<25.0	60.0	
tert-Butylbenzene	ug/kg	<25.0	60.0	
Tetrachloroethene	ug/kg	<25.0	60.0	
Toluene	ug/kg	<25.0	60.0	
trans-1,2-Dichloroethene	ug/kg	<25.0	60.0	
trans-1,3-Dichloropropene	ug/kg	<25.0	60.0	
Trichloroethene	ug/kg	<25.0	60.0	
Trichlorofluoromethane	ug/kg	<25.0	60.0	
Vinyl chloride	ug/kg	<25.0	60.0	
4-Bromofluorobenzene (S)	%	111	64-133	
Dibromofluoromethane (S)	%	120	64-140	
Toluene-d8 (S)	%	116	67-139	

LABORATORY CONTROL SAMPLE & LCSD: 44824

44825

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2900	2980	116	119	75-125	3	20	
1,1,2,2-Tetrachloroethane	ug/kg	2500	2410	2660	97	107	75-125	10	20	
1,1,2-Trichloroethane	ug/kg	2500	2640	2770	105	111	75-125	5	20	
1,1-Dichloroethane	ug/kg	2500	2810	2950	112	118	75-125	5	20	
1,1-Dichloroethene	ug/kg	2500	3000	3150	120	126	54-149	5	20	
1,2-Dichloroethane	ug/kg	2500	2690	2880	108	115	75-125	7	20	
1,2-Dichloropropane	ug/kg	2500	2760	2860	111	115	75-125	4	20	
Benzene	ug/kg	2500	2680	2770	107	111	75-125	3	20	
Bromodichloromethane	ug/kg	2500	2720	2870	109	115	75-125	5	20	
Bromoform	ug/kg	2500	2510	2630	100	105	72-125	5	20	
Bromomethane	ug/kg	2500	2650	2840	106	114	40-159	7	20	
Carbon tetrachloride	ug/kg	2500	2870	3030	115	121	75-125	5	20	
Chlorobenzene	ug/kg	2500	2680	2820	107	113	75-125	5	20	
Chloroethane	ug/kg	2500	2570	2590	103	103	40-179	.6	20	
Chloroform	ug/kg	2500	2710	2790	108	112	75-125	3	20	
Chloromethane	ug/kg	2500	2370	2420	95	97	42-125	2	20	
cis-1,2-Dichloroethene	ug/kg	2500	2730	2850	109	114	75-125	4	20	
cis-1,3-Dichloropropene	ug/kg	2500	2740	2890	109	116	75-125	6	20	
Dibromochloromethane	ug/kg	2500	2670	2880	107	115	75-125	8	20	
Ethylbenzene	ug/kg	2500	2870	3030	115	121	75-125	5	20	

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### QUALITY CONTROL DATA

Project: 200802257  
Pace Project No.: 405374

LABORATORY CONTROL SAMPLE & LCSD: 44824		44825								
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
m&p-Xylene	ug/kg	5000	5780	6060	116	121	75-127	5	20	
Methylene Chloride	ug/kg	2500	2410	3110	96	124	58-144	25	20	
o-Xylene	ug/kg	2500	3000	3110	120	124	75-125	4	20	
Styrene	ug/kg	2500	2520	2690	101	107	75-130	6	20	
Tetrachloroethene	ug/kg	2500	2760	2900	110	116	75-125	5	20	
Toluene	ug/kg	2500	2740	2860	109	114	75-125	4	20	
trans-1,2-Dichloroethene	ug/kg	2500	2780	2930	111	117	75-125	5	20	
trans-1,3-Dichloropropene	ug/kg	2500	2660	2780	106	111	75-125	4	20	
Trichloroethene	ug/kg	2500	2780	2870	111	115	75-125	3	20	
Vinyl chloride	ug/kg	2500	2670	2800	107	112	49-125	4	20	
4-Bromofluorobenzene (S)	%				111	113	64-133			
Dibromofluoromethane (S)	%				115	123	64-140			
Toluene-d8 (S)	%				115	118	67-139			

## QUALIFIERS

Project: 200802257  
Pace Project No.: 405374

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### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

### LABORATORIES

PASI-G Pace Analytical Services - Green Bay

### BATCH QUALIFIERS

Batch: MSV/2012

[1] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/2017

[1] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

### ANALYTE QUALIFIERS

L3 Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

R1 RPD value was outside control limits.

S3 Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

W Non-detect results are reported on a wet weight basis.

**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: 200802257  
Pace Project No.: 405374

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
405374001	8516 DURAND 1-2'	ASTM D2974-87	PMST/1464		
405374002	8516 DURAND 8-9'	ASTM D2974-87	PMST/1464		
405374003	2801 DURAND 1-2'	ASTM D2974-87	PMST/1464		
405374004	2801 DURAND 2 1-2'	ASTM D2974-87	PMST/1464		
405374005	2801 DURAND 2 8-10'	ASTM D2974-87	PMST/1464		
405374006	4606 WASHINGTON 1-3'	ASTM D2974-87	PMST/1464		
405374007	4606 WASHINGTON 10-12'	ASTM D2974-87	PMST/1464		
405374008	301 MAIN 1-2'	ASTM D2974-87	PMST/1464		
405374009	3406 DOUGLAS 1-2'	ASTM D2974-87	PMST/1464		
405374010	3406 DOUGLAS 8-9'	ASTM D2974-87	PMST/1464		
405374011	301 MAIN	EPA 8260	MSV/1983		
405374012	4606 WASHINGTON	EPA 8260	MSV/1983		
405374014	TRIP BLANK	EPA 8260	MSV/1983		
405374001	8516 DURAND 1-2'	EPA 5035/5030B	MSV/2011	EPA 8260	MSV/2012
405374002	8516 DURAND 8-9'	EPA 5035/5030B	MSV/2011	EPA 8260	MSV/2012
405374003	2801 DURAND 1-2'	EPA 5035/5030B	MSV/2011	EPA 8260	MSV/2012
405374004	2801 DURAND 2 1-2'	EPA 5035/5030B	MSV/2011	EPA 8260	MSV/2012
405374005	2801 DURAND 2 8-10'	EPA 5035/5030B	MSV/2011	EPA 8260	MSV/2012
405374006	4606 WASHINGTON 1-3'	EPA 5035/5030B	MSV/2011	EPA 8260	MSV/2012
405374007	4606 WASHINGTON 10-12'	EPA 5035/5030B	MSV/2011	EPA 8260	MSV/2012
405374008	301 MAIN 1-2'	EPA 5035/5030B	MSV/2011	EPA 8260	MSV/2012
405374009	3406 DOUGLAS 1-2'	EPA 5035/5030B	MSV/2016	EPA 8260	MSV/2017
405374010	3406 DOUGLAS 8-9'	EPA 5035/5030B	MSV/2016	EPA 8260	MSV/2017
405374013	MEOH BLANK	EPA 5035/5030B	MSV/2016	EPA 8260	MSV/2017



Sample Condition Upon Receipt

Client Name: STS

Project # 405374

Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace Other waited

Tracking #: \_\_\_\_\_

Custody Seal on Cooler/Box Present:  yes  no Seals intact:  yes  no

Packing Material:  Bubble Wrap  Bubble Bags  None  Other \_\_\_\_\_

Thermometer Used N/A Type of Ice: Wet Blue None  Samples on ice, cooling process has begun

Cooler Temperature 20 Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Optional:  
Proj. Due Date:  
Proj. Name:

Date and Initials of person examining contents: 1-21-08 STS

Comments:

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12. <u>On COC 8516 Durand is actually 8415 Durand</u>
-Includes date/time/ID/Analysis Matrix: <u>SIW</u>		<u>1-21-08</u>
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed
		Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15.
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: \_\_\_\_\_ Field Data Required? Y / N

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

Project Manager Review: [Signature]

Date: 062008

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

(Please Print Clearly)

Company Name: **STS**  
 Branch/Location: **Milwaukee**  
 Project Contact: **Lanette Altenbach**  
 Phone: **414-577-1363**  
 Project Number: **200802257**  
 Project Name:  
 Project State: **WI**  
 Sampled By (Print): **Bryan Bergmann**  
 Sampled By (Sign): *Bry Berg*  
 PO #:  
 Regulatory Program:



UPPER MIDWEST REGION  
 MN: 612-607-1700 WI: 920-469-2436

### CHAIN OF CUSTODY

**\*Preservation Codes**  
 A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH  
 H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

**Data Package Options** (billable)  
 EPA Level III  
 EPA Level IV

**MS/MSD**  
 On your sample (billable)  
 NOT needed on your sample

**Matrix Codes**  
 A = Air W = Water  
 B = Biota DW = Drinking Water  
 C = Charcoal GW = Ground Water  
 O = Oil SW = Surface Water  
 S = Soil WW = Waste Water  
 SI = Sludge WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION		MATRIX	Y/N	Pick Letter	Analyses Requested
		DATE	TIME				
001	8576 Durand 1-2'	6-18-08		S	Y	F	VOC 8260
003	8576 Durand 8-9'				Y	B	VOC 8260
003	2801 Durand 1-2'						
004	2801 Durand 2 1-2'						
005	2801 Durand 2 8-10'						
006	4606 Washington 1-3'						
007	4606 Washington 10-12'						
008	301 Main 1-2'						
009	3406 Douglas 1-2'						
010	3406 Douglas 8-9'						
011	301 Main			GW			
012	4606 Washington						
013	MeOH Blank						
014	Tap Blank						

**Quote #:**  
**Mail To Contact:** Lanette Altenbach  
**Mail To Company:** STS  
**Mail To Address:** 11425 W. Lake Park Dr.  
 Milwaukee, WI 53224  
**Invoice To Contact:**  
**Invoice To Company:**  
**Invoice To Address:**  
**Invoice To Phone:**  
**CLIENT COMMENTS**  
**LAB COMMENTS (Lab Use Only)**  
**Profile #**

Rush Turnaround Time Requested - Prelims  
 (Rush TAT subject to approval/surcharge)  
 Date Needed:  
 Transmit Prelim Rush Results by (complete what you want):  
 Email #1:  
 Email #2:  
 Telephone:  
 Fax:  
 Samples on HOLD are subject to special pricing and release of liability

Relinquished By: *Bry Berg* Date/Time: 6-19-08  
 Relinquished By: *D. Farnell* Date/Time: 6/19/08 1730  
 Relinquished By: *Walter* Date/Time: 6/20/08 845  
 Relinquished By: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Relinquished By: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Received By: *D. Farnell* Date/Time: 6/19/08 1130  
 Received By: *Walter* Date/Time: \_\_\_\_\_  
 Received By: *Cherifer Schust* Date/Time: 6/20/08 845  
 Received By: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Received By: \_\_\_\_\_ Date/Time: \_\_\_\_\_

PACE Project No. 405374  
 Receipt Temp = *100* °C  
 Sample Receipt pH OK / Adjusted  
 Cooler Custody Seal Present / Not Present Intact / Not Intact



## **APPENDIX B**

### **Soil Boring Logs/Abandonment Forms**

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

Facility/Project Name 301 Main Street, Racine WI 1E2109011			License/Permit/Monitoring Number		Boring Number B-1	
Boring Drilled By (Firm name and name of crew chief) 1E-2109011 Jim Blair, Giles Engineering Associates			Date Drilling Started 10/12/2021		Date Drilling Completed 10/12/2021	
Drilling Method Direct Push			WI Unique Well No.		DNR Well ID No.	
Common Well Name			Final Static Water Level Feet MSL		Surface Elevation Feet MSL	
Borehole Diameter 2" Inches			Boring Location or Local Grid Origin (Check if estimated: <input type="checkbox"/> )			
State Plane SW 1/4 of SE 1/4 of Section 17, T 5 N, R 21 E			Lat. _____ ° _____ ' _____ "		Local Grid Location (If applicable) <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
Long. _____ ° _____ ' _____ "			Facility ID		County Racine	
County Code 52			Civil Town/City/ or Village Racine			

Sample Number and Type	Length Att. & Recovered (in)	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
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
DP-1	48/36		0	3" Concrete	Concrete									
			1	Brown coarse Sand, trace Gravel (Fill)	ML			1.7						
DP-2	48/24		2					1.3						
			3											
DP-3	48/33		4	Brown Silty Clay with Sand, trace Gravel (Fill)	CL			2.1						
			5											
DP-4	48/24		6	Brown Silty Clay with Sand, little Brick and trace Gravel (Fill)	CL			1.0						
			7											
			8					2.7						
			9											
			10	Brown Silty Clay, trace Gravel (Native)	CL			1.6						
			11											
			12					84.2						
			13											
			14					0.6						
				End of Boring at 14.5 feet Below Ground										

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

Signature <i>Scott Bender</i>	Firm Giles Engineering Associates, Inc. N8 W22350 Johnson Drive, Suite A1 Waukesha, WI 53186	Tel: 262-544-0118 Fax: 262-549-5868
----------------------------------	--	--

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completions 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.




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

Facility/Project Name 301 Main Street, Racine WI 1E2109011			License/Permit/Monitoring Number		Boring Number B-1A		
Boring Drilled By (Firm name and name of crew chief) 1E-2109011 Jim Blair, Giles Engineering Associates			Date Drilling Started 10/12/2021		Date Drilling Completed 10/12/2021		
Drilling Method Direct Push			WI Unique Well No.		DNR Well ID No.		
Common Well Name			Final Static Water Level Feet MSL		Surface Elevation Feet MSL		
Borehole Diameter 2" Inches			Boring Location or Local Grid Origin (Check if estimated: <input type="checkbox"/> )				
State Plane 1/4 of 1/4 of Section , T N, R			Lat. ° ' "		Local Grid Location (If applicable) <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W		
Facility ID		County Racine		County Code 52		Civil Town/City/ or Village Racine	

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
DP-1	48/30		1	3" Concrete	Concrete									
			2	Brown coarse Sand, little Gravel (Fill)	ML			1.2						
DP-2	48/38		3					4.6						
			4	Brown coarse Sand, trace Gravel and Bricks (Fill)	ML			1.0						
DP-3	48/40		5											
			6	Brown Silty Clay with Sand, trace Gravel and Brick (Fill)	CL			2.4						
DP-4	48/18		7											
			8	Brown Silty Clay, trace Sand (Native)	CL			2.4						
			9											
			10											
			11											
			12											
			13											
				End of Boring at 13.5 feet Below Ground Surface				30.5						

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

Signature 	Firm Giles Engineering Associates, Inc. N8 W22350 Johnson Drive, Suite A1 Waukesha, WI 53186	Tel: 262-544-0118 Fax: 262-549-5868
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Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Facility/Project Name 301 Main Street, Racine WI 1E2109011			License/Permit/Monitoring Number		Boring Number B-1B		
Boring Drilled By (Firm name and name of crew chief) 1E-2109011 Jim Blair, Giles Engineering Associates			Date Drilling Started 10/12/2021		Date Drilling Completed 10/12/2021		
Drilling Method Direct Push		WI Unique Well No.		DNR Well ID No.		Common Well Name	
Final Static Water Level Feet MSL		Surface Elevation Feet MSL		Borehole Diameter 2" Inches			
Boring Location or Local Grid Origin (Check if estimated: <input type="checkbox"/> ) State Plane S/C/N 1/4 of 1/4 of Section , T N, R			Lat. ° ' "		Local Grid Location (If applicable) <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W		
Facility ID		County Racine		County Code 52		Civil Town/City/ or Village Racine	

Sample Number and Type	Length Att. & Recovered (in)	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
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
DP-1	48/24		1	Concrete	Concrete									
			2	Brown coarse Sand, little Gravel (Fill)	ML			2.2						
DP-2	48/28		3					0.9						
			4	Brown coarse Sand, little Gravel, trace Bricks (Fill)	ML			0.8						
DP-3	48/23		5					0.5						
			6	Brown Silty Clay with Sand, some Brick, trace Gravel (Fill)	CL			0.6						
DP-4	48/48		7					2.2						
			8	Brown to Gray Silty Clay (Native)	CL			0.6						
			9					0.6						
			10											
			11											
			12											
			13											
			14											
			15											
			16	End of Boring at 16 feet Below Ground Surface										

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

Signature <i>Scott Bender</i>	Firm Giles Engineering Associates, Inc. N8 W22350 Johnson Drive, Suite A1 Waukesha, WI 53186	Tel: 262-544-0118 Fax: 262-549-5868
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Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Facility/Project Name 301 Main Street, Racine WI 1E2109011			License/Permit/Monitoring Number		Boring Number B-1C		
Boring Drilled By (Firm name and name of crew chief) 1E-2109011 Jim Blair, Giles Engineering Associates			Date Drilling Started 10/12/2021		Date Drilling Completed 10/12/2021		
Drilling Method Direct Push		WI Unique Well No.		DNR Well ID No.		Common Well Name	
Final Static Water Level Feet MSL		Surface Elevation Feet MSL		Borehole Diameter 2" Inches			
Boring Location or Local Grid Origin (Check if estimated: <input type="checkbox"/> ) State Plane S/C/N 1/4 of 1/4 of Section , T N, R			Lat. ° ' "		Local Grid Location (If applicable) <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W		
Facility ID		County Racine		County Code 52		Civil Town/City/ or Village Racine	

Sample Number and Type	Length Att. & Recovered (in)	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
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
DP-1	48/24		1	3" Concrete	Concrete									
			2	Brown coarse Sand, little Gravel (Fill)	ML			5.3						
DP-2	48/12		3	Brown coarse Sand, little Gravel, trace Bricks (Fill)	ML			5.2	2.4	0.9				
			4											
			5											
DP-3	48/24		6	Brown Silty Clay, some Sand, trace Gravel and Bricks, 3" Cinders at 10.5 feet (Fill)	CL			1.9	0.9					
			7											
DP-4	48/20		8	Brown Silty Clay (Native)	CL			0.9	2.3					
			9											
			10	End of Boring at 13.5 feet Below Ground Surface										

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

Signature 	Firm Giles Engineering Associates, Inc. N8 W22350 Johnson Drive, Suite A1 Waukesha, WI 53186	Tel: 262-544-0118 Fax: 262-549-5868
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This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completions 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.

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

Facility/Project Name 301 Main Street, Racine WI 1E2109011		License/Permit/Monitoring Number		Boring Number B-2	
Boring Drilled By (Firm name and name of crew chief) 1E-2109011 Jim Blair, Giles Engineering Associates		Date Drilling Started 10/12/2021		Date Drilling Completed 10/12/2021	
Drilling Method Direct Push		WI Unique Well No.		DNR Well ID No.	
Common Well Name		Final Static Water Level Feet MSL		Surface Elevation Feet MSL	
Boring Location or Local Grid Origin (Check if estimated: <input type="checkbox"/> ) State Plane S/C/N 1/4 of 1/4 of Section T N, R		Local Grid Location (If applicable) Lat. ° ' " Long. ° ' " Feet <input type="checkbox"/> N <input type="checkbox"/> S Feet <input type="checkbox"/> E <input type="checkbox"/> W		Borehole Diameter 2" Inches	

Facility ID	County Racine	County Code 52	Civil Town/City/ or Village Racine
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Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments	
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200		
DP-1	60/40		0.0 - 1.5	3" Concrete	Concrete										
			1.5 - 3.0	3" Base Course					12.0						
DP-2	60/38		3.0 - 4.5	Brown Silty Clay with Sand, trace Gravel (Fill)	CL			35.0							
			4.5 - 6.0				4.7								
DP-3	60/60		6.0 - 7.5	Brown Silty Clay, trace Sand and Gravel (Native)	CL			4.9							
			7.5 - 9.0				2.8								
DP-4	60/60		9.0 - 10.5	Brown Silty Clay (Native)				3.0							
			10.5 - 12.0				3.0								
DP-4	60/60		12.0 - 13.5					2.2							
			13.5 - 15.0				1.8								
DP-4	60/60		15.0 - 16.5					1.7							
			16.5 - 18.0				1.7								
			18.0 - 19.5					1.7							
				End of Boring at 20 feet Below Ground Surface											

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

Signature <i>Scott Rusk</i>	Firm Giles Engineering Associates, Inc. N8 W22350 Johnson Drive, Suite A1 Waukesha, WI 53186	Tel: 262-544-0118 Fax: 262-549-5868
--------------------------------	--	--

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

Facility/Project Name 301 Main Street, Racine WI 1E2109011			License/Permit/Monitoring Number		Boring Number B-2A		
Boring Drilled By (Firm name and name of crew chief) 1E-2109011 Jim Blair, Giles Engineering Associates			Date Drilling Started 10/12/2021		Date Drilling Completed 10/12/2021		
WI Unique Well No.		DNR Well ID No.	Common Well Name		Drilling Method Direct Push		
Boring Location or Local Grid Origin (Check if estimated: <input type="checkbox"/> ) State Plane S/C/N 1/4 of 1/4 of Section , T N, R			Final Static Water Level Feet MSL		Surface Elevation Feet MSL		
			Local Grid Location (If applicable) Lat. ° ' " <input type="checkbox"/> N <input type="checkbox"/> E Long. ° ' " <input type="checkbox"/> S <input type="checkbox"/> W		Borehole Diameter 2" Inches		
Facility ID		County Racine		County Code 52		Civil Town/City/ or Village Racine	

Sample Number and Type	Length Att. & Recovered (in)	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
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
DP-1	60/40		0	3" Concrete	Concrete									
			1	3" Base Course										
DP-2	60/60		1	Brown coarse Sand, trace Gravel (Fill)	ML			6.4						
			2											
			3						8.2					
			4	Brown Silty Clay, some Sand, trace Gravel (Fill)	CL				8.2					
			5											
			6											
			7	Brown Silty Clay, trace Gravel (Native)	CL			4.5						
			8											
			9											
			10					3.2						
			10	End of Boring at 10 feet Below Ground Surface										

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

Signature <i>Scott Bender</i>	Firm Giles Engineering Associates, Inc. N8 W22350 Johnson Drive, Suite A1 Waukesha, WI 53186	Tel: 262-544-0118 Fax: 262-549-5868
----------------------------------	--	--

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

Facility/Project Name 301 Main Street, Racine WI 1E2109011		License/Permit/Monitoring Number		Boring Number B-2B	
Boring Drilled By (Firm name and name of crew chief) 1E-2109011 Jim Blair, Giles Engineering Associates			Date Drilling Started 10/12/2021	Date Drilling Completed 10/12/2021	Drilling Method Direct Push
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level Feet MSL	Surface Elevation Feet MSL	Borehole Diameter 2" Inches
Boring Location or Local Grid Origin (Check if estimated: <input type="checkbox"/> ) State Plane S/C/N 1/4 of 1/4 of Section , T N, R			Local Grid Location (If applicable) Lat. ° ' " <input type="checkbox"/> N <input type="checkbox"/> E Long. ° ' " <input type="checkbox"/> S <input type="checkbox"/> W		

Facility ID	County Racine	County Code 52	Civil Town/City/ or Village Racine
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Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments	
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200		
DP-1			0	3" Concrete	Concrete										
			1	3" Base Course											
DP-2			1	Brown coarse Sand, little Gravel, trace Bricks (Fill)	ML			5.1							
			2	Brown Silty Clay, little Sand (Fill)	CL			6.3							
			5	Brown Silty Clay, trace Gravel (Native)	CL			5.4							
			6												
			7												
			8												
			9												
			10	End of Boring at 10 feet Below Ground Surface											

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

Signature <i>Scott Bender</i>	Firm Giles Engineering Associates, Inc. N8 W22350 Johnson Drive, Suite A1 Waukesha, WI 53186	Tel: 262-544-0118 Fax: 262-549-5868
----------------------------------	--	--

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

Facility/Project Name 301 Main Street, Racine WI 1E2109011			License/Permit/Monitoring Number		Boring Number B-2C
Boring Drilled By (Firm name and name of crew chief) 1E-2109011 Jim Blair, Giles Engineering Associates			Date Drilling Started 10/12/2021	Date Drilling Completed 10/12/2021	Drilling Method Direct Push
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level Feet MSL	Surface Elevation Feet MSL	Borehole Diameter 2" Inches
Boring Location or Local Grid Origin (Check if estimated: <input type="checkbox"/> ) State Plane S/C/N 1/4 of 1/4 of Section , T N, R			Local Grid Location (If applicable) Lat. ° ' " <input type="checkbox"/> N <input type="checkbox"/> E Long. ° ' " <input type="checkbox"/> S <input type="checkbox"/> W		
Facility ID	County Racine	County Code 52	Civil Town/City/ or Village Racine		

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments	
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200		
DP-1	60/38		0	3" Concrete	Concrete										
			1	3" Base Course											
DP-2	60/40		1	Brown coarse Sand with crushed Brick (Fill)	ML			4.8							
			2												
			3	Brown Silty Clay (Native)	CL				5.4						
			4												
			5												
			6												
			7												
			8												
9															
10	End of Boring at 10 feet Below Ground Surface														

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

Signature 	Firm Giles Engineering Associates, Inc. N8 W22350 Johnson Drive, Suite A1 Waukesha, WI 53186	Tel: 262-544-0118 Fax: 262-549-5868
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# Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

**Notice:** Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, 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. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

**Verification Only of Fill and Seal**

**Route to DNR Bureau:**

Drinking Water       Watershed/Wastewater       Remediation/Redevelopment

Waste Management       Other: \_\_\_\_\_

1. Well Location Information				2. Facility / Owner Information			
County <b>Racine</b>		WI Unique Well # of Removed Well _____		Hicap # _____		Facility Name <b>One Hour Martinizing (Former)</b>	
Latitude / Longitude (see instructions) _____ N _____ W		Format Code <input type="checkbox"/> DD <input type="checkbox"/> DDM		Method Code <input type="checkbox"/> GPS008 <input type="checkbox"/> SCR002 <input type="checkbox"/> OTH001		Facility ID (FID or PWS) _____	
1/4 SW or Gov't Lot #		Section <b>17</b>		Township <b>5 N</b>		License/Permit/Monitoring # <b>B-1/BTW-1</b>	
Well Street Address <b>301 Main Street</b>		Well ZIP Code <b>53403</b>		Original Well Owner <b>BMP Realty, Inc</b>		Present Well Owner <b>BMP Realty, Inc</b>	
Subdivision Name		Lot #		Mailing Address of Present Owner <b>3319 Nobb Hill Drive</b>		City of Present Owner <b>Racine</b>	
				State <b>WI</b>		ZIP Code <b>53406</b>	

3. Filled & Sealed Well / Drillhole / Borehole Information		4. Pump, Liner, Screen, Casing & Sealing Material			
Reason for Removal from Service <b>Sampling Completed</b>		WI Unique Well # of Replacement Well _____		Pump and piping removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
<input type="checkbox"/> Monitoring Well		Original Construction Date (mm/dd/yyyy) <b>10/12/2021</b>		Liner(s) removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
<input type="checkbox"/> Water Well		If a Well Construction Report is available, please attach.		Liner(s) perforated? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
<input checked="" type="checkbox"/> Borehole / Drillhole				Screen removed? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Construction Type:				Casing left in place? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
<input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug				Was casing cut off below surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
<input checked="" type="checkbox"/> Other (specify): <u>Direct Push</u>				Did sealing material rise to surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Formation Type:				Did material settle after 24 hours? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
<input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock				If yes, was hole retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Total Well Depth From Ground Surface (ft.) <b>14.5</b>		Casing Diameter (in.) <b>1</b>		If bentonite chips were used, were they hydrated with water from a known safe source? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Lower Drillhole Diameter (in.) <b>2</b>		Casing Depth (ft.) <b>14.5</b>		Required Method of Placing Sealing Material	
Was well annular space grouted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown				<input type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped	
If yes, to what depth (feet)?		Depth to Water (feet)		<input type="checkbox"/> Screened & Poured (Bentonite Chips) <input checked="" type="checkbox"/> Other (Explain): <u>Bentonite Gravity Pour</u>	

5. Material Used to Fill Well / Drillhole			
Concrete	From (ft.) <b>surface</b>	To (ft.) <b>0.5</b>	No. Yards, Sacks Sealant or Volume (circle one)
Bentonite	<b>0.5</b>	<b>14.5</b>	Mix Ratio or Mud Weight
6. Comments			
Temporary well was set in open boring.			
7. Supervision of Work			DNR Use Only
Name of Person or Firm Doing Filling & Sealing <b>Giles Engineering Associates, Inc</b>	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy) <b>10/12/2021</b>	Date Received
Street or Route <b>N8 W22350 Johnson Drive Suite 1A</b>	Telephone Number <b>( 262 ) 544-0118</b>	Comments	Noted By
City <b>Waukesha</b>	State <b>WI</b>	ZIP Code <b>53186</b>	Signature of Person Doing Work <i>Drew Buler</i>
			Date Signed <b>11/5/21</b>

# Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, 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. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

Verification Only of Fill and Seal

**Route to DNR Bureau:**

- Drinking Water       Watershed/Wastewater       Remediation/Redevelopment  
 Waste Management       Other: \_\_\_\_\_

**1. Well Location Information**      **2. Facility / Owner Information**

County		WI Unique Well # of Removed Well		Hicap #		Facility Name	
Latitude / Longitude (see instructions)		Format Code		Method Code		Facility ID (FID or PWS)	
_____ N		<input type="checkbox"/> DD		<input type="checkbox"/> GPS008		License/Permit/Monitoring #	
_____ W		<input type="checkbox"/> DDM		<input type="checkbox"/> SCR002		Original Well Owner	
_____ 1/4		Section		Township		Present Well Owner	
or Gov't Lot #		_____		Range <input type="checkbox"/> E		Mailing Address of Present Owner	
Well Street Address		_____		<input type="checkbox"/> W		City of Present Owner	
Well City, Village or Town		Well ZIP Code		_____		State	
Subdivision Name		Lot #		_____		ZIP Code	
Reason for Removal from Service		WI Unique Well # of Replacement Well		_____		_____	

**3. Filled & Sealed Well / Drillhole / Borehole Information**

Monitoring Well      Original Construction Date (mm/dd/yyyy)  
 Water Well      \_\_\_\_\_  
 Borehole / Drillhole      If a Well Construction Report is available, please attach.

Construction Type:

Drilled       Driven (Sandpoint)       Dug  
 Other (specify): Direct Push

Formation Type:

Unconsolidated Formation       Bedrock

Total Well Depth From Ground Surface (ft.)      Casing Diameter (in.)

Lower Drillhole Diameter (in.)      Casing Depth (ft.)

2      \_\_\_\_\_

Was well annular space grouted?       Yes       No       Unknown

If yes, to what depth (feet)?      Depth to Water (feet)

\_\_\_\_\_      \_\_\_\_\_

**4. Pump, Liner, Screen, Casing & Sealing Material**

Pump and piping removed?       Yes       No       N/A  
 Liner(s) removed?       Yes       No       N/A  
 Liner(s) perforated?       Yes       No       N/A  
 Screen removed?       Yes       No       N/A  
 Casing left in place?       Yes       No       N/A

Was casing cut off below surface?       Yes       No       N/A  
 Did sealing material rise to surface?       Yes       No       N/A  
 Did material settle after 24 hours?       Yes       No       N/A  
 If yes, was hole retopped?       Yes       No       N/A  
 If bentonite chips were used, were they hydrated with water from a known safe source?       Yes       No       N/A

Required Method of Placing Sealing Material

Conductor Pipe-Gravity       Conductor Pipe-Pumped  
 Screened & Poured (Bentonite Chips)       Other (Explain): Bentonite Gravity Poured

Sealing Materials

Neat Cement Grout       Concrete  
 Sand-Cement (Concrete) Grout       Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:

Bentonite Chips       Bentonite - Cement Grout  
 Granular Bentonite       Bentonite - Sand Slurry

**5. Material Used to Fill Well / Drillhole**

Material	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite	Surface	13.5		

**6. Comments**

B-1A

**7. Supervision of Work**      **DNR Use Only**

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)	Date Received	Noted By
Giles Engineering Assoc.		10/12/21		
Street or Route	Telephone Number		Comments	
N8 W22350 Johnson Drive Suite A1	( 262 ) 544-0118			
City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Waukesha	WI	53186	<i>Steve Bauer</i>	11/5/21

**Notice:** Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, 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. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

**Verification Only of Fill and Seal**

Route to DNR Bureau:

Drinking Water       Watershed/Wastewater       Remediation/Redevelopment

Waste Management       Other: \_\_\_\_\_

1. Well Location Information				2. Facility / Owner Information			
County		WI Unique Well # of Removed Well		Hicap #		Facility Name	
Latitude / Longitude (see instructions)		Format Code		Method Code		Facility ID (FID or PWS)	
_____ N		<input type="checkbox"/> DD		<input type="checkbox"/> GPS008		License/Permit/Monitoring #	
_____ W		<input type="checkbox"/> DDM		<input type="checkbox"/> SCR002		Original Well Owner	
1/4 / 1/4		Section		Township		Range <input type="checkbox"/> E	
or Gov't Lot #		_____		_____ N		<input type="checkbox"/> W	
Well Street Address				Present Well Owner			
Well City, Village or Town				Mailing Address of Present Owner			
Subdivision Name				Lot #		City of Present Owner	
Reason for Removal from Service				WI Unique Well # of Replacement Well		State	
_____				_____		ZIP Code	

3. Filled & Sealed Well / Drillhole / Borehole Information		4. Pump, Liner, Screen, Casing & Sealing Material			
<input type="checkbox"/> Monitoring Well		Pump and piping removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A			
<input type="checkbox"/> Water Well		Liner(s) removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A			
<input checked="" type="checkbox"/> Borehole / Drillhole		Liner(s) perforated? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A			
Original Construction Date (mm/dd/yyyy)		Screen removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A			
If a Well Construction Report is available, please attach.		Casing left in place? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A			
Construction Type:		Was casing cut off below surface? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A			
<input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug		Did sealing material rise to surface? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A			
<input checked="" type="checkbox"/> Other (specify): Direct Push		Did material settle after 24 hours? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A			
Formation Type:		If yes, was hole retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A			
<input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock		If bentonite chips were used, were they hydrated with water from a known safe source? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A			
Total Well Depth From Ground Surface (ft.)		Casing Diameter (in.)		Required Method of Placing Sealing Material	
_____		_____		<input type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped	
Lower Drillhole Diameter (in.)		Casing Depth (ft.)		<input type="checkbox"/> Screened & Poured (Bentonite Chips) <input checked="" type="checkbox"/> Other (Explain): Bentonite Gravity Poured	
2		_____		Sealing Materials	
Was well annular space grouted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown		<input type="checkbox"/> Neat Cement Grout <input checked="" type="checkbox"/> Concrete			
If yes, to what depth (feet)?		Depth to Water (feet)		<input type="checkbox"/> Sand-Cement (Concrete) Grout <input checked="" type="checkbox"/> Bentonite Chips	
_____		_____		For Monitoring Wells and Monitoring Well Boreholes Only:	
_____		_____		<input type="checkbox"/> Bentonite Chips <input type="checkbox"/> Bentonite - Cement Grout	
_____		_____		<input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite - Sand Slurry	

5. Material Used to Fill Well / Drillhole		From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite		Surface	16		

**6. Comments**

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7. Supervision of Work				DNR Use Only	
Name of Person or Firm Doing Filling & Sealing		License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)	Date Received	Noted By
Giles Engineering Assoc.			10/12/21		
Street or Route			Telephone Number	Comments	
N8 W22350 Johnson Drive Suite A1			( 262 ) 544-0118		
City	State	ZIP Code	Signature of Person Doing Work		Date Signed
Waukesha	WI	53186	<i>Scott Bush</i>		11/5/21

**Notice:** Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, 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. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

**Verification Only of Fill and Seal**

Route to DNR Bureau:

Drinking Water       Watershed/Wastewater       Remediation/Redevelopment  
 Waste Management       Other: \_\_\_\_\_

1. Well Location Information				2. Facility / Owner Information			
County		WI Unique Well # of Removed Well		Hicap #		Facility Name	
Latitude / Longitude (see instructions)		Format Code		Method Code		Facility ID (FID or PWS)	
_____ N		<input type="checkbox"/> DD		<input type="checkbox"/> GPS008		License/Permit/Monitoring #	
_____ W		<input type="checkbox"/> DDM		<input type="checkbox"/> SCR002		Original Well Owner	
_____ W		<input type="checkbox"/> OTH001		Original Well Owner		Present Well Owner	
¼ / ¼	¼	Section	Township	Range	<input type="checkbox"/> E	Mailing Address of Present Owner	
or Gov't Lot #		N		<input type="checkbox"/> W		City of Present Owner	
Well Street Address				State			
Well City, Village or Town				ZIP Code			
Subdivision Name				Lot #			

3. Filled & Sealed Well / Drillhole / Borehole Information		4. Pump, Liner, Screen, Casing & Sealing Material			
Reason for Removal from Service		WI Unique Well # of Replacement Well		Pump and piping removed?	
<input type="checkbox"/> Monitoring Well		Original Construction Date (mm/dd/yyyy)		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
<input type="checkbox"/> Water Well		If a Well Construction Report is available, please attach.		Liner(s) removed?	
<input checked="" type="checkbox"/> Borehole / Drillhole				<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Construction Type:				Liner(s) perforated?	
<input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug				<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
<input checked="" type="checkbox"/> Other (specify): <u>Direct Push</u>				Screen removed?	
Formation Type:				<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
<input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock				Casing left in place?	
Total Well Depth From Ground Surface (ft.)		Casing Diameter (in.)		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Lower Drillhole Diameter (in.)		Casing Depth (ft.)		Was casing cut off below surface?	
2				<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Was well annular space grouted?				Did sealing material rise to surface?	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown				<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
If yes, to what depth (feet)?		Depth to Water (feet)		Did material settle after 24 hours?	
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
				If yes, was hole retopped?	
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
				If bentonite chips were used, were they hydrated with water from a known safe source?	
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
				Required Method of Placing Sealing Material	
				<input type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped	
				<input type="checkbox"/> Screened & Poured (Bentonite Chips) <input checked="" type="checkbox"/> Other (Explain): <u>Bentonite Gravity Poured</u>	
				Sealing Materials	
				<input type="checkbox"/> Neat Cement Grout <input checked="" type="checkbox"/> Concrete	
				<input type="checkbox"/> Sand-Cement (Concrete) Grout <input checked="" type="checkbox"/> Bentonite Chips	
				For Monitoring Wells and Monitoring Well Boreholes Only:	
				<input type="checkbox"/> Bentonite Chips <input type="checkbox"/> Bentonite - Cement Grout	
				<input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite - Sand Slurry	

5. Material Used to Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite	Surface	13.5		

**6. Comments**

B-1C

7. Supervision of Work				DNR Use Only	
Name of Person or Firm Doing Filling & Sealing		License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)	Date Received	Noted By
Giles Engineering Assoc.			10/12/21		
Street or Route			Telephone Number	Comments	
N8 W22350 Johnson Drive Suite A1			( 262 ) 544-0118		
City	State	ZIP Code	Signature of Person Doing Work		Date Signed
Waukesha	WI	53186	<i>Scott Bender</i>		11/5/21

# Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

**Notice:** Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, 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. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

**Verification Only of Fill and Seal**

**Route to DNR Bureau:**

Drinking Water       Watershed/Wastewater       Remediation/Redevelopment

Waste Management       Other: \_\_\_\_\_

**1. Well Location Information**

County: Racine      WI Unique Well # of Removed Well: \_\_\_\_\_      Hicap #: \_\_\_\_\_

Latitude / Longitude (see instructions): \_\_\_\_\_ N      \_\_\_\_\_ W

Format Code:  DD       DDM

Method Code:  GPS008       SCR002       OTH001

1/4 SW      1/4 SE      Section: 17      Township: 5 N      Range: 21 E

or Gov't Lot # \_\_\_\_\_

Well Street Address: 301 Main Street

Well City, Village or Town: Racine      Well ZIP Code: 53403

Subdivision Name: \_\_\_\_\_      Lot #: \_\_\_\_\_

Reason for Removal from Service: Sampling Completed      WI Unique Well # of Replacement Well: \_\_\_\_\_

**2. Facility / Owner Information**

Facility Name: One Hour Martinizing (Former)

Facility ID (FID or PWS): \_\_\_\_\_

License/Permit/Monitoring #: B-2/BTW-2

Original Well Owner: BMP Realty, Inc

Present Well Owner: BMP Realty, Inc

Mailing Address of Present Owner: 3319 Nobb Hill Drive

City of Present Owner: Racine      State: WI      ZIP Code: 53406

**3. Filled & Sealed Well / Drillhole / Borehole Information**

Monitoring Well       Water Well       Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 10/12/2021

If a Well Construction Report is available, please attach. \_\_\_\_\_

Construction Type:  Drilled       Driven (Sandpoint)       Dug       Other (specify): Direct Push

Formation Type:  Unconsolidated Formation       Bedrock

Total Well Depth From Ground Surface (ft.): 20      Casing Diameter (in.): 1

Lower Drillhole Diameter (in.): 2      Casing Depth (ft.): 20

Was well annular space grouted?  Yes       No       Unknown

If yes, to what depth (feet)? \_\_\_\_\_      Depth to Water (feet): 7.5

**4. Pump, Liner, Screen, Casing & Sealing Material**

Pump and piping removed?  Yes       No       N/A

Liner(s) removed?  Yes       No       N/A

Liner(s) perforated?  Yes       No       N/A

Screen removed?  Yes       No       N/A

Casing left in place?  Yes       No       N/A

Was casing cut off below surface?  Yes       No       N/A

Did sealing material rise to surface?  Yes       No       N/A

Did material settle after 24 hours?  Yes       No       N/A

If yes, was hole retopped?  Yes       No       N/A

If bentonite chips were used, were they hydrated with water from a known safe source?  Yes       No       N/A

Required Method of Placing Sealing Material

Conductor Pipe-Gravity       Conductor Pipe-Pumped

Screened & Poured (Bentonite Chips)       Other (Explain): Bentonite Gravity Pour

Sealing Materials

Neat Cement Grout       Concrete

Sand-Cement (Concrete) Grout       Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:

Bentonite Chips       Bentonite - Cement Grout

Granular Bentonite       Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Concrete	surface	0.5		
Bentonite	0.5	20		

**6. Comments**

Temporary well was set in open boring.

**7. Supervision of Work**

Name of Person or Firm Doing Filling & Sealing Giles Engineering Associates, Inc	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy) 10/12/2021	<b>DNR Use Only</b>	
			Date Received	Noted By
Street or Route N8 W22350 Johnson Drive Suite 1A		Telephone Number ( 262 ) 544-0118	Comments	
City Waukesha	State WI	ZIP Code 53186	Signature of Person Doing Work <i>Scott Bush</i>	Date Signed 11/5/21

# Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

**Notice:** Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, 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. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

**Verification Only of Fill and Seal**

**Route to DNR Bureau:**

Drinking Water       Watershed/Wastewater       Remediation/Redevelopment

Waste Management       Other: \_\_\_\_\_

**1. Well Location Information**

County: Racine      WI Unique Well # of Removed Well: \_\_\_\_\_      Hicap #: \_\_\_\_\_

Latitude / Longitude (see instructions): \_\_\_\_\_ N      \_\_\_\_\_ W

Format Code:  DD       DDM

Method Code:  GPS008       SCR002       OTH001

1/4 SW      1/4 SE      Section: 17      Township: 5 N      Range: 21 E

or Gov't Lot #: \_\_\_\_\_

Well Street Address: 301 Main Street

Well City, Village or Town: Racine      Well ZIP Code: 53403

Subdivision Name: \_\_\_\_\_      Lot #: \_\_\_\_\_

**2. Facility / Owner Information**

Facility Name: One Hour Martinizing (Former)

Facility ID (FID or PWS): \_\_\_\_\_

License/Permit/Monitoring #: B-2A

Original Well Owner: BMP Realty, Inc

Present Well Owner: BMP Realty, Inc

Mailing Address of Present Owner: 3319 Nobb Hill Drive

City of Present Owner: Racine      State: WI      ZIP Code: 53406

Reason for Removal from Service: Sampling Completed

WI Unique Well # of Replacement Well: \_\_\_\_\_

**3. Filled & Sealed Well / Drillhole / Borehole Information**

Monitoring Well       Water Well       Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 10/12/2021

If a Well Construction Report is available, please attach. \_\_\_\_\_

Construction Type:  Drilled       Driven (Sandpoint)       Dug       Other (specify): Direct Push

Formation Type:  Unconsolidated Formation       Bedrock

Total Well Depth From Ground Surface (ft.): 10      Casing Diameter (in.): \_\_\_\_\_

Lower Drillhole Diameter (in.): 2      Casing Depth (ft.): \_\_\_\_\_

Was well annular space grouted?  Yes       No       Unknown

If yes, to what depth (feet): \_\_\_\_\_      Depth to Water (feet): \_\_\_\_\_

**4. Pump, Liner, Screen, Casing & Sealing Material**

Pump and piping removed?  Yes       No       N/A

Liner(s) removed?  Yes       No       N/A

Liner(s) perforated?  Yes       No       N/A

Screen removed?  Yes       No       N/A

Casing left in place?  Yes       No       N/A

Was casing cut off below surface?  Yes       No       N/A

Did sealing material rise to surface?  Yes       No       N/A

Did material settle after 24 hours?  Yes       No       N/A

If yes, was hole retopped?  Yes       No       N/A

If bentonite chips were used, were they hydrated with water from a known safe source?  Yes       No       N/A

Required Method of Placing Sealing Material:  Conductor Pipe-Gravity       Conductor Pipe-Pumped       Screened & Poured (Bentonite Chips)       Other (Explain): Bentonite Gravity Pour

Sealing Materials:  Neat Cement Grout       Concrete       Sand-Cement (Concrete) Grout       Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:  Bentonite Chips       Bentonite - Cement Grout       Granular Bentonite       Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite	surface	10		

**6. Comments**

**7. Supervision of Work**

Name of Person or Firm Doing Filling & Sealing: Giles Engineering Associates, Inc      License #: \_\_\_\_\_      Date of Filling & Sealing or Verification (mm/dd/yyyy): 10/12/2021

Street or Route: N8 W22350 Johnson Drive Suite 1A      Telephone Number: ( 262 ) 544-0118

City: Waukesha      State: WI      ZIP Code: 53186      Signature of Person Doing Work: *[Signature]*      Date Signed: 11/5/21

**DNR Use Only**

Date Received: \_\_\_\_\_      Noted By: \_\_\_\_\_

Comments: \_\_\_\_\_



# Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

**Notice:** Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, 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. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

Verification Only of Fill and Seal

**Route to DNR Bureau:**

- Drinking Water       Watershed/Wastewater       Remediation/Redevelopment  
 Waste Management       Other: \_\_\_\_\_

**1. Well Location Information**      **2. Facility / Owner Information**

County: Racine      WI Unique Well # of Removed Well: \_\_\_\_\_      Hicap #: \_\_\_\_\_  
 Latitude / Longitude (see instructions): \_\_\_\_\_ N \_\_\_\_\_ W  
 Format Code:  DD       DDM  
 Method Code:  GPS008       SCR002       OTH001  
 1/4 SW      1/4 SE      Section: 17      Township: 5 N      Range: 21 E  
 or Gov't Lot #: \_\_\_\_\_      Well Street Address: 301 Main Street  
 Well City, Village or Town: Racine      Well ZIP Code: 53403  
 Subdivision Name: \_\_\_\_\_      Lot #: \_\_\_\_\_  
 Reason for Removal from Service: Sampling Completed      WI Unique Well # of Replacement Well: \_\_\_\_\_

Facility Name: One Hour Martinizing (Former)  
 Facility ID (FID or PWS): \_\_\_\_\_  
 License/Permit/Monitoring #: B-2B  
 Original Well Owner: BMP Realty, Inc  
 Present Well Owner: BMP Realty, Inc  
 Mailing Address of Present Owner: 3319 Nobb Hill Drive  
 City of Present Owner: Racine      State: WI      ZIP Code: 53406

**3. Filled & Sealed Well / Drillhole / Borehole Information**

Monitoring Well       Water Well       Borehole / Drillhole  
 Original Construction Date (mm/dd/yyyy): 10/12/2021  
 If a Well Construction Report is available, please attach.  
 Construction Type:  Drilled       Driven (Sandpoint)       Dug  
 Other (specify): Direct Push  
 Formation Type:  Unconsolidated Formation       Bedrock  
 Total Well Depth From Ground Surface (ft.): 10      Casing Diameter (in.): \_\_\_\_\_  
 Lower Drillhole Diameter (in.): 2      Casing Depth (ft.): \_\_\_\_\_  
 Was well annular space grouted?  Yes       No       Unknown  
 If yes, to what depth (feet)? \_\_\_\_\_      Depth to Water (feet): \_\_\_\_\_

**4. Pump, Liner, Screen, Casing & Sealing Material**

Pump and piping removed?  Yes       No       N/A  
 Liner(s) removed?  Yes       No       N/A  
 Liner(s) perforated?  Yes       No       N/A  
 Screen removed?  Yes       No       N/A  
 Casing left in place?  Yes       No       N/A  
 Was casing cut off below surface?  Yes       No       N/A  
 Did sealing material rise to surface?  Yes       No       N/A  
 Did material settle after 24 hours?  Yes       No       N/A  
 If yes, was hole retopped?  Yes       No       N/A  
 If bentonite chips were used, were they hydrated with water from a known safe source?  Yes       No       N/A  
 Required Method of Placing Sealing Material:  
 Conductor Pipe-Gravity       Conductor Pipe-Pumped  
 Screened & Poured (Bentonite Chips)       Other (Explain): Bentonite Gravity Pour  
 Sealing Materials:  
 Neat Cement Grout       Concrete  
 Sand-Cement (Concrete) Grout       Bentonite Chips  
 For Monitoring Wells and Monitoring Well Boreholes Only:  
 Bentonite Chips       Bentonite - Cement Grout  
 Granular Bentonite       Bentonite - Sand Slurry

**5. Material Used to Fill Well / Drillhole**

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite	surface	10		

**6. Comments**

**7. Supervision of Work**      **DNR Use Only**

Name of Person or Firm Doing Filling & Sealing: Giles Engineering Associates, Inc      License #: \_\_\_\_\_      Date of Filling & Sealing or Verification (mm/dd/yyyy): 10/12/2021  
 Street or Route: N8 W22350 Johnson Drive Suite 1A      Telephone Number: ( 262 ) 544-0118  
 City: Waukesha      State: WI      ZIP Code: 53186      Signature of Person Doing Work: *Scott Burke*      Date Signed: 11/5/21

Date Received: \_\_\_\_\_      Noted By: \_\_\_\_\_  
 Comments: \_\_\_\_\_

# Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

**Notice:** Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, 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. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

**Verification Only of Fill and Seal**

**Route to DNR Bureau:**

Drinking Water       Watershed/Wastewater       Remediation/Redevelopment

Waste Management       Other: \_\_\_\_\_

1. Well Location Information				2. Facility / Owner Information			
County <b>Racine</b>		WI Unique Well # of Removed Well _____		Hicap # _____		Facility Name <b>One Hour Martinizing (Former)</b>	
Latitude / Longitude (see instructions) _____ N _____ W		Format Code <input type="checkbox"/> DD <input type="checkbox"/> DDM		Method Code <input type="checkbox"/> GPS008 <input type="checkbox"/> SCR002 <input type="checkbox"/> OTH001		Facility ID (FID or PWS) _____	
¼ / ¼ SW    ¼ SE or Gov't Lot #		Section <b>17</b>		Township <b>5 N</b>		Range <input checked="" type="checkbox"/> E <input type="checkbox"/> W	
Well Street Address <b>301 Main Street</b>				Original Well Owner <b>BMP Realty, Inc</b>			
Well City, Village or Town <b>Racine</b>				Present Well Owner <b>BMP Realty, Inc</b>			
Subdivision Name				Well ZIP Code <b>53403</b>		Mailing Address of Present Owner <b>3319 Nobb Hill Drive</b>	
				City of Present Owner <b>Racine</b>		State <b>WI</b>	ZIP Code <b>53406</b>

3. Filled & Sealed Well / Drillhole / Borehole Information		4. Pump, Liner, Screen, Casing & Sealing Material			
Reason for Removal from Service <b>Sampling Completed</b>		WI Unique Well # of Replacement Well _____		Pump and piping removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
<input type="checkbox"/> Monitoring Well		Original Construction Date (mm/dd/yyyy) <b>10/12/2021</b>		Liner(s) removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
<input type="checkbox"/> Water Well		If a Well Construction Report is available, please attach.		Liner(s) perforated? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
<input checked="" type="checkbox"/> Borehole / Drillhole				Screen removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Construction Type:				Casing left in place? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
<input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug				Was casing cut off below surface? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
<input checked="" type="checkbox"/> Other (specify): <u>Direct Push</u>				Did sealing material rise to surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Formation Type:				Did material settle after 24 hours? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
<input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock				If yes, was hole retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Total Well Depth From Ground Surface (ft.) <b>10</b>		Casing Diameter (in.)		If bentonite chips were used, were they hydrated with water from a known safe source? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Lower Drillhole Diameter (in.) <b>2</b>		Casing Depth (ft.)		Required Method of Placing Sealing Material	
Was well annular space grouted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown				<input type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped	
If yes, to what depth (feet)?		Depth to Water (feet)		<input type="checkbox"/> Screened & Poured (Bentonite Chips) <input checked="" type="checkbox"/> Other (Explain): <u>Bentonite Gravity Pour</u>	

5. Material Used to Fill Well / Drillhole				DNR Use Only	
From (ft.)		To (ft.)		No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
<b>surface</b>		<b>10</b>			
6. Comments					
7. Supervision of Work				DNR Use Only	
Name of Person or Firm Doing Filling & Sealing <b>Giles Engineering Associates, Inc</b>		License #	Date of Filling & Sealing or Verification (mm/dd/yyyy) <b>10/12/2021</b>		Date Received
Street or Route <b>N8 W22350 Johnson Drive Suite 1A</b>		Telephone Number <b>( 262 ) 544-0118</b>		Noted By	
City <b>Waukesha</b>		State <b>WI</b>	ZIP Code <b>53186</b>	Signature of Person Doing Work <i>Scott Brubaker</i>	
				Date Signed <b>11/5/21</b>	

## **APPENDIX C**

### **Analytical Laboratory Report (Soil)**

## ANALYTICAL REPORT

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

Laboratory Job ID: 500-206744-1

Client Project/Site: 301 Main Martinizing Racine 1E-2108003

**For:**

Giles Engineering Associates  
N8 W 22350 Johnson Road  
Waukesha, Wisconsin 53186

Attn: Kelly Hayden



Authorized for release by:  
10/22/2021 2:37:24 PM

Sandie Fredrick, Project Manager II  
(920)261-1660  
[sandra.fredrick@eurofinset.com](mailto:sandra.fredrick@eurofinset.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://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.*

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# Case Narrative

Client: Giles Engineering Associates  
Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

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## Job ID: 500-206744-1

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Laboratory: Eurofins TestAmerica, Chicago

### Narrative

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#### Job Narrative 500-206744-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 10/13/2021 9:55 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.4° C.

#### GC/MS VOA

Method 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: B-1 (12-14) (500-206744-2), B-1A (12-14) (500-206744-4), B-2 (2-4) (500-206744-9) and B-2A (2-4) (500-206744-11). Elevated reporting limits (RLs) are provided.

Method 8260B: Methylene chloride was detected in the following samples: B-1 (0-2) (500-206744-1), B-1A (2-4) (500-206744-3), B-1A (12-14) (500-206744-4), B-1B (0-2) (500-206744-5), B-1B (10-12) (500-206744-6), B-1C (0-2) (500-206744-7), B-2 (2-4) (500-206744-9), B-2 (10-12) (500-206744-10), B-2A (8-10) (500-206744-12), B-2B (2-4) (500-206744-13), B-2B (8-10) (500-206744-14) and B-2C (2-4) (500-206744-15). 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.

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

#### Metals

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

# Detection Summary

Client: Giles Engineering Associates  
Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

## Client Sample ID: B-1 (0-2)

## Lab Sample ID: 500-206744-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	100	J	290	94	ug/Kg	50	✳	8260B	Total/NA
Tetrachloroethene	940		57	21	ug/Kg	50	✳	8260B	Total/NA

## Client Sample ID: B-1 (12-14)

## Lab Sample ID: 500-206744-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene - DL	64000		1300	490	ug/Kg	1000	✳	8260B	Total/NA

## Client Sample ID: B-1A (2-4)

## Lab Sample ID: 500-206744-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	120	J	290	96	ug/Kg	50	✳	8260B	Total/NA
Tetrachloroethene	1500		59	22	ug/Kg	50	✳	8260B	Total/NA
Toluene	17		15	8.6	ug/Kg	50	✳	8260B	Total/NA

## Client Sample ID: B-1A (12-14)

## Lab Sample ID: 500-206744-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	280	J	700	230	ug/Kg	100	✳	8260B	Total/NA
Tetrachloroethene - DL	50000		1400	520	ug/Kg	1000	✳	8260B	Total/NA

## Client Sample ID: B-1B (0-2)

## Lab Sample ID: 500-206744-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	110	J	290	95	ug/Kg	50	✳	8260B	Total/NA
Tetrachloroethene	330		58	22	ug/Kg	50	✳	8260B	Total/NA

## Client Sample ID: B-1B (10-12)

## Lab Sample ID: 500-206744-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	110	J	330	110	ug/Kg	50	✳	8260B	Total/NA
Tetrachloroethene	4400		66	25	ug/Kg	50	✳	8260B	Total/NA

## Client Sample ID: B-1C (0-2)

## Lab Sample ID: 500-206744-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	98	J	270	89	ug/Kg	50	✳	8260B	Total/NA
Tetrachloroethene	2100		55	20	ug/Kg	50	✳	8260B	Total/NA

## Client Sample ID: B-1C (12-13.5)

## Lab Sample ID: 500-206744-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	380		63	23	ug/Kg	50	✳	8260B	Total/NA

## Client Sample ID: B-2 (2-4)

## Lab Sample ID: 500-206744-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	220	J	680	220	ug/Kg	100	✳	8260B	Total/NA
Naphthalene	60	J B	140	45	ug/Kg	100	✳	8260B	Total/NA
Toluene	38		34	20	ug/Kg	100	✳	8260B	Total/NA
Trichloroethene	1800		68	22	ug/Kg	100	✳	8260B	Total/NA
Xylenes, Total	36	J	68	30	ug/Kg	100	✳	8260B	Total/NA
Tetrachloroethene - DL	100000		1400	500	ug/Kg	1000	✳	8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

# Detection Summary

Client: Giles Engineering Associates  
Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

## Client Sample ID: B-2 (10-12)

Lab Sample ID: 500-206744-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	110	J	320	100	ug/Kg	50	✳	8260B	Total/NA
Tetrachloroethene	84		64	24	ug/Kg	50	✳	8260B	Total/NA

## Client Sample ID: B-2A (2-4)

Lab Sample ID: 500-206744-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	10	J	16	9.1	ug/Kg	50	✳	8260B	Total/NA
Naphthalene	24	J B	62	21	ug/Kg	50	✳	8260B	Total/NA
Toluene	9.4	J	16	9.1	ug/Kg	50	✳	8260B	Total/NA
Tetrachloroethene - DL	17000		620	230	ug/Kg	500	✳	8260B	Total/NA

## Client Sample ID: B-2A (8-10)

Lab Sample ID: 500-206744-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	100	J	310	100	ug/Kg	50	✳	8260B	Total/NA

## Client Sample ID: B-2B (2-4)

Lab Sample ID: 500-206744-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	160	J	340	110	ug/Kg	50	✳	8260B	Total/NA
Naphthalene	59	J	68	23	ug/Kg	50	✳	8260B	Total/NA
Tetrachloroethene	170		68	25	ug/Kg	50	✳	8260B	Total/NA

## Client Sample ID: B-2B (8-10)

Lab Sample ID: 500-206744-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	140	J	320	100	ug/Kg	50	✳	8260B	Total/NA
Naphthalene	34	J	64	21	ug/Kg	50	✳	8260B	Total/NA

## Client Sample ID: B-2C (2-4)

Lab Sample ID: 500-206744-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	150	J	320	100	ug/Kg	50	✳	8260B	Total/NA
Tetrachloroethene	81		64	24	ug/Kg	50	✳	8260B	Total/NA

## Client Sample ID: B-2C (8-10)

Lab Sample ID: 500-206744-16

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago



# Method Summary

Client: Giles Engineering Associates  
Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
Moisture	Percent Moisture	EPA	TAL CHI
5035	Closed System Purge and Trap	SW846	TAL CHI

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



# Sample Summary

Client: Giles Engineering Associates  
Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-206744-1	B-1 (0-2)	Solid	10/12/21 09:40	10/13/21 09:55
500-206744-2	B-1 (12-14)	Solid	10/12/21 10:25	10/13/21 09:55
500-206744-3	B-1A (2-4)	Solid	10/12/21 10:30	10/13/21 09:55
500-206744-4	B-1A (12-14)	Solid	10/12/21 10:35	10/13/21 09:55
500-206744-5	B-1B (0-2)	Solid	10/12/21 12:35	10/13/21 09:55
500-206744-6	B-1B (10-12)	Solid	10/12/21 12:40	10/13/21 09:55
500-206744-7	B-1C (0-2)	Solid	10/12/21 11:00	10/13/21 09:55
500-206744-8	B-1C (12-13.5)	Solid	10/12/21 11:05	10/13/21 09:55
500-206744-9	B-2 (2-4)	Solid	10/12/21 14:20	10/13/21 09:55
500-206744-10	B-2 (10-12)	Solid	10/12/21 14:25	10/13/21 09:55
500-206744-11	B-2A (2-4)	Solid	10/12/21 14:30	10/13/21 09:55
500-206744-12	B-2A (8-10)	Solid	10/12/21 14:35	10/13/21 09:55
500-206744-13	B-2B (2-4)	Solid	10/12/21 14:40	10/13/21 09:55
500-206744-14	B-2B (8-10)	Solid	10/12/21 14:45	10/13/21 09:55
500-206744-15	B-2C (2-4)	Solid	10/12/21 14:50	10/13/21 09:55
500-206744-16	B-2C (8-10)	Solid	10/12/21 14:55	10/13/21 09:55



# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-1 (0-2)**

**Lab Sample ID: 500-206744-1**

**Date Collected: 10/12/21 09:40**

**Matrix: Solid**

**Date Received: 10/13/21 09:55**

**Percent Solids: 93.1**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<27		57	27	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
1,1,1-Trichloroethane	<22		57	22	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
1,1,2,2-Tetrachloroethane	<23		57	23	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
1,1,2-Trichloroethane	<20		57	20	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
1,1-Dichloroethane	<24		57	24	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
1,1-Dichloroethene	<22		57	22	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
1,1-Dichloropropene	<17		57	17	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
1,2,3-Trichlorobenzene	<26		57	26	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
1,2,3-Trichloropropane	<24		110	24	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
1,2,4-Trichlorobenzene	<20		57	20	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
1,2,4-Trimethylbenzene	<21		57	21	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
1,2-Dibromo-3-Chloropropane	<110		290	110	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
Ethylene Dibromide	<22		57	22	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
1,2-Dichlorobenzene	<19		57	19	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
1,2-Dichloroethane	<23		57	23	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
1,2-Dichloropropane	<25		57	25	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
1,3,5-Trimethylbenzene	<22		57	22	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
1,3-Dichlorobenzene	<23		57	23	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
1,3-Dichloropropane	<21		57	21	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
1,4-Dichlorobenzene	<21		57	21	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
2,2-Dichloropropane	<26		57	26	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
2-Chlorotoluene	<18		57	18	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
4-Chlorotoluene	<20		57	20	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
Benzene	<8.4		14	8.4	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
Bromobenzene	<20		57	20	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
Bromochloromethane	<25		57	25	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
Bromodichloromethane	<21		57	21	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
Bromoform	<28		57	28	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
Bromomethane	<46		170	46	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
Carbon tetrachloride	<22		57	22	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
Chlorobenzene	<22		57	22	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
Chloroethane	<29		57	29	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
Chloroform	<21		110	21	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
Chloromethane	<18		57	18	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
cis-1,2-Dichloroethene	<23		57	23	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
cis-1,3-Dichloropropene	<24		57	24	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
Dibromochloromethane	<28		57	28	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
Dibromomethane	<16		57	16	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
Dichlorodifluoromethane	<39		170	39	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
Ethylbenzene	<11		14	11	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
Hexachlorobutadiene	<26		57	26	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
Isopropyl ether	<16		57	16	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
Isopropylbenzene	<22		57	22	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
Methyl tert-butyl ether	<23		57	23	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
<b>Methylene Chloride</b>	<b>100 J</b>		290	94	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
Naphthalene	<19		57	19	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
n-Butylbenzene	<22		57	22	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
N-Propylbenzene	<24		57	24	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50
p-Isopropyltoluene	<21		57	21	ug/Kg	✱	10/12/21 09:40	10/21/21 12:08	50

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-1 (0-2)**

**Lab Sample ID: 500-206744-1**

**Date Collected: 10/12/21 09:40**

**Matrix: Solid**

**Date Received: 10/13/21 09:55**

**Percent Solids: 93.1**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<23		57	23	ug/Kg	☼	10/12/21 09:40	10/21/21 12:08	50
Styrene	<22		57	22	ug/Kg	☼	10/12/21 09:40	10/21/21 12:08	50
tert-Butylbenzene	<23		57	23	ug/Kg	☼	10/12/21 09:40	10/21/21 12:08	50
<b>Tetrachloroethene</b>	<b>940</b>		57	21	ug/Kg	☼	10/12/21 09:40	10/21/21 12:08	50
Toluene	<8.5		14	8.5	ug/Kg	☼	10/12/21 09:40	10/21/21 12:08	50
trans-1,2-Dichloroethene	<20		57	20	ug/Kg	☼	10/12/21 09:40	10/21/21 12:08	50
trans-1,3-Dichloropropene	<21		57	21	ug/Kg	☼	10/12/21 09:40	10/21/21 12:08	50
Trichloroethene	<9.4		29	9.4	ug/Kg	☼	10/12/21 09:40	10/21/21 12:08	50
Trichlorofluoromethane	<25		57	25	ug/Kg	☼	10/12/21 09:40	10/21/21 12:08	50
Vinyl chloride	<15		57	15	ug/Kg	☼	10/12/21 09:40	10/21/21 12:08	50
Xylenes, Total	<13		29	13	ug/Kg	☼	10/12/21 09:40	10/21/21 12:08	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		75 - 126	10/12/21 09:40	10/21/21 12:08	50
4-Bromofluorobenzene (Surr)	92		72 - 124	10/12/21 09:40	10/21/21 12:08	50
Dibromofluoromethane (Surr)	91		75 - 120	10/12/21 09:40	10/21/21 12:08	50
Toluene-d8 (Surr)	102		75 - 120	10/12/21 09:40	10/21/21 12:08	50

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-1 (12-14)**

**Lab Sample ID: 500-206744-2**

**Date Collected: 10/12/21 10:25**

**Matrix: Solid**

**Date Received: 10/13/21 09:55**

**Percent Solids: 86.6**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<61		130	61	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
1,1,1-Trichloroethane	<50		130	50	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
1,1,2,2-Tetrachloroethane	<53		130	53	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
1,1,2-Trichloroethane	<47		130	47	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
1,1-Dichloroethane	<54		130	54	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
1,1-Dichloroethene	<52		130	52	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
1,1-Dichloropropene	<40		130	40	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
1,2,3-Trichlorobenzene	<61		130	61	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
1,2,3-Trichloropropane	<55		270	55	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
1,2,4-Trichlorobenzene	<45		130	45	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
1,2,4-Trimethylbenzene	<48		130	48	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
1,2-Dibromo-3-Chloropropane	<260		660	260	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
Ethylene Dibromide	<51		130	51	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
1,2-Dichlorobenzene	<44		130	44	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
1,2-Dichloroethane	<52		130	52	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
1,2-Dichloropropane	<57		130	57	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
1,3,5-Trimethylbenzene	<50		130	50	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
1,3-Dichlorobenzene	<53		130	53	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
1,3-Dichloropropane	<48		130	48	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
1,4-Dichlorobenzene	<48		130	48	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
2,2-Dichloropropane	<59		130	59	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
2-Chlorotoluene	<42		130	42	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
4-Chlorotoluene	<46		130	46	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
Benzene	<19		33	19	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
Bromobenzene	<47		130	47	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
Bromochloromethane	<57		130	57	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
Bromodichloromethane	<49		130	49	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
Bromoform	<64		130	64	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
Bromomethane	<110		400	110	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
Carbon tetrachloride	<51		130	51	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
Chlorobenzene	<51		130	51	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
Chloroethane	<67		130	67	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
Chloroform	<49		270	49	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
Chloromethane	<42		130	42	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
cis-1,2-Dichloroethene	<54		130	54	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
cis-1,3-Dichloropropene	<55		130	55	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
Dibromochloromethane	<65		130	65	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
Dibromomethane	<36		130	36	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
Dichlorodifluoromethane	<89		400	89	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
Ethylbenzene	<24		33	24	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
Hexachlorobutadiene	<59		130	59	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
Isopropyl ether	<37		130	37	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
Isopropylbenzene	<51		130	51	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
Methyl tert-butyl ether	<52		130	52	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
Methylene Chloride	<220		660	220	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
Naphthalene	<44		130	44	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
n-Butylbenzene	<51		130	51	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
N-Propylbenzene	<55		130	55	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
p-Isopropyltoluene	<48		130	48	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100

Eurofins TestAmerica, Chicago

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-1 (12-14)**

**Lab Sample ID: 500-206744-2**

**Date Collected: 10/12/21 10:25**

**Matrix: Solid**

**Date Received: 10/13/21 09:55**

**Percent Solids: 86.6**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<53		130	53	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
Styrene	<51		130	51	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
tert-Butylbenzene	<53		130	53	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
Toluene	<20		33	20	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
trans-1,2-Dichloroethene	<46		130	46	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
trans-1,3-Dichloropropene	<48		130	48	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
Trichloroethene	<22		66	22	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
Trichlorofluoromethane	<57		130	57	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
Vinyl chloride	<35		130	35	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100
Xylenes, Total	<29		66	29	ug/Kg	☼	10/12/21 10:25	10/21/21 12:30	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		75 - 126	10/12/21 10:25	10/21/21 12:30	100
4-Bromofluorobenzene (Surr)	92		72 - 124	10/12/21 10:25	10/21/21 12:30	100
Dibromofluoromethane (Surr)	91		75 - 120	10/12/21 10:25	10/21/21 12:30	100
Toluene-d8 (Surr)	100		75 - 120	10/12/21 10:25	10/21/21 12:30	100

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Tetrachloroethene</b>	<b>64000</b>		1300	490	ug/Kg	☼	10/12/21 10:25	10/21/21 12:52	1000

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		75 - 126	10/12/21 10:25	10/21/21 12:52	1000
4-Bromofluorobenzene (Surr)	92		72 - 124	10/12/21 10:25	10/21/21 12:52	1000
Dibromofluoromethane (Surr)	92		75 - 120	10/12/21 10:25	10/21/21 12:52	1000
Toluene-d8 (Surr)	102		75 - 120	10/12/21 10:25	10/21/21 12:52	1000

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-1A (2-4)**

**Lab Sample ID: 500-206744-3**

**Date Collected: 10/12/21 10:30**

**Matrix: Solid**

**Date Received: 10/13/21 09:55**

**Percent Solids: 91.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<27		59	27	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
1,1,1-Trichloroethane	<22		59	22	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
1,1,2,2-Tetrachloroethane	<23		59	23	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
1,1,2-Trichloroethane	<21		59	21	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
1,1-Dichloroethane	<24		59	24	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
1,1-Dichloroethene	<23		59	23	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
1,1-Dichloropropene	<17		59	17	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
1,2,3-Trichlorobenzene	<27		59	27	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
1,2,3-Trichloropropane	<24		120	24	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
1,2,4-Trichlorobenzene	<20		59	20	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
1,2,4-Trimethylbenzene	<21		59	21	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
1,2-Dibromo-3-Chloropropane	<120		290	120	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
Ethylene Dibromide	<23		59	23	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
1,2-Dichlorobenzene	<20		59	20	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
1,2-Dichloroethane	<23		59	23	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
1,2-Dichloropropane	<25		59	25	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
1,3,5-Trimethylbenzene	<22		59	22	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
1,3-Dichlorobenzene	<23		59	23	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
1,3-Dichloropropane	<21		59	21	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
1,4-Dichlorobenzene	<21		59	21	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
2,2-Dichloropropane	<26		59	26	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
2-Chlorotoluene	<18		59	18	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
4-Chlorotoluene	<21		59	21	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
Benzene	<8.6		15	8.6	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
Bromobenzene	<21		59	21	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
Bromochloromethane	<25		59	25	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
Bromodichloromethane	<22		59	22	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
Bromoform	<28		59	28	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
Bromomethane	<47		180	47	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
Carbon tetrachloride	<23		59	23	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
Chlorobenzene	<23		59	23	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
Chloroethane	<30		59	30	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
Chloroform	<22		120	22	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
Chloromethane	<19		59	19	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
cis-1,2-Dichloroethene	<24		59	24	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
cis-1,3-Dichloropropene	<24		59	24	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
Dibromochloromethane	<29		59	29	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
Dibromomethane	<16		59	16	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
Dichlorodifluoromethane	<40		180	40	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
Ethylbenzene	<11		15	11	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
Hexachlorobutadiene	<26		59	26	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
Isopropyl ether	<16		59	16	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
Isopropylbenzene	<23		59	23	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
Methyl tert-butyl ether	<23		59	23	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
<b>Methylene Chloride</b>	<b>120 J</b>		290	96	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
Naphthalene	<20		59	20	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
n-Butylbenzene	<23		59	23	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
N-Propylbenzene	<24		59	24	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50
p-Isopropyltoluene	<21		59	21	ug/Kg	✱	10/12/21 10:30	10/21/21 13:14	50

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-1A (2-4)**

**Lab Sample ID: 500-206744-3**

Date Collected: 10/12/21 10:30

Matrix: Solid

Date Received: 10/13/21 09:55

Percent Solids: 91.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<23		59	23	ug/Kg	☼	10/12/21 10:30	10/21/21 13:14	50
Styrene	<23		59	23	ug/Kg	☼	10/12/21 10:30	10/21/21 13:14	50
tert-Butylbenzene	<23		59	23	ug/Kg	☼	10/12/21 10:30	10/21/21 13:14	50
<b>Tetrachloroethene</b>	<b>1500</b>		59	22	ug/Kg	☼	10/12/21 10:30	10/21/21 13:14	50
<b>Toluene</b>	<b>17</b>		15	8.6	ug/Kg	☼	10/12/21 10:30	10/21/21 13:14	50
trans-1,2-Dichloroethene	<21		59	21	ug/Kg	☼	10/12/21 10:30	10/21/21 13:14	50
trans-1,3-Dichloropropene	<21		59	21	ug/Kg	☼	10/12/21 10:30	10/21/21 13:14	50
Trichloroethene	<9.6		29	9.6	ug/Kg	☼	10/12/21 10:30	10/21/21 13:14	50
Trichlorofluoromethane	<25		59	25	ug/Kg	☼	10/12/21 10:30	10/21/21 13:14	50
Vinyl chloride	<15		59	15	ug/Kg	☼	10/12/21 10:30	10/21/21 13:14	50
Xylenes, Total	<13		29	13	ug/Kg	☼	10/12/21 10:30	10/21/21 13:14	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		75 - 126	10/12/21 10:30	10/21/21 13:14	50
4-Bromofluorobenzene (Surr)	92		72 - 124	10/12/21 10:30	10/21/21 13:14	50
Dibromofluoromethane (Surr)	90		75 - 120	10/12/21 10:30	10/21/21 13:14	50
Toluene-d8 (Surr)	103		75 - 120	10/12/21 10:30	10/21/21 13:14	50



# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-1A (12-14)**

**Lab Sample ID: 500-206744-4**

**Date Collected: 10/12/21 10:35**

**Matrix: Solid**

**Date Received: 10/13/21 09:55**

**Percent Solids: 82.9**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<65		140	65	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
1,1,1-Trichloroethane	<54		140	54	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
1,1,2,2-Tetrachloroethane	<56		140	56	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
1,1,2-Trichloroethane	<50		140	50	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
1,1-Dichloroethane	<58		140	58	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
1,1-Dichloroethene	<55		140	55	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
1,1-Dichloropropene	<42		140	42	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
1,2,3-Trichlorobenzene	<65		140	65	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
1,2,3-Trichloropropane	<58		280	58	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
1,2,4-Trichlorobenzene	<48		140	48	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
1,2,4-Trimethylbenzene	<50		140	50	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
1,2-Dibromo-3-Chloropropane	<280		700	280	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
Ethylene Dibromide	<54		140	54	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
1,2-Dichlorobenzene	<47		140	47	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
1,2-Dichloroethane	<55		140	55	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
1,2-Dichloropropane	<60		140	60	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
1,3,5-Trimethylbenzene	<54		140	54	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
1,3-Dichlorobenzene	<56		140	56	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
1,3-Dichloropropane	<51		140	51	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
1,4-Dichlorobenzene	<51		140	51	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
2,2-Dichloropropane	<63		140	63	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
2-Chlorotoluene	<44		140	44	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
4-Chlorotoluene	<49		140	49	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
Benzene	<21		35	21	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
Bromobenzene	<50		140	50	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
Bromochloromethane	<60		140	60	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
Bromodichloromethane	<52		140	52	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
Bromoform	<68		140	68	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
Bromomethane	<110		420	110	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
Carbon tetrachloride	<54		140	54	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
Chlorobenzene	<54		140	54	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
Chloroethane	<71		140	71	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
Chloroform	<52		280	52	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
Chloromethane	<45		140	45	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
cis-1,2-Dichloroethene	<57		140	57	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
cis-1,3-Dichloropropene	<59		140	59	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
Dibromochloromethane	<69		140	69	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
Dibromomethane	<38		140	38	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
Dichlorodifluoromethane	<95		420	95	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
Ethylbenzene	<26		35	26	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
Hexachlorobutadiene	<63		140	63	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
Isopropyl ether	<39		140	39	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
Isopropylbenzene	<54		140	54	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
Methyl tert-butyl ether	<55		140	55	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
<b>Methylene Chloride</b>	<b>280 J</b>		700	230	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
Naphthalene	<47		140	47	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
n-Butylbenzene	<55		140	55	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
N-Propylbenzene	<58		140	58	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
p-Isopropyltoluene	<51		140	51	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100

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# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-1A (12-14)**

**Lab Sample ID: 500-206744-4**

**Date Collected: 10/12/21 10:35**

**Matrix: Solid**

**Date Received: 10/13/21 09:55**

**Percent Solids: 82.9**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<56		140	56	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
Styrene	<54		140	54	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
tert-Butylbenzene	<56		140	56	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
Toluene	<21		35	21	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
trans-1,2-Dichloroethene	<49		140	49	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
trans-1,3-Dichloropropene	<51		140	51	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
Trichloroethene	<23		70	23	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
Trichlorofluoromethane	<60		140	60	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
Vinyl chloride	<37		140	37	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100
Xylenes, Total	<31		70	31	ug/Kg	☼	10/12/21 10:35	10/21/21 13:36	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		75 - 126	10/12/21 10:35	10/21/21 13:36	100
4-Bromofluorobenzene (Surr)	92		72 - 124	10/12/21 10:35	10/21/21 13:36	100
Dibromofluoromethane (Surr)	90		75 - 120	10/12/21 10:35	10/21/21 13:36	100
Toluene-d8 (Surr)	101		75 - 120	10/12/21 10:35	10/21/21 13:36	100

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Tetrachloroethene</b>	<b>50000</b>		1400	520	ug/Kg	☼	10/12/21 10:35	10/21/21 13:58	1000

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		75 - 126	10/12/21 10:35	10/21/21 13:58	1000
4-Bromofluorobenzene (Surr)	92		72 - 124	10/12/21 10:35	10/21/21 13:58	1000
Dibromofluoromethane (Surr)	92		75 - 120	10/12/21 10:35	10/21/21 13:58	1000
Toluene-d8 (Surr)	102		75 - 120	10/12/21 10:35	10/21/21 13:58	1000

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-1B (0-2)**

**Lab Sample ID: 500-206744-5**

**Date Collected: 10/12/21 12:35**

**Matrix: Solid**

**Date Received: 10/13/21 09:55**

**Percent Solids: 92.4**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<27		58	27	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
1,1,1-Trichloroethane	<22		58	22	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
1,1,2,2-Tetrachloroethane	<23		58	23	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
1,1,2-Trichloroethane	<21		58	21	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
1,1-Dichloroethane	<24		58	24	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
1,1-Dichloroethene	<23		58	23	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
1,1-Dichloropropene	<17		58	17	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
1,2,3-Trichlorobenzene	<27		58	27	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
1,2,3-Trichloropropane	<24		120	24	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
1,2,4-Trichlorobenzene	<20		58	20	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
1,2,4-Trimethylbenzene	<21		58	21	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
1,2-Dibromo-3-Chloropropane	<120		290	120	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
Ethylene Dibromide	<23		58	23	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
1,2-Dichlorobenzene	<19		58	19	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
1,2-Dichloroethane	<23		58	23	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
1,2-Dichloropropane	<25		58	25	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
1,3,5-Trimethylbenzene	<22		58	22	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
1,3-Dichlorobenzene	<23		58	23	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
1,3-Dichloropropane	<21		58	21	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
1,4-Dichlorobenzene	<21		58	21	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
2,2-Dichloropropane	<26		58	26	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
2-Chlorotoluene	<18		58	18	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
4-Chlorotoluene	<20		58	20	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
Benzene	<8.5		15	8.5	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
Bromobenzene	<21		58	21	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
Bromochloromethane	<25		58	25	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
Bromodichloromethane	<22		58	22	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
Bromoform	<28		58	28	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
Bromomethane	<46		180	46	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
Carbon tetrachloride	<22		58	22	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
Chlorobenzene	<23		58	23	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
Chloroethane	<29		58	29	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
Chloroform	<22		120	22	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
Chloromethane	<19		58	19	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
cis-1,2-Dichloroethene	<24		58	24	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
cis-1,3-Dichloropropene	<24		58	24	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
Dibromochloromethane	<28		58	28	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
Dibromomethane	<16		58	16	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
Dichlorodifluoromethane	<39		180	39	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
Ethylbenzene	<11		15	11	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
Hexachlorobutadiene	<26		58	26	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
Isopropyl ether	<16		58	16	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
Isopropylbenzene	<22		58	22	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
Methyl tert-butyl ether	<23		58	23	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
<b>Methylene Chloride</b>	<b>110</b>	<b>J</b>	290	95	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
Naphthalene	<19		58	19	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
n-Butylbenzene	<23		58	23	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
N-Propylbenzene	<24		58	24	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
p-Isopropyltoluene	<21		58	21	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50

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# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-1B (0-2)**

**Lab Sample ID: 500-206744-5**

Date Collected: 10/12/21 12:35

Matrix: Solid

Date Received: 10/13/21 09:55

Percent Solids: 92.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<23		58	23	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
Styrene	<23		58	23	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
tert-Butylbenzene	<23		58	23	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
<b>Tetrachloroethene</b>	<b>330</b>		58	22	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
Toluene	<8.6		15	8.6	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
trans-1,2-Dichloroethene	<20		58	20	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
trans-1,3-Dichloropropene	<21		58	21	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
Trichloroethene	<9.6		29	9.6	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
Trichlorofluoromethane	<25		58	25	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
Vinyl chloride	<15		58	15	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
Xylenes, Total	<13		29	13	ug/Kg	☼	10/12/21 12:35	10/21/21 14:20	50
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	92		75 - 126				10/12/21 12:35	10/21/21 14:20	50
4-Bromofluorobenzene (Surr)	93		72 - 124				10/12/21 12:35	10/21/21 14:20	50
Dibromofluoromethane (Surr)	91		75 - 120				10/12/21 12:35	10/21/21 14:20	50
Toluene-d8 (Surr)	101		75 - 120				10/12/21 12:35	10/21/21 14:20	50

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-1B (10-12)**

**Lab Sample ID: 500-206744-6**

**Date Collected: 10/12/21 12:40**

**Matrix: Solid**

**Date Received: 10/13/21 09:55**

**Percent Solids: 84.9**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<31		66	31	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
1,1,1-Trichloroethane	<25		66	25	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
1,1,2,2-Tetrachloroethane	<26		66	26	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
1,1,2-Trichloroethane	<23		66	23	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
1,1-Dichloroethane	<27		66	27	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
1,1-Dichloroethene	<26		66	26	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
1,1-Dichloropropene	<20		66	20	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
1,2,3-Trichlorobenzene	<30		66	30	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
1,2,3-Trichloropropane	<27		130	27	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
1,2,4-Trichlorobenzene	<23		66	23	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
1,2,4-Trimethylbenzene	<24		66	24	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
1,2-Dibromo-3-Chloropropane	<130		330	130	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
Ethylene Dibromide	<26		66	26	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
1,2-Dichlorobenzene	<22		66	22	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
1,2-Dichloroethane	<26		66	26	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
1,2-Dichloropropane	<28		66	28	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
1,3,5-Trimethylbenzene	<25		66	25	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
1,3-Dichlorobenzene	<26		66	26	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
1,3-Dichloropropane	<24		66	24	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
1,4-Dichlorobenzene	<24		66	24	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
2,2-Dichloropropane	<29		66	29	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
2-Chlorotoluene	<21		66	21	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
4-Chlorotoluene	<23		66	23	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
Benzene	<9.7		17	9.7	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
Bromobenzene	<24		66	24	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
Bromochloromethane	<28		66	28	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
Bromodichloromethane	<25		66	25	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
Bromoform	<32		66	32	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
Bromomethane	<53		200	53	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
Carbon tetrachloride	<25		66	25	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
Chlorobenzene	<26		66	26	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
Chloroethane	<33		66	33	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
Chloroform	<25		130	25	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
Chloromethane	<21		66	21	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
cis-1,2-Dichloroethene	<27		66	27	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
cis-1,3-Dichloropropene	<28		66	28	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
Dibromochloromethane	<32		66	32	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
Dibromomethane	<18		66	18	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
Dichlorodifluoromethane	<45		200	45	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
Ethylbenzene	<12		17	12	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
Hexachlorobutadiene	<30		66	30	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
Isopropyl ether	<18		66	18	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
Isopropylbenzene	<25		66	25	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
Methyl tert-butyl ether	<26		66	26	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
<b>Methylene Chloride</b>	<b>110 J</b>		330	110	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
Naphthalene	<22		66	22	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
n-Butylbenzene	<26		66	26	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
N-Propylbenzene	<27		66	27	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
p-Isopropyltoluene	<24		66	24	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50

Eurofins TestAmerica, Chicago

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-1B (10-12)**

**Lab Sample ID: 500-206744-6**

**Date Collected: 10/12/21 12:40**

**Matrix: Solid**

**Date Received: 10/13/21 09:55**

**Percent Solids: 84.9**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<26		66	26	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
Styrene	<26		66	26	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
tert-Butylbenzene	<26		66	26	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
<b>Tetrachloroethene</b>	<b>4400</b>		66	25	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
Toluene	<9.7		17	9.7	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
trans-1,2-Dichloroethene	<23		66	23	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
trans-1,3-Dichloropropene	<24		66	24	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
Trichloroethene	<11		33	11	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
Trichlorofluoromethane	<28		66	28	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
Vinyl chloride	<17		66	17	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50
Xylenes, Total	<15		33	15	ug/Kg	☼	10/12/21 12:40	10/21/21 14:42	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		75 - 126	10/12/21 12:40	10/21/21 14:42	50
4-Bromofluorobenzene (Surr)	91		72 - 124	10/12/21 12:40	10/21/21 14:42	50
Dibromofluoromethane (Surr)	91		75 - 120	10/12/21 12:40	10/21/21 14:42	50
Toluene-d8 (Surr)	101		75 - 120	10/12/21 12:40	10/21/21 14:42	50

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-1C (0-2)**

**Lab Sample ID: 500-206744-7**

**Date Collected: 10/12/21 11:00**

**Matrix: Solid**

**Date Received: 10/13/21 09:55**

**Percent Solids: 92.9**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<25		55	25	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
1,1,1-Trichloroethane	<21		55	21	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
1,1,2,2-Tetrachloroethane	<22		55	22	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
1,1,2-Trichloroethane	<19		55	19	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
1,1-Dichloroethane	<22		55	22	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
1,1-Dichloroethene	<21		55	21	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
1,1-Dichloropropene	<16		55	16	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
1,2,3-Trichlorobenzene	<25		55	25	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
1,2,3-Trichloropropane	<23		110	23	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
1,2,4-Trichlorobenzene	<19		55	19	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
1,2,4-Trimethylbenzene	<20		55	20	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
1,2-Dibromo-3-Chloropropane	<110		270	110	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
Ethylene Dibromide	<21		55	21	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
1,2-Dichlorobenzene	<18		55	18	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
1,2-Dichloroethane	<21		55	21	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
1,2-Dichloropropane	<23		55	23	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
1,3,5-Trimethylbenzene	<21		55	21	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
1,3-Dichlorobenzene	<22		55	22	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
1,3-Dichloropropane	<20		55	20	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
1,4-Dichlorobenzene	<20		55	20	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
2,2-Dichloropropane	<24		55	24	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
2-Chlorotoluene	<17		55	17	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
4-Chlorotoluene	<19		55	19	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
Benzene	<8.0		14	8.0	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
Bromobenzene	<19		55	19	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
Bromochloromethane	<23		55	23	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
Bromodichloromethane	<20		55	20	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
Bromoform	<26		55	26	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
Bromomethane	<44		160	44	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
Carbon tetrachloride	<21		55	21	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
Chlorobenzene	<21		55	21	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
Chloroethane	<28		55	28	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
Chloroform	<20		110	20	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
Chloromethane	<18		55	18	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
cis-1,2-Dichloroethene	<22		55	22	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
cis-1,3-Dichloropropene	<23		55	23	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
Dibromochloromethane	<27		55	27	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
Dibromomethane	<15		55	15	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
Dichlorodifluoromethane	<37		160	37	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
Ethylbenzene	<10		14	10	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
Hexachlorobutadiene	<24		55	24	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
Isopropyl ether	<15		55	15	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
Isopropylbenzene	<21		55	21	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
Methyl tert-butyl ether	<22		55	22	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
<b>Methylene Chloride</b>	<b>98 J</b>		270	89	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
Naphthalene	<18		55	18	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
n-Butylbenzene	<21		55	21	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
N-Propylbenzene	<23		55	23	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
p-Isopropyltoluene	<20		55	20	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-1C (0-2)**

**Lab Sample ID: 500-206744-7**

**Date Collected: 10/12/21 11:00**

**Matrix: Solid**

**Date Received: 10/13/21 09:55**

**Percent Solids: 92.9**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<22		55	22	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
Styrene	<21		55	21	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
tert-Butylbenzene	<22		55	22	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
<b>Tetrachloroethene</b>	<b>2100</b>		55	20	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
Toluene	<8.0		14	8.0	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
trans-1,2-Dichloroethene	<19		55	19	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
trans-1,3-Dichloropropene	<20		55	20	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
Trichloroethene	<9.0		27	9.0	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
Trichlorofluoromethane	<23		55	23	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
Vinyl chloride	<14		55	14	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50
Xylenes, Total	<12		27	12	ug/Kg	☼	10/12/21 11:00	10/21/21 15:04	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		75 - 126	10/12/21 11:00	10/21/21 15:04	50
4-Bromofluorobenzene (Surr)	91		72 - 124	10/12/21 11:00	10/21/21 15:04	50
Dibromofluoromethane (Surr)	92		75 - 120	10/12/21 11:00	10/21/21 15:04	50
Toluene-d8 (Surr)	101		75 - 120	10/12/21 11:00	10/21/21 15:04	50



# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-1C (12-13.5)**

**Lab Sample ID: 500-206744-8**

**Date Collected: 10/12/21 11:05**

**Matrix: Solid**

**Date Received: 10/13/21 09:55**

**Percent Solids: 89.1**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<29		63	29	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
1,1,1-Trichloroethane	<24		63	24	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
1,1,2,2-Tetrachloroethane	<25		63	25	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
1,1,2-Trichloroethane	<22		63	22	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
1,1-Dichloroethane	<26		63	26	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
1,1-Dichloroethene	<25		63	25	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
1,1-Dichloropropene	<19		63	19	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
1,2,3-Trichlorobenzene	<29		63	29	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
1,2,3-Trichloropropane	<26		130	26	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
1,2,4-Trichlorobenzene	<22		63	22	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
1,2,4-Trimethylbenzene	<23		63	23	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
1,2-Dibromo-3-Chloropropane	<130		310	130	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
Ethylene Dibromide	<24		63	24	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
1,2-Dichlorobenzene	<21		63	21	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
1,2-Dichloroethane	<25		63	25	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
1,2-Dichloropropane	<27		63	27	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
1,3,5-Trimethylbenzene	<24		63	24	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
1,3-Dichlorobenzene	<25		63	25	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
1,3-Dichloropropane	<23		63	23	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
1,4-Dichlorobenzene	<23		63	23	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
2,2-Dichloropropane	<28		63	28	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
2-Chlorotoluene	<20		63	20	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
4-Chlorotoluene	<22		63	22	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
Benzene	<9.2		16	9.2	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
Bromobenzene	<22		63	22	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
Bromochloromethane	<27		63	27	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
Bromodichloromethane	<23		63	23	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
Bromoform	<30		63	30	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
Bromomethane	<50		190	50	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
Carbon tetrachloride	<24		63	24	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
Chlorobenzene	<24		63	24	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
Chloroethane	<32		63	32	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
Chloroform	<23		130	23	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
Chloromethane	<20		63	20	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
cis-1,2-Dichloroethene	<26		63	26	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
cis-1,3-Dichloropropene	<26		63	26	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
Dibromochloromethane	<31		63	31	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
Dibromomethane	<17		63	17	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
Dichlorodifluoromethane	<42		190	42	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
Ethylbenzene	<12		16	12	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
Hexachlorobutadiene	<28		63	28	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
Isopropyl ether	<17		63	17	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
Isopropylbenzene	<24		63	24	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
Methyl tert-butyl ether	<25		63	25	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
Methylene Chloride	<100		310	100	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
Naphthalene	<21		63	21	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
n-Butylbenzene	<24		63	24	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
N-Propylbenzene	<26		63	26	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
p-Isopropyltoluene	<23		63	23	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50

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# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-1C (12-13.5)**

**Lab Sample ID: 500-206744-8**

Date Collected: 10/12/21 11:05

Matrix: Solid

Date Received: 10/13/21 09:55

Percent Solids: 89.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<25		63	25	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
Styrene	<24		63	24	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
tert-Butylbenzene	<25		63	25	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
<b>Tetrachloroethene</b>	<b>380</b>		63	23	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
Toluene	<9.2		16	9.2	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
trans-1,2-Dichloroethene	<22		63	22	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
trans-1,3-Dichloropropene	<23		63	23	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
Trichloroethene	<10		31	10	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
Trichlorofluoromethane	<27		63	27	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
Vinyl chloride	<16		63	16	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
Xylenes, Total	<14		31	14	ug/Kg	☼	10/12/21 11:05	10/21/21 15:27	50
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	92		75 - 126				10/12/21 11:05	10/21/21 15:27	50
4-Bromofluorobenzene (Surr)	93		72 - 124				10/12/21 11:05	10/21/21 15:27	50
Dibromofluoromethane (Surr)	91		75 - 120				10/12/21 11:05	10/21/21 15:27	50
Toluene-d8 (Surr)	102		75 - 120				10/12/21 11:05	10/21/21 15:27	50

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-2 (2-4)**

**Lab Sample ID: 500-206744-9**

Date Collected: 10/12/21 14:20

Matrix: Solid

Date Received: 10/13/21 09:59

Percent Solids: 84.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<63		140	63	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
1,1,1-Trichloroethane	<52		140	52	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
1,1,2,2-Tetrachloroethane	<54		140	54	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
1,1,2-Trichloroethane	<48		140	48	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
1,1-Dichloroethane	<56		140	56	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
1,1-Dichloroethene	<53		140	53	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
1,1-Dichloropropene	<40		140	40	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
1,2,3-Trichlorobenzene	<62		140	62	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
1,2,3-Trichloropropane	<56		270	56	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
1,2,4-Trichlorobenzene	<46		140	46	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
1,2,4-Trimethylbenzene	<49		140	49	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
1,2-Dibromo-3-Chloropropane	<270		680	270	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
Ethylene Dibromide	<52		140	52	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
1,2-Dichlorobenzene	<45		140	45	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
1,2-Dichloroethane	<53		140	53	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
1,2-Dichloropropane	<58		140	58	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
1,3,5-Trimethylbenzene	<52		140	52	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
1,3-Dichlorobenzene	<54		140	54	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
1,3-Dichloropropane	<49		140	49	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
1,4-Dichlorobenzene	<49		140	49	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
2,2-Dichloropropane	<60		140	60	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
2-Chlorotoluene	<43		140	43	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
4-Chlorotoluene	<47		140	47	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
Benzene	<20		34	20	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
Bromobenzene	<48		140	48	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
Bromochloromethane	<58		140	58	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
Bromodichloromethane	<50		140	50	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
Bromoform	<66		140	66	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
Bromomethane	<110		410	110	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
Carbon tetrachloride	<52		140	52	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
Chlorobenzene	<52		140	52	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
Chloroethane	<68		140	68	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
Chloroform	<50		270	50	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
Chloromethane	<43		140	43	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
cis-1,2-Dichloroethene	<55		140	55	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
cis-1,3-Dichloropropene	<56		140	56	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
Dibromochloromethane	<66		140	66	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
Dibromomethane	<37		140	37	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
Dichlorodifluoromethane	<91		410	91	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
Ethylbenzene	<25		34	25	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
Hexachlorobutadiene	<61		140	61	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
Isopropyl ether	<37		140	37	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
Isopropylbenzene	<52		140	52	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
Methyl tert-butyl ether	<53		140	53	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
<b>Methylene Chloride</b>	<b>220 J</b>		680	220	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
<b>Naphthalene</b>	<b>60 J B</b>		140	45	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
n-Butylbenzene	<53		140	53	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
N-Propylbenzene	<56		140	56	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
p-Isopropyltoluene	<49		140	49	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100

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# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-2 (2-4)**

**Lab Sample ID: 500-206744-9**

**Date Collected: 10/12/21 14:20**

**Matrix: Solid**

**Date Received: 10/13/21 09:55**

**Percent Solids: 84.9**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<54		140	54	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
Styrene	<52		140	52	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
tert-Butylbenzene	<54		140	54	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
<b>Toluene</b>	<b>38</b>		34	20	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
trans-1,2-Dichloroethene	<47		140	47	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
trans-1,3-Dichloropropene	<49		140	49	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
<b>Trichloroethene</b>	<b>1800</b>		68	22	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
Trichlorofluoromethane	<58		140	58	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
Vinyl chloride	<36		140	36	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100
<b>Xylenes, Total</b>	<b>36 J</b>		68	30	ug/Kg	☼	10/12/21 14:20	10/21/21 15:48	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		75 - 126	10/12/21 14:20	10/21/21 15:48	100
4-Bromofluorobenzene (Surr)	92		72 - 124	10/12/21 14:20	10/21/21 15:48	100
Dibromofluoromethane (Surr)	91		75 - 120	10/12/21 14:20	10/21/21 15:48	100
Toluene-d8 (Surr)	102		75 - 120	10/12/21 14:20	10/21/21 15:48	100

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Tetrachloroethene</b>	<b>100000</b>		1400	500	ug/Kg	☼	10/12/21 14:20	10/21/21 16:10	1000

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		75 - 126	10/12/21 14:20	10/21/21 16:10	1000
4-Bromofluorobenzene (Surr)	92		72 - 124	10/12/21 14:20	10/21/21 16:10	1000
Dibromofluoromethane (Surr)	94		75 - 120	10/12/21 14:20	10/21/21 16:10	1000
Toluene-d8 (Surr)	101		75 - 120	10/12/21 14:20	10/21/21 16:10	1000

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-2 (10-12)**

**Lab Sample ID: 500-206744-10**

Date Collected: 10/12/21 14:25

Matrix: Solid

Date Received: 10/13/21 09:55

Percent Solids: 87.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<29		64	29	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
1,1,1-Trichloroethane	<24		64	24	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
1,1,2,2-Tetrachloroethane	<25		64	25	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
1,1,2-Trichloroethane	<22		64	22	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
1,1-Dichloroethane	<26		64	26	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
1,1-Dichloroethene	<25		64	25	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
1,1-Dichloropropene	<19		64	19	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
1,2,3-Trichlorobenzene	<29		64	29	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
1,2,3-Trichloropropane	<26		130	26	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
1,2,4-Trichlorobenzene	<22		64	22	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
1,2,4-Trimethylbenzene	<23		64	23	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
1,2-Dibromo-3-Chloropropane	<130		320	130	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
Ethylene Dibromide	<25		64	25	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
1,2-Dichlorobenzene	<21		64	21	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
1,2-Dichloroethane	<25		64	25	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
1,2-Dichloropropane	<27		64	27	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
1,3,5-Trimethylbenzene	<24		64	24	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
1,3-Dichlorobenzene	<26		64	26	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
1,3-Dichloropropane	<23		64	23	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
1,4-Dichlorobenzene	<23		64	23	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
2,2-Dichloropropane	<28		64	28	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
2-Chlorotoluene	<20		64	20	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
4-Chlorotoluene	<22		64	22	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
Benzene	<9.3		16	9.3	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
Bromobenzene	<23		64	23	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
Bromochloromethane	<27		64	27	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
Bromodichloromethane	<24		64	24	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
Bromoform	<31		64	31	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
Bromomethane	<51		190	51	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
Carbon tetrachloride	<25		64	25	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
Chlorobenzene	<25		64	25	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
Chloroethane	<32		64	32	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
Chloroform	<24		130	24	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
Chloromethane	<20		64	20	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
cis-1,2-Dichloroethene	<26		64	26	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
cis-1,3-Dichloropropene	<27		64	27	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
Dibromochloromethane	<31		64	31	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
Dibromomethane	<17		64	17	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
Dichlorodifluoromethane	<43		190	43	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
Ethylbenzene	<12		16	12	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
Hexachlorobutadiene	<28		64	28	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
Isopropyl ether	<18		64	18	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
Isopropylbenzene	<25		64	25	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
Methyl tert-butyl ether	<25		64	25	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
<b>Methylene Chloride</b>	<b>110</b>	<b>J</b>	320	100	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
Naphthalene	<21		64	21	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
n-Butylbenzene	<25		64	25	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
N-Propylbenzene	<26		64	26	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50
p-Isopropyltoluene	<23		64	23	ug/Kg	✳	10/12/21 14:25	10/21/21 16:32	50

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-2 (10-12)**

**Lab Sample ID: 500-206744-10**

Date Collected: 10/12/21 14:25

Matrix: Solid

Date Received: 10/13/21 09:55

Percent Solids: 87.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<25		64	25	ug/Kg	☼	10/12/21 14:25	10/21/21 16:32	50
Styrene	<25		64	25	ug/Kg	☼	10/12/21 14:25	10/21/21 16:32	50
tert-Butylbenzene	<25		64	25	ug/Kg	☼	10/12/21 14:25	10/21/21 16:32	50
<b>Tetrachloroethene</b>	<b>84</b>		64	24	ug/Kg	☼	10/12/21 14:25	10/21/21 16:32	50
Toluene	<9.4		16	9.4	ug/Kg	☼	10/12/21 14:25	10/21/21 16:32	50
trans-1,2-Dichloroethene	<22		64	22	ug/Kg	☼	10/12/21 14:25	10/21/21 16:32	50
trans-1,3-Dichloropropene	<23		64	23	ug/Kg	☼	10/12/21 14:25	10/21/21 16:32	50
Trichloroethene	<10		32	10	ug/Kg	☼	10/12/21 14:25	10/21/21 16:32	50
Trichlorofluoromethane	<27		64	27	ug/Kg	☼	10/12/21 14:25	10/21/21 16:32	50
Vinyl chloride	<17		64	17	ug/Kg	☼	10/12/21 14:25	10/21/21 16:32	50
Xylenes, Total	<14		32	14	ug/Kg	☼	10/12/21 14:25	10/21/21 16:32	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		75 - 126	10/12/21 14:25	10/21/21 16:32	50
4-Bromofluorobenzene (Surr)	93		72 - 124	10/12/21 14:25	10/21/21 16:32	50
Dibromofluoromethane (Surr)	92		75 - 120	10/12/21 14:25	10/21/21 16:32	50
Toluene-d8 (Surr)	101		75 - 120	10/12/21 14:25	10/21/21 16:32	50

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-2A (2-4)**

**Lab Sample ID: 500-206744-11**

**Date Collected: 10/12/21 14:30**

**Matrix: Solid**

**Date Received: 10/13/21 09:55**

**Percent Solids: 89.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<29		62	29	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
1,1,1-Trichloroethane	<24		62	24	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
1,1,2,2-Tetrachloroethane	<25		62	25	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
1,1,2-Trichloroethane	<22		62	22	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
1,1-Dichloroethane	<25		62	25	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
1,1-Dichloroethene	<24		62	24	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
1,1-Dichloropropene	<18		62	18	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
1,2,3-Trichlorobenzene	<28		62	28	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
1,2,3-Trichloropropane	<26		120	26	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
1,2,4-Trichlorobenzene	<21		62	21	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
1,2,4-Trimethylbenzene	<22		62	22	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
1,2-Dibromo-3-Chloropropane	<120		310	120	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
Ethylene Dibromide	<24		62	24	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
1,2-Dichlorobenzene	<21		62	21	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
1,2-Dichloroethane	<24		62	24	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
1,2-Dichloropropane	<27		62	27	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
1,3,5-Trimethylbenzene	<24		62	24	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
1,3-Dichlorobenzene	<25		62	25	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
1,3-Dichloropropane	<22		62	22	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
1,4-Dichlorobenzene	<23		62	23	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
2,2-Dichloropropane	<28		62	28	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
2-Chlorotoluene	<19		62	19	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
4-Chlorotoluene	<22		62	22	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
<b>Benzene</b>	<b>10 J</b>		16	9.1	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
Bromobenzene	<22		62	22	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
Bromochloromethane	<27		62	27	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
Bromodichloromethane	<23		62	23	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
Bromoform	<30		62	30	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
Bromomethane	<49		190	49	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
Carbon tetrachloride	<24		62	24	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
Chlorobenzene	<24		62	24	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
Chloroethane	<31		62	31	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
Chloroform	<23		120	23	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
Chloromethane	<20		62	20	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
cis-1,2-Dichloroethene	<25		62	25	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
cis-1,3-Dichloropropene	<26		62	26	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
Dibromochloromethane	<30		62	30	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
Dibromomethane	<17		62	17	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
Dichlorodifluoromethane	<42		190	42	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
Ethylbenzene	<11		16	11	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
Hexachlorobutadiene	<28		62	28	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
Isopropyl ether	<17		62	17	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
Isopropylbenzene	<24		62	24	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
Methyl tert-butyl ether	<24		62	24	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
Methylene Chloride	<100		310	100	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
<b>Naphthalene</b>	<b>24 J B</b>		62	21	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
n-Butylbenzene	<24		62	24	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
N-Propylbenzene	<26		62	26	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
p-Isopropyltoluene	<22		62	22	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50

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# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-2A (2-4)**

**Lab Sample ID: 500-206744-11**

**Date Collected: 10/12/21 14:30**

**Matrix: Solid**

**Date Received: 10/13/21 09:55**

**Percent Solids: 89.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<25		62	25	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
Styrene	<24		62	24	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
tert-Butylbenzene	<25		62	25	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
<b>Toluene</b>	<b>9.4</b>	<b>J</b>	16	9.1	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
trans-1,2-Dichloroethene	<22		62	22	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
trans-1,3-Dichloropropene	<22		62	22	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
Trichloroethene	<10		31	10	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
Trichlorofluoromethane	<27		62	27	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
Vinyl chloride	<16		62	16	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50
Xylenes, Total	<14		31	14	ug/Kg	☼	10/12/21 14:30	10/21/21 16:54	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		75 - 126	10/12/21 14:30	10/21/21 16:54	50
4-Bromofluorobenzene (Surr)	93		72 - 124	10/12/21 14:30	10/21/21 16:54	50
Dibromofluoromethane (Surr)	93		75 - 120	10/12/21 14:30	10/21/21 16:54	50
Toluene-d8 (Surr)	100		75 - 120	10/12/21 14:30	10/21/21 16:54	50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Tetrachloroethene</b>	<b>17000</b>		620	230	ug/Kg	☼	10/12/21 14:30	10/22/21 11:11	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		75 - 126	10/12/21 14:30	10/22/21 11:11	500
4-Bromofluorobenzene (Surr)	92		72 - 124	10/12/21 14:30	10/22/21 11:11	500
Dibromofluoromethane (Surr)	93		75 - 120	10/12/21 14:30	10/22/21 11:11	500
Toluene-d8 (Surr)	101		75 - 120	10/12/21 14:30	10/22/21 11:11	500



# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-2A (8-10)**

**Lab Sample ID: 500-206744-12**

Date Collected: 10/12/21 14:35

Matrix: Solid

Date Received: 10/13/21 09:55

Percent Solids: 89.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<29		62	29	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
1,1,1-Trichloroethane	<24		62	24	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
1,1,2,2-Tetrachloroethane	<25		62	25	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
1,1,2-Trichloroethane	<22		62	22	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
1,1-Dichloroethane	<26		62	26	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
1,1-Dichloroethene	<24		62	24	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
1,1-Dichloropropene	<19		62	19	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
1,2,3-Trichlorobenzene	<29		62	29	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
1,2,3-Trichloropropane	<26		120	26	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
1,2,4-Trichlorobenzene	<21		62	21	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
1,2,4-Trimethylbenzene	<22		62	22	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
1,2-Dibromo-3-Chloropropane	<120		310	120	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
Ethylene Dibromide	<24		62	24	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
1,2-Dichlorobenzene	<21		62	21	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
1,2-Dichloroethane	<24		62	24	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
1,2-Dichloropropane	<27		62	27	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
1,3,5-Trimethylbenzene	<24		62	24	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
1,3-Dichlorobenzene	<25		62	25	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
1,3-Dichloropropane	<23		62	23	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
1,4-Dichlorobenzene	<23		62	23	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
2,2-Dichloropropane	<28		62	28	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
2-Chlorotoluene	<20		62	20	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
4-Chlorotoluene	<22		62	22	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
Benzene	<9.1		16	9.1	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
Bromobenzene	<22		62	22	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
Bromochloromethane	<27		62	27	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
Bromodichloromethane	<23		62	23	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
Bromoform	<30		62	30	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
Bromomethane	<50		190	50	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
Carbon tetrachloride	<24		62	24	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
Chlorobenzene	<24		62	24	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
Chloroethane	<31		62	31	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
Chloroform	<23		120	23	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
Chloromethane	<20		62	20	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
cis-1,2-Dichloroethene	<25		62	25	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
cis-1,3-Dichloropropene	<26		62	26	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
Dibromochloromethane	<30		62	30	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
Dibromomethane	<17		62	17	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
Dichlorodifluoromethane	<42		190	42	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
Ethylbenzene	<11		16	11	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
Hexachlorobutadiene	<28		62	28	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
Isopropyl ether	<17		62	17	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
Isopropylbenzene	<24		62	24	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
Methyl tert-butyl ether	<25		62	25	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
<b>Methylene Chloride</b>	<b>100 J</b>		310	100	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
Naphthalene	<21		62	21	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
n-Butylbenzene	<24		62	24	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
N-Propylbenzene	<26		62	26	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
p-Isopropyltoluene	<23		62	23	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50

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# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-2A (8-10)**

**Lab Sample ID: 500-206744-12**

Date Collected: 10/12/21 14:35

Matrix: Solid

Date Received: 10/13/21 09:55

Percent Solids: 89.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<25		62	25	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
Styrene	<24		62	24	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
tert-Butylbenzene	<25		62	25	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
Tetrachloroethene	<23		62	23	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
Toluene	<9.2		16	9.2	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
trans-1,2-Dichloroethene	<22		62	22	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
trans-1,3-Dichloropropene	<23		62	23	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
Trichloroethene	<10		31	10	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
Trichlorofluoromethane	<27		62	27	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
Vinyl chloride	<16		62	16	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50
Xylenes, Total	<14		31	14	ug/Kg	☼	10/12/21 14:35	10/21/21 17:16	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		75 - 126	10/12/21 14:35	10/21/21 17:16	50
4-Bromofluorobenzene (Surr)	92		72 - 124	10/12/21 14:35	10/21/21 17:16	50
Dibromofluoromethane (Surr)	91		75 - 120	10/12/21 14:35	10/21/21 17:16	50
Toluene-d8 (Surr)	101		75 - 120	10/12/21 14:35	10/21/21 17:16	50

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-2B (2-4)**

**Lab Sample ID: 500-206744-13**

**Date Collected: 10/12/21 14:40**

**Matrix: Solid**

**Date Received: 10/13/21 09:55**

**Percent Solids: 85.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<31		68	31	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
1,1,1-Trichloroethane	<26		68	26	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
1,1,2,2-Tetrachloroethane	<27		68	27	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
1,1,2-Trichloroethane	<24		68	24	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
1,1-Dichloroethane	<28		68	28	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
1,1-Dichloroethene	<26		68	26	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
1,1-Dichloropropene	<20		68	20	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
1,2,3-Trichlorobenzene	<31		68	31	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
1,2,3-Trichloropropane	<28		140	28	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
1,2,4-Trichlorobenzene	<23		68	23	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
1,2,4-Trimethylbenzene	<24		68	24	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
1,2-Dibromo-3-Chloropropane	<130		340	130	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
Ethylene Dibromide	<26		68	26	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
1,2-Dichlorobenzene	<23		68	23	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
1,2-Dichloroethane	<27		68	27	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
1,2-Dichloropropane	<29		68	29	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
1,3,5-Trimethylbenzene	<26		68	26	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
1,3-Dichlorobenzene	<27		68	27	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
1,3-Dichloropropane	<25		68	25	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
1,4-Dichlorobenzene	<25		68	25	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
2,2-Dichloropropane	<30		68	30	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
2-Chlorotoluene	<21		68	21	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
4-Chlorotoluene	<24		68	24	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
Benzene	<9.9		17	9.9	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
Bromobenzene	<24		68	24	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
Bromochloromethane	<29		68	29	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
Bromodichloromethane	<25		68	25	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
Bromoform	<33		68	33	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
Bromomethane	<54		200	54	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
Carbon tetrachloride	<26		68	26	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
Chlorobenzene	<26		68	26	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
Chloroethane	<34		68	34	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
Chloroform	<25		140	25	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
Chloromethane	<22		68	22	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
cis-1,2-Dichloroethene	<28		68	28	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
cis-1,3-Dichloropropene	<28		68	28	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
Dibromochloromethane	<33		68	33	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
Dibromomethane	<18		68	18	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
Dichlorodifluoromethane	<46		200	46	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
Ethylbenzene	<12		17	12	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
Hexachlorobutadiene	<30		68	30	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
Isopropyl ether	<19		68	19	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
Isopropylbenzene	<26		68	26	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
Methyl tert-butyl ether	<27		68	27	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
<b>Methylene Chloride</b>	<b>160</b>	<b>J</b>	340	110	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
<b>Naphthalene</b>	<b>59</b>	<b>J</b>	68	23	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
n-Butylbenzene	<26		68	26	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
N-Propylbenzene	<28		68	28	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
p-Isopropyltoluene	<25		68	25	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50

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# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-2B (2-4)**

**Lab Sample ID: 500-206744-13**

Date Collected: 10/12/21 14:40

Matrix: Solid

Date Received: 10/13/21 09:55

Percent Solids: 85.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<27		68	27	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
Styrene	<26		68	26	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
tert-Butylbenzene	<27		68	27	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
<b>Tetrachloroethene</b>	<b>170</b>		68	25	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
Toluene	<10		17	10	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
trans-1,2-Dichloroethene	<24		68	24	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
trans-1,3-Dichloropropene	<25		68	25	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
Trichloroethene	<11		34	11	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
Trichlorofluoromethane	<29		68	29	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
Vinyl chloride	<18		68	18	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50
Xylenes, Total	<15		34	15	ug/Kg	☼	10/12/21 14:40	10/21/21 17:01	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		75 - 126	10/12/21 14:40	10/21/21 17:01	50
4-Bromofluorobenzene (Surr)	84		72 - 124	10/12/21 14:40	10/21/21 17:01	50
Dibromofluoromethane (Surr)	90		75 - 120	10/12/21 14:40	10/21/21 17:01	50
Toluene-d8 (Surr)	99		75 - 120	10/12/21 14:40	10/21/21 17:01	50

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-2B (8-10)**

**Lab Sample ID: 500-206744-14**

**Date Collected: 10/12/21 14:45**

**Matrix: Solid**

**Date Received: 10/13/21 09:55**

**Percent Solids: 87.7**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<30		64	30	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
1,1,1-Trichloroethane	<24		64	24	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
1,1,2,2-Tetrachloroethane	<25		64	25	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
1,1,2-Trichloroethane	<22		64	22	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
1,1-Dichloroethane	<26		64	26	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
1,1-Dichloroethene	<25		64	25	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
1,1-Dichloropropene	<19		64	19	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
1,2,3-Trichlorobenzene	<29		64	29	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
1,2,3-Trichloropropane	<26		130	26	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
1,2,4-Trichlorobenzene	<22		64	22	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
1,2,4-Trimethylbenzene	<23		64	23	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
1,2-Dibromo-3-Chloropropane	<130		320	130	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
Ethylene Dibromide	<25		64	25	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
1,2-Dichlorobenzene	<21		64	21	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
1,2-Dichloroethane	<25		64	25	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
1,2-Dichloropropane	<27		64	27	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
1,3,5-Trimethylbenzene	<24		64	24	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
1,3-Dichlorobenzene	<26		64	26	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
1,3-Dichloropropane	<23		64	23	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
1,4-Dichlorobenzene	<23		64	23	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
2,2-Dichloropropane	<28		64	28	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
2-Chlorotoluene	<20		64	20	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
4-Chlorotoluene	<22		64	22	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
Benzene	<9.3		16	9.3	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
Bromobenzene	<23		64	23	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
Bromochloromethane	<27		64	27	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
Bromodichloromethane	<24		64	24	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
Bromoform	<31		64	31	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
Bromomethane	<51		190	51	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
Carbon tetrachloride	<25		64	25	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
Chlorobenzene	<25		64	25	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
Chloroethane	<32		64	32	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
Chloroform	<24		130	24	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
Chloromethane	<20		64	20	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
cis-1,2-Dichloroethene	<26		64	26	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
cis-1,3-Dichloropropene	<27		64	27	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
Dibromochloromethane	<31		64	31	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
Dibromomethane	<17		64	17	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
Dichlorodifluoromethane	<43		190	43	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
Ethylbenzene	<12		16	12	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
Hexachlorobutadiene	<29		64	29	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
Isopropyl ether	<18		64	18	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
Isopropylbenzene	<25		64	25	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
Methyl tert-butyl ether	<25		64	25	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
<b>Methylene Chloride</b>	<b>140</b>	<b>J</b>	320	100	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
<b>Naphthalene</b>	<b>34</b>	<b>J</b>	64	21	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
n-Butylbenzene	<25		64	25	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
N-Propylbenzene	<26		64	26	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
p-Isopropyltoluene	<23		64	23	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50

Eurofins TestAmerica, Chicago

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-2B (8-10)**

**Lab Sample ID: 500-206744-14**

**Date Collected: 10/12/21 14:45**

**Matrix: Solid**

**Date Received: 10/13/21 09:55**

**Percent Solids: 87.7**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<25		64	25	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
Styrene	<25		64	25	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
tert-Butylbenzene	<25		64	25	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
Tetrachloroethene	<24		64	24	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
Toluene	<9.4		16	9.4	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
trans-1,2-Dichloroethene	<22		64	22	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
trans-1,3-Dichloropropene	<23		64	23	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
Trichloroethene	<10		32	10	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
Trichlorofluoromethane	<27		64	27	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
Vinyl chloride	<17		64	17	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50
Xylenes, Total	<14		32	14	ug/Kg	☼	10/12/21 14:45	10/21/21 17:28	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		75 - 126	10/12/21 14:45	10/21/21 17:28	50
4-Bromofluorobenzene (Surr)	83		72 - 124	10/12/21 14:45	10/21/21 17:28	50
Dibromofluoromethane (Surr)	90		75 - 120	10/12/21 14:45	10/21/21 17:28	50
Toluene-d8 (Surr)	99		75 - 120	10/12/21 14:45	10/21/21 17:28	50

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-2C (2-4)**

**Lab Sample ID: 500-206744-15**

**Date Collected: 10/12/21 14:50**

**Matrix: Solid**

**Date Received: 10/13/21 09:55**

**Percent Solids: 85.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<30		64	30	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
1,1,1-Trichloroethane	<24		64	24	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
1,1,2,2-Tetrachloroethane	<26		64	26	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
1,1,2-Trichloroethane	<23		64	23	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
1,1-Dichloroethane	<26		64	26	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
1,1-Dichloroethene	<25		64	25	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
1,1-Dichloropropene	<19		64	19	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
1,2,3-Trichlorobenzene	<29		64	29	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
1,2,3-Trichloropropane	<27		130	27	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
1,2,4-Trichlorobenzene	<22		64	22	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
1,2,4-Trimethylbenzene	<23		64	23	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
1,2-Dibromo-3-Chloropropane	<130		320	130	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
Ethylene Dibromide	<25		64	25	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
1,2-Dichlorobenzene	<21		64	21	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
1,2-Dichloroethane	<25		64	25	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
1,2-Dichloropropane	<27		64	27	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
1,3,5-Trimethylbenzene	<24		64	24	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
1,3-Dichlorobenzene	<26		64	26	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
1,3-Dichloropropane	<23		64	23	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
1,4-Dichlorobenzene	<23		64	23	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
2,2-Dichloropropane	<28		64	28	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
2-Chlorotoluene	<20		64	20	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
4-Chlorotoluene	<22		64	22	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
Benzene	<9.4		16	9.4	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
Bromobenzene	<23		64	23	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
Bromochloromethane	<27		64	27	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
Bromodichloromethane	<24		64	24	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
Bromoform	<31		64	31	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
Bromomethane	<51		190	51	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
Carbon tetrachloride	<25		64	25	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
Chlorobenzene	<25		64	25	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
Chloroethane	<32		64	32	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
Chloroform	<24		130	24	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
Chloromethane	<21		64	21	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
cis-1,2-Dichloroethene	<26		64	26	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
cis-1,3-Dichloropropene	<27		64	27	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
Dibromochloromethane	<31		64	31	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
Dibromomethane	<17		64	17	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
Dichlorodifluoromethane	<43		190	43	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
Ethylbenzene	<12		16	12	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
Hexachlorobutadiene	<29		64	29	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
Isopropyl ether	<18		64	18	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
Isopropylbenzene	<25		64	25	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
Methyl tert-butyl ether	<25		64	25	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
<b>Methylene Chloride</b>	<b>150 J</b>		320	100	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
Naphthalene	<21		64	21	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
n-Butylbenzene	<25		64	25	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
N-Propylbenzene	<27		64	27	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
p-Isopropyltoluene	<23		64	23	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50

Eurofins TestAmerica, Chicago

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-2C (2-4)**

**Lab Sample ID: 500-206744-15**

**Date Collected: 10/12/21 14:50**

**Matrix: Solid**

**Date Received: 10/13/21 09:55**

**Percent Solids: 85.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<26		64	26	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
Styrene	<25		64	25	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
tert-Butylbenzene	<26		64	26	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
<b>Tetrachloroethene</b>	<b>81</b>		64	24	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
Toluene	<9.4		16	9.4	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
trans-1,2-Dichloroethene	<22		64	22	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
trans-1,3-Dichloropropene	<23		64	23	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
Trichloroethene	<11		32	11	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
Trichlorofluoromethane	<27		64	27	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
Vinyl chloride	<17		64	17	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
Xylenes, Total	<14		32	14	ug/Kg	☼	10/12/21 14:50	10/21/21 17:56	50
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	107		75 - 126				10/12/21 14:50	10/21/21 17:56	50
4-Bromofluorobenzene (Surr)	85		72 - 124				10/12/21 14:50	10/21/21 17:56	50
Dibromofluoromethane (Surr)	89		75 - 120				10/12/21 14:50	10/21/21 17:56	50
Toluene-d8 (Surr)	98		75 - 120				10/12/21 14:50	10/21/21 17:56	50



# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-2C (8-10)**

**Lab Sample ID: 500-206744-16**

**Date Collected: 10/12/21 14:55**

**Matrix: Solid**

**Date Received: 10/13/21 09:55**

**Percent Solids: 88.1**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<29		64	29	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
1,1,1-Trichloroethane	<24		64	24	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
1,1,2,2-Tetrachloroethane	<25		64	25	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
1,1,2-Trichloroethane	<22		64	22	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
1,1-Dichloroethane	<26		64	26	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
1,1-Dichloroethene	<25		64	25	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
1,1-Dichloropropene	<19		64	19	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
1,2,3-Trichlorobenzene	<29		64	29	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
1,2,3-Trichloropropane	<26		130	26	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
1,2,4-Trichlorobenzene	<22		64	22	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
1,2,4-Trimethylbenzene	<23		64	23	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
1,2-Dibromo-3-Chloropropane	<130		320	130	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
Ethylene Dibromide	<25		64	25	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
1,2-Dichlorobenzene	<21		64	21	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
1,2-Dichloroethane	<25		64	25	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
1,2-Dichloropropane	<27		64	27	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
1,3,5-Trimethylbenzene	<24		64	24	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
1,3-Dichlorobenzene	<25		64	25	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
1,3-Dichloropropane	<23		64	23	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
1,4-Dichlorobenzene	<23		64	23	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
2,2-Dichloropropane	<28		64	28	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
2-Chlorotoluene	<20		64	20	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
4-Chlorotoluene	<22		64	22	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
Benzene	<9.3		16	9.3	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
Bromobenzene	<23		64	23	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
Bromochloromethane	<27		64	27	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
Bromodichloromethane	<24		64	24	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
Bromoform	<31		64	31	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
Bromomethane	<51		190	51	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
Carbon tetrachloride	<24		64	24	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
Chlorobenzene	<25		64	25	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
Chloroethane	<32		64	32	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
Chloroform	<24		130	24	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
Chloromethane	<20		64	20	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
cis-1,2-Dichloroethene	<26		64	26	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
cis-1,3-Dichloropropene	<27		64	27	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
Dibromochloromethane	<31		64	31	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
Dibromomethane	<17		64	17	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
Dichlorodifluoromethane	<43		190	43	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
Ethylbenzene	<12		16	12	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
Hexachlorobutadiene	<28		64	28	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
Isopropyl ether	<18		64	18	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
Isopropylbenzene	<24		64	24	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
Methyl tert-butyl ether	<25		64	25	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
Methylene Chloride	<100		320	100	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
Naphthalene	<21		64	21	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
n-Butylbenzene	<25		64	25	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
N-Propylbenzene	<26		64	26	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
p-Isopropyltoluene	<23		64	23	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50

Eurofins TestAmerica, Chicago

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-2C (8-10)**

**Lab Sample ID: 500-206744-16**

Date Collected: 10/12/21 14:55

Matrix: Solid

Date Received: 10/13/21 09:55

Percent Solids: 88.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<25		64	25	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
Styrene	<25		64	25	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
tert-Butylbenzene	<25		64	25	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
Tetrachloroethene	<24		64	24	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
Toluene	<9.4		16	9.4	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
trans-1,2-Dichloroethene	<22		64	22	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
trans-1,3-Dichloropropene	<23		64	23	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
Trichloroethene	<10		32	10	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
Trichlorofluoromethane	<27		64	27	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
Vinyl chloride	<17		64	17	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
Xylenes, Total	<14		32	14	ug/Kg	☼	10/12/21 14:55	10/21/21 17:38	50
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	94		75 - 126				10/12/21 14:55	10/21/21 17:38	50
4-Bromofluorobenzene (Surr)	94		72 - 124				10/12/21 14:55	10/21/21 17:38	50
Dibromofluoromethane (Surr)	93		75 - 120				10/12/21 14:55	10/21/21 17:38	50
Toluene-d8 (Surr)	102		75 - 120				10/12/21 14:55	10/21/21 17:38	50

# Definitions/Glossary

Client: Giles Engineering Associates  
Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

## Qualifiers

### GC/MS VOA

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

## 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: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

## GC/MS VOA

### Prep Batch: 623945

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-206744-1	B-1 (0-2)	Total/NA	Solid	5035	
500-206744-2	B-1 (12-14)	Total/NA	Solid	5035	
500-206744-2 - DL	B-1 (12-14)	Total/NA	Solid	5035	
500-206744-3	B-1A (2-4)	Total/NA	Solid	5035	
500-206744-4 - DL	B-1A (12-14)	Total/NA	Solid	5035	
500-206744-4	B-1A (12-14)	Total/NA	Solid	5035	
500-206744-5	B-1B (0-2)	Total/NA	Solid	5035	
500-206744-6	B-1B (10-12)	Total/NA	Solid	5035	
500-206744-7	B-1C (0-2)	Total/NA	Solid	5035	
500-206744-8	B-1C (12-13.5)	Total/NA	Solid	5035	
500-206744-9	B-2 (2-4)	Total/NA	Solid	5035	
500-206744-9 - DL	B-2 (2-4)	Total/NA	Solid	5035	
500-206744-10	B-2 (10-12)	Total/NA	Solid	5035	
500-206744-11 - DL	B-2A (2-4)	Total/NA	Solid	5035	
500-206744-11	B-2A (2-4)	Total/NA	Solid	5035	
500-206744-12	B-2A (8-10)	Total/NA	Solid	5035	
500-206744-13	B-2B (2-4)	Total/NA	Solid	5035	
500-206744-14	B-2B (8-10)	Total/NA	Solid	5035	
500-206744-15	B-2C (2-4)	Total/NA	Solid	5035	
500-206744-16	B-2C (8-10)	Total/NA	Solid	5035	
LB3 500-623945/17-A	Method Blank	Total/NA	Solid	5035	
LCS 500-623945/18-A	Lab Control Sample	Total/NA	Solid	5035	
500-206744-16 MS	B-2C (8-10)	Total/NA	Solid	5035	
500-206744-16 MSD	B-2C (8-10)	Total/NA	Solid	5035	

### Analysis Batch: 624639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-206744-13	B-2B (2-4)	Total/NA	Solid	8260B	623945
500-206744-14	B-2B (8-10)	Total/NA	Solid	8260B	623945
500-206744-15	B-2C (2-4)	Total/NA	Solid	8260B	623945
MB 500-624639/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-624639/4	Lab Control Sample	Total/NA	Solid	8260B	

### Analysis Batch: 624645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-206744-1	B-1 (0-2)	Total/NA	Solid	8260B	623945
500-206744-2	B-1 (12-14)	Total/NA	Solid	8260B	623945
500-206744-2 - DL	B-1 (12-14)	Total/NA	Solid	8260B	623945
500-206744-3	B-1A (2-4)	Total/NA	Solid	8260B	623945
500-206744-4	B-1A (12-14)	Total/NA	Solid	8260B	623945
500-206744-4 - DL	B-1A (12-14)	Total/NA	Solid	8260B	623945
500-206744-5	B-1B (0-2)	Total/NA	Solid	8260B	623945
500-206744-6	B-1B (10-12)	Total/NA	Solid	8260B	623945
500-206744-7	B-1C (0-2)	Total/NA	Solid	8260B	623945
500-206744-8	B-1C (12-13.5)	Total/NA	Solid	8260B	623945
500-206744-9	B-2 (2-4)	Total/NA	Solid	8260B	623945
500-206744-9 - DL	B-2 (2-4)	Total/NA	Solid	8260B	623945
500-206744-10	B-2 (10-12)	Total/NA	Solid	8260B	623945
500-206744-11	B-2A (2-4)	Total/NA	Solid	8260B	623945
500-206744-12	B-2A (8-10)	Total/NA	Solid	8260B	623945
500-206744-16	B-2C (8-10)	Total/NA	Solid	8260B	623945

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# QC Association Summary

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

## GC/MS VOA (Continued)

### Analysis Batch: 624645 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB3 500-623945/17-A	Method Blank	Total/NA	Solid	8260B	623945
MB 500-624645/7	Method Blank	Total/NA	Solid	8260B	
LCS 500-623945/18-A	Lab Control Sample	Total/NA	Solid	8260B	623945
LCS 500-624645/5	Lab Control Sample	Total/NA	Solid	8260B	
500-206744-16 MS	B-2C (8-10)	Total/NA	Solid	8260B	623945
500-206744-16 MSD	B-2C (8-10)	Total/NA	Solid	8260B	623945

### Analysis Batch: 624850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-206744-11 - DL	B-2A (2-4)	Total/NA	Solid	8260B	623945
LCS 500-624850/8	Lab Control Sample	Total/NA	Solid	8260B	

## General Chemistry

### Analysis Batch: 623453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-206744-1	B-1 (0-2)	Total/NA	Solid	Moisture	
500-206744-2	B-1 (12-14)	Total/NA	Solid	Moisture	
500-206744-3	B-1A (2-4)	Total/NA	Solid	Moisture	
500-206744-4	B-1A (12-14)	Total/NA	Solid	Moisture	
500-206744-5	B-1B (0-2)	Total/NA	Solid	Moisture	
500-206744-6	B-1B (10-12)	Total/NA	Solid	Moisture	
500-206744-7	B-1C (0-2)	Total/NA	Solid	Moisture	
500-206744-8	B-1C (12-13.5)	Total/NA	Solid	Moisture	
500-206744-9	B-2 (2-4)	Total/NA	Solid	Moisture	
500-206744-10	B-2 (10-12)	Total/NA	Solid	Moisture	
500-206744-11	B-2A (2-4)	Total/NA	Solid	Moisture	
500-206744-12	B-2A (8-10)	Total/NA	Solid	Moisture	
500-206744-13	B-2B (2-4)	Total/NA	Solid	Moisture	
500-206744-14	B-2B (8-10)	Total/NA	Solid	Moisture	
500-206744-15	B-2C (2-4)	Total/NA	Solid	Moisture	
500-206744-16	B-2C (8-10)	Total/NA	Solid	Moisture	
500-206744-1 DU	B-1 (0-2)	Total/NA	Solid	Moisture	

# Surrogate Summary

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

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

**Matrix: Solid**

**Prep Type: Total/NA**

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (75-126)	BFB (72-124)	DBFM (75-120)	TOL (75-120)
500-206744-1	B-1 (0-2)	91	92	91	102
500-206744-2	B-1 (12-14)	93	92	91	100
500-206744-2 - DL	B-1 (12-14)	92	92	92	102
500-206744-3	B-1A (2-4)	91	92	90	103
500-206744-4	B-1A (12-14)	88	92	90	101
500-206744-4 - DL	B-1A (12-14)	91	92	92	102
500-206744-5	B-1B (0-2)	92	93	91	101
500-206744-6	B-1B (10-12)	94	91	91	101
500-206744-7	B-1C (0-2)	92	91	92	101
500-206744-8	B-1C (12-13.5)	92	93	91	102
500-206744-9	B-2 (2-4)	93	92	91	102
500-206744-9 - DL	B-2 (2-4)	92	92	94	101
500-206744-10	B-2 (10-12)	93	93	92	101
500-206744-11	B-2A (2-4)	96	93	93	100
500-206744-11 - DL	B-2A (2-4)	90	92	93	101
500-206744-12	B-2A (8-10)	93	92	91	101
500-206744-13	B-2B (2-4)	107	84	90	99
500-206744-14	B-2B (8-10)	109	83	90	99
500-206744-15	B-2C (2-4)	107	85	89	98
500-206744-16	B-2C (8-10)	94	94	93	102
500-206744-16 MS	B-2C (8-10)	94	96	96	100
500-206744-16 MSD	B-2C (8-10)	90	95	94	100
LB3 500-623945/17-A	Method Blank	86	92	89	104
LCS 500-623945/18-A	Lab Control Sample	92	94	94	101
LCS 500-624639/4	Lab Control Sample	104	85	96	101
LCS 500-624645/5	Lab Control Sample	89	95	95	100
LCS 500-624850/8	Lab Control Sample	87	94	93	101
MB 500-624639/6	Method Blank	112	86	96	97
MB 500-624645/7	Method Blank	92	93	94	100

**Surrogate Legend**

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

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

**Lab Sample ID: LB3 500-623945/17-A**  
**Matrix: Solid**  
**Analysis Batch: 624645**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 623945**

Analyte	LB3	LB3	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	<23		50	23	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
1,1,1-Trichloroethane	<19		50	19	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
1,1,2,2-Tetrachloroethane	<20		50	20	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
1,1,2-Trichloroethane	<18		50	18	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
1,1-Dichloroethane	<21		50	21	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
1,1-Dichloroethene	<20		50	20	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
1,1-Dichloropropene	<15		50	15	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
1,2,3-Trichlorobenzene	<23		50	23	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
1,2,3-Trichloropropane	<21		100	21	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
1,2,4-Trichlorobenzene	<17		50	17	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
1,2,4-Trimethylbenzene	<18		50	18	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
1,2-Dibromo-3-Chloropropane	<100		250	100	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
Ethylene Dibromide	<19		50	19	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
1,2-Dichlorobenzene	<17		50	17	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
1,2-Dichloroethane	<20		50	20	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
1,2-Dichloropropane	<21		50	21	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
1,3,5-Trimethylbenzene	<19		50	19	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
1,3-Dichlorobenzene	<20		50	20	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
1,3-Dichloropropane	<18		50	18	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
1,4-Dichlorobenzene	<18		50	18	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
2,2-Dichloropropane	<22		50	22	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
2-Chlorotoluene	<16		50	16	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
4-Chlorotoluene	<18		50	18	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
Benzene	<7.3		13	7.3	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
Bromobenzene	<18		50	18	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
Bromochloromethane	<21		50	21	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
Bromodichloromethane	<19		50	19	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
Bromoform	<24		50	24	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
Bromomethane	<40		150	40	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
Carbon tetrachloride	<19		50	19	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
Chlorobenzene	<19		50	19	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
Chloroethane	<25		50	25	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
Chloroform	<19		100	19	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
Chloromethane	<16		50	16	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
cis-1,2-Dichloroethene	<20		50	20	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
cis-1,3-Dichloropropene	<21		50	21	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
Dibromochloromethane	<24		50	24	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
Dibromomethane	<14		50	14	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
Dichlorodifluoromethane	<34		150	34	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
Ethylbenzene	<9.2		13	9.2	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
Hexachlorobutadiene	<22		50	22	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
Isopropyl ether	<14		50	14	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
Isopropylbenzene	<19		50	19	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
Methyl tert-butyl ether	<20		50	20	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
Methylene Chloride	<82		250	82	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
Naphthalene	<17		50	17	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
n-Butylbenzene	<19		50	19	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
N-Propylbenzene	<21		50	21	ug/Kg		10/18/21 03:15	10/21/21 10:41	50

Eurofins TestAmerica, Chicago

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

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

**Lab Sample ID: LB3 500-623945/17-A**  
**Matrix: Solid**  
**Analysis Batch: 624645**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 623945**

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	<18		50	18	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
sec-Butylbenzene	<20		50	20	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
Styrene	<19		50	19	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
tert-Butylbenzene	<20		50	20	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
Tetrachloroethene	<19		50	19	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
Toluene	<7.4		13	7.4	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
trans-1,2-Dichloroethene	<18		50	18	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
trans-1,3-Dichloropropene	<18		50	18	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
Trichloroethene	<8.2		25	8.2	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
Trichlorofluoromethane	<21		50	21	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
Vinyl chloride	<13		50	13	ug/Kg		10/18/21 03:15	10/21/21 10:41	50
Xylenes, Total	<11		25	11	ug/Kg		10/18/21 03:15	10/21/21 10:41	50

Surrogate	LB3 %Recovery	LB3 Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		75 - 126	10/18/21 03:15	10/21/21 10:41	50
4-Bromofluorobenzene (Surr)	92		72 - 124	10/18/21 03:15	10/21/21 10:41	50
Dibromofluoromethane (Surr)	89		75 - 120	10/18/21 03:15	10/21/21 10:41	50
Toluene-d8 (Surr)	104		75 - 120	10/18/21 03:15	10/21/21 10:41	50

**Lab Sample ID: LCS 500-623945/18-A**  
**Matrix: Solid**  
**Analysis Batch: 624645**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 623945**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1,1,1,2-Tetrachloroethane	2500	2280		ug/Kg		91	70 - 125
1,1,1-Trichloroethane	2500	2330		ug/Kg		93	70 - 125
1,1,1,2,2-Tetrachloroethane	2500	2310		ug/Kg		92	62 - 140
1,1,2-Trichloroethane	2500	2470		ug/Kg		99	71 - 130
1,1-Dichloroethane	2500	2620		ug/Kg		105	70 - 125
1,1-Dichloroethene	2500	2380		ug/Kg		95	67 - 122
1,1-Dichloropropene	2500	2450		ug/Kg		98	70 - 121
1,2,3-Trichlorobenzene	2500	2440		ug/Kg		98	51 - 145
1,2,3-Trichloropropane	2500	2330		ug/Kg		93	50 - 133
1,2,4-Trichlorobenzene	2500	2490		ug/Kg		100	57 - 137
1,2,4-Trimethylbenzene	2500	2550		ug/Kg		102	70 - 123
1,2-Dibromo-3-Chloropropane	2500	1920		ug/Kg		77	56 - 123
Ethylene Dibromide	2500	2520		ug/Kg		101	70 - 125
1,2-Dichlorobenzene	2500	2600		ug/Kg		104	70 - 125
1,2-Dichloroethane	2500	2490		ug/Kg		100	68 - 127
1,2-Dichloropropane	2500	2650		ug/Kg		106	67 - 130
1,3,5-Trimethylbenzene	2500	2540		ug/Kg		102	70 - 123
1,3-Dichlorobenzene	2500	2580		ug/Kg		103	70 - 125
1,3-Dichloropropane	2500	2460		ug/Kg		98	62 - 136
1,4-Dichlorobenzene	2500	2600		ug/Kg		104	70 - 120
2,2-Dichloropropane	2500	2000		ug/Kg		80	58 - 139
2-Chlorotoluene	2500	2560		ug/Kg		102	70 - 125
4-Chlorotoluene	2500	2550		ug/Kg		102	68 - 124
Benzene	2500	2420		ug/Kg		97	70 - 120

Eurofins TestAmerica, Chicago



# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

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

**Lab Sample ID: LCS 500-623945/18-A**  
**Matrix: Solid**  
**Analysis Batch: 624645**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 623945**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	2500	2600		ug/Kg		104	70 - 122
Bromochloromethane	2500	2530		ug/Kg		101	65 - 122
Bromodichloromethane	2500	2380		ug/Kg		95	69 - 120
Bromoform	2500	2070		ug/Kg		83	56 - 132
Bromomethane	2500	2560		ug/Kg		102	40 - 152
Carbon tetrachloride	2500	2120		ug/Kg		85	59 - 133
Chlorobenzene	2500	2580		ug/Kg		103	70 - 120
Chloroethane	2500	2290		ug/Kg		92	48 - 136
Chloroform	2500	2520		ug/Kg		101	70 - 120
Chloromethane	2500	2180		ug/Kg		87	56 - 152
cis-1,2-Dichloroethene	2500	2630		ug/Kg		105	70 - 125
cis-1,3-Dichloropropene	2500	2290		ug/Kg		92	64 - 127
Dibromochloromethane	2500	2240		ug/Kg		90	68 - 125
Dibromomethane	2500	2460		ug/Kg		99	70 - 120
Dichlorodifluoromethane	2500	1380		ug/Kg		55	40 - 159
Ethylbenzene	2500	2540		ug/Kg		102	70 - 123
Hexachlorobutadiene	2500	2540		ug/Kg		101	51 - 150
Isopropylbenzene	2500	2540		ug/Kg		102	70 - 126
Methyl tert-butyl ether	2500	2420		ug/Kg		97	55 - 123
Methylene Chloride	2500	2510		ug/Kg		100	69 - 125
Naphthalene	2500	2350		ug/Kg		94	53 - 144
n-Butylbenzene	2500	2520		ug/Kg		101	68 - 125
N-Propylbenzene	2500	2530		ug/Kg		101	69 - 127
p-Isopropyltoluene	2500	2480		ug/Kg		99	70 - 125
sec-Butylbenzene	2500	2530		ug/Kg		101	70 - 123
Styrene	2500	2560		ug/Kg		102	70 - 120
tert-Butylbenzene	2500	2490		ug/Kg		100	70 - 121
Tetrachloroethene	2500	2600		ug/Kg		104	70 - 128
Toluene	2500	2500		ug/Kg		100	70 - 125
trans-1,2-Dichloroethene	2500	2570		ug/Kg		103	70 - 125
trans-1,3-Dichloropropene	2500	2180		ug/Kg		87	62 - 128
Trichloroethene	2500	2410		ug/Kg		97	70 - 125
Trichlorofluoromethane	2500	2300		ug/Kg		92	55 - 128
Vinyl chloride	2500	2230		ug/Kg		89	64 - 126
Xylenes, Total	5000	5010		ug/Kg		100	70 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	92		75 - 126
4-Bromofluorobenzene (Surr)	94		72 - 124
Dibromofluoromethane (Surr)	94		75 - 120
Toluene-d8 (Surr)	101		75 - 120

**Lab Sample ID: 500-206744-16 MS**  
**Matrix: Solid**  
**Analysis Batch: 624645**

**Client Sample ID: B-2C (8-10)**  
**Prep Type: Total/NA**  
**Prep Batch: 623945**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	<29		3190	2690		ug/Kg	☆	84	70 - 125

Eurofins TestAmerica, Chicago

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

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

Lab Sample ID: 500-206744-16 MS

Matrix: Solid

Analysis Batch: 624645

Client Sample ID: B-2C (8-10)

Prep Type: Total/NA

Prep Batch: 623945

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	<24		3190	2840		ug/Kg	*	89	70 - 125
1,1,2,2-Tetrachloroethane	<25		3190	2850		ug/Kg	*	89	62 - 140
1,1,2-Trichloroethane	<22		3190	2970		ug/Kg	*	93	71 - 130
1,1-Dichloroethane	<26		3190	3180		ug/Kg	*	100	70 - 125
1,1-Dichloroethene	<25		3190	3020		ug/Kg	*	95	67 - 122
1,1-Dichloropropene	<19		3190	2920		ug/Kg	*	92	70 - 121
1,2,3-Trichlorobenzene	<29		3190	3010		ug/Kg	*	94	51 - 145
1,2,3-Trichloropropane	<26		3190	2910		ug/Kg	*	91	50 - 133
1,2,4-Trichlorobenzene	<22		3190	2890		ug/Kg	*	91	57 - 137
1,2,4-Trimethylbenzene	<23		3190	3050		ug/Kg	*	96	70 - 123
1,2-Dibromo-3-Chloropropane	<130		3190	2520		ug/Kg	*	79	56 - 123
Ethylene Dibromide	<25		3190	3090		ug/Kg	*	97	70 - 125
1,2-Dichlorobenzene	<21		3190	3110		ug/Kg	*	98	70 - 125
1,2-Dichloroethane	<25		3190	3020		ug/Kg	*	95	68 - 127
1,2-Dichloropropane	<27		3190	3140		ug/Kg	*	98	67 - 130
1,3,5-Trimethylbenzene	<24		3190	3020		ug/Kg	*	95	70 - 123
1,3-Dichlorobenzene	<25		3190	3120		ug/Kg	*	98	70 - 125
1,3-Dichloropropane	<23		3190	2920		ug/Kg	*	92	62 - 136
1,4-Dichlorobenzene	<23		3190	3070		ug/Kg	*	96	70 - 120
2,2-Dichloropropane	<28		3190	2480		ug/Kg	*	78	58 - 139
2-Chlorotoluene	<20		3190	3080		ug/Kg	*	97	70 - 125
4-Chlorotoluene	<22		3190	3020		ug/Kg	*	95	68 - 124
Benzene	<9.3		3190	2900		ug/Kg	*	91	70 - 120
Bromobenzene	<23		3190	3100		ug/Kg	*	97	70 - 122
Bromochloromethane	<27		3190	3060		ug/Kg	*	96	65 - 122
Bromodichloromethane	<24		3190	2830		ug/Kg	*	89	69 - 120
Bromoform	<31		3190	2550		ug/Kg	*	80	56 - 132
Bromomethane	<51		3190	3300		ug/Kg	*	104	40 - 152
Carbon tetrachloride	<24		3190	2610		ug/Kg	*	82	59 - 133
Chlorobenzene	<25		3190	3070		ug/Kg	*	96	70 - 120
Chloroethane	<32		3190	2870		ug/Kg	*	90	48 - 136
Chloroform	<24		3190	3010		ug/Kg	*	94	70 - 120
Chloromethane	<20		3190	3350		ug/Kg	*	105	56 - 152
cis-1,2-Dichloroethene	<26		3190	3100		ug/Kg	*	97	70 - 125
cis-1,3-Dichloropropene	<27		3190	2740		ug/Kg	*	86	64 - 127
Dibromochloromethane	<31		3190	2700		ug/Kg	*	85	68 - 125
Dibromomethane	<17		3190	2910		ug/Kg	*	91	70 - 120
Dichlorodifluoromethane	<43		3190	2890		ug/Kg	*	91	40 - 159
Ethylbenzene	<12		3190	2980		ug/Kg	*	94	70 - 123
Hexachlorobutadiene	<28		3190	3020		ug/Kg	*	95	51 - 150
Isopropylbenzene	<24		3190	3040		ug/Kg	*	95	70 - 126
Methyl tert-butyl ether	<25		3190	2920		ug/Kg	*	92	55 - 123
Methylene Chloride	<100		3190	3030		ug/Kg	*	95	69 - 125
Naphthalene	<21		3190	2980		ug/Kg	*	93	53 - 144
n-Butylbenzene	<25		3190	2950		ug/Kg	*	93	68 - 125
N-Propylbenzene	<26		3190	3000		ug/Kg	*	94	69 - 127
p-Isopropyltoluene	<23		3190	2910		ug/Kg	*	91	70 - 125
sec-Butylbenzene	<25		3190	3000		ug/Kg	*	94	70 - 123
Styrene	<25		3190	3010		ug/Kg	*	94	70 - 120

Eurofins TestAmerica, Chicago

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

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

**Lab Sample ID: 500-206744-16 MS**

**Matrix: Solid**

**Analysis Batch: 624645**

**Client Sample ID: B-2C (8-10)**

**Prep Type: Total/NA**

**Prep Batch: 623945**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier					
tert-Butylbenzene	<25		3190	2970		ug/Kg	✖	93	70 - 121	
Tetrachloroethene	<24		3190	3010		ug/Kg	✖	94	70 - 128	
Toluene	<9.4		3190	2980		ug/Kg	✖	93	70 - 125	
trans-1,2-Dichloroethene	<22		3190	3090		ug/Kg	✖	97	70 - 125	
trans-1,3-Dichloropropene	<23		3190	2640		ug/Kg	✖	83	62 - 128	
Trichloroethene	<10		3190	2920		ug/Kg	✖	92	70 - 125	
Trichlorofluoromethane	<27		3190	2970		ug/Kg	✖	93	55 - 128	
Vinyl chloride	<17		3190	3220		ug/Kg	✖	101	64 - 126	
Xylenes, Total	<14		6370	5900		ug/Kg	✖	93	70 - 125	
<b>MS MS</b>										
Surrogate	%Recovery	Qualifier	Limits							
1,2-Dichloroethane-d4 (Surr)	94		75 - 126							
4-Bromofluorobenzene (Surr)	96		72 - 124							
Dibromofluoromethane (Surr)	96		75 - 120							
Toluene-d8 (Surr)	100		75 - 120							

**Lab Sample ID: 500-206744-16 MSD**

**Matrix: Solid**

**Analysis Batch: 624645**

**Client Sample ID: B-2C (8-10)**

**Prep Type: Total/NA**

**Prep Batch: 623945**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier							
1,1,1,2-Tetrachloroethane	<29		3190	2700		ug/Kg	✖	85	70 - 125	0	30	
1,1,1-Trichloroethane	<24		3190	2850		ug/Kg	✖	89	70 - 125	0	30	
1,1,1,2-Tetrachloroethane	<25		3190	2690		ug/Kg	✖	85	62 - 140	6	30	
1,1,2-Trichloroethane	<22		3190	2850		ug/Kg	✖	89	71 - 130	4	30	
1,1-Dichloroethane	<26		3190	3210		ug/Kg	✖	101	70 - 125	1	30	
1,1-Dichloroethene	<25		3190	3080		ug/Kg	✖	97	67 - 122	2	30	
1,1-Dichloropropene	<19		3190	2960		ug/Kg	✖	93	70 - 121	1	30	
1,2,3-Trichlorobenzene	<29		3190	3010		ug/Kg	✖	94	51 - 145	0	30	
1,2,3-Trichloropropane	<26		3190	2720		ug/Kg	✖	85	50 - 133	7	30	
1,2,4-Trichlorobenzene	<22		3190	3000		ug/Kg	✖	94	57 - 137	4	30	
1,2,4-Trimethylbenzene	<23		3190	3050		ug/Kg	✖	96	70 - 123	0	30	
1,2-Dibromo-3-Chloropropane	<130		3190	2300		ug/Kg	✖	72	56 - 123	9	30	
Ethylene Dibromide	<25		3190	2930		ug/Kg	✖	92	70 - 125	5	30	
1,2-Dichlorobenzene	<21		3190	3080		ug/Kg	✖	97	70 - 125	1	30	
1,2-Dichloroethane	<25		3190	2910		ug/Kg	✖	91	68 - 127	4	30	
1,2-Dichloropropane	<27		3190	3130		ug/Kg	✖	98	67 - 130	0	30	
1,3,5-Trimethylbenzene	<24		3190	3010		ug/Kg	✖	94	70 - 123	0	30	
1,3-Dichlorobenzene	<25		3190	3140		ug/Kg	✖	99	70 - 125	1	30	
1,3-Dichloropropane	<23		3190	2850		ug/Kg	✖	89	62 - 136	3	30	
1,4-Dichlorobenzene	<23		3190	3090		ug/Kg	✖	97	70 - 120	1	30	
2,2-Dichloropropane	<28		3190	2540		ug/Kg	✖	80	58 - 139	3	30	
2-Chlorotoluene	<20		3190	3060		ug/Kg	✖	96	70 - 125	0	30	
4-Chlorotoluene	<22		3190	3050		ug/Kg	✖	96	68 - 124	1	30	
Benzene	<9.3		3190	2900		ug/Kg	✖	91	70 - 120	0	30	
Bromobenzene	<23		3190	3120		ug/Kg	✖	98	70 - 122	1	30	
Bromochloromethane	<27		3190	3030		ug/Kg	✖	95	65 - 122	1	30	
Bromodichloromethane	<24		3190	2790		ug/Kg	✖	88	69 - 120	1	30	

Eurofins TestAmerica, Chicago

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

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

**Lab Sample ID: 500-206744-16 MSD**  
**Matrix: Solid**  
**Analysis Batch: 624645**

**Client Sample ID: B-2C (8-10)**  
**Prep Type: Total/NA**  
**Prep Batch: 623945**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.		RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD		
Bromoform	<31		3190	2420		ug/Kg	*	76	56 - 132	5	30	
Bromomethane	<51		3190	3570		ug/Kg	*	112	40 - 152	8	30	
Carbon tetrachloride	<24		3190	2620		ug/Kg	*	82	59 - 133	1	30	
Chlorobenzene	<25		3190	3040		ug/Kg	*	95	70 - 120	1	30	
Chloroethane	<32		3190	3330		ug/Kg	*	105	48 - 136	15	30	
Chloroform	<24		3190	3000		ug/Kg	*	94	70 - 120	0	30	
Chloromethane	<20		3190	3340		ug/Kg	*	105	56 - 152	0	30	
cis-1,2-Dichloroethene	<26		3190	3070		ug/Kg	*	96	70 - 125	1	30	
cis-1,3-Dichloropropene	<27		3190	2720		ug/Kg	*	85	64 - 127	1	30	
Dibromochloromethane	<31		3190	2640		ug/Kg	*	83	68 - 125	2	30	
Dibromomethane	<17		3190	2830		ug/Kg	*	89	70 - 120	3	30	
Dichlorodifluoromethane	<43		3190	3040		ug/Kg	*	95	40 - 159	5	30	
Ethylbenzene	<12		3190	3000		ug/Kg	*	94	70 - 123	0	30	
Hexachlorobutadiene	<28		3190	3000		ug/Kg	*	94	51 - 150	1	30	
Isopropylbenzene	<24		3190	3040		ug/Kg	*	96	70 - 126	0	30	
Methyl tert-butyl ether	<25		3190	2810		ug/Kg	*	88	55 - 123	4	30	
Methylene Chloride	<100		3190	2990		ug/Kg	*	94	69 - 125	2	30	
Naphthalene	<21		3190	2850		ug/Kg	*	90	53 - 144	4	30	
n-Butylbenzene	<25		3190	3000		ug/Kg	*	94	68 - 125	2	30	
N-Propylbenzene	<26		3190	3010		ug/Kg	*	95	69 - 127	0	30	
p-Isopropyltoluene	<23		3190	2970		ug/Kg	*	93	70 - 125	2	30	
sec-Butylbenzene	<25		3190	2990		ug/Kg	*	94	70 - 123	0	30	
Styrene	<25		3190	2980		ug/Kg	*	94	70 - 120	1	30	
tert-Butylbenzene	<25		3190	2960		ug/Kg	*	93	70 - 121	0	30	
Tetrachloroethene	<24		3190	3050		ug/Kg	*	96	70 - 128	1	30	
Toluene	<9.4		3190	2930		ug/Kg	*	92	70 - 125	2	30	
trans-1,2-Dichloroethene	<22		3190	3130		ug/Kg	*	98	70 - 125	1	30	
trans-1,3-Dichloropropene	<23		3190	2580		ug/Kg	*	81	62 - 128	2	30	
Trichloroethene	<10		3190	2930		ug/Kg	*	92	70 - 125	0	30	
Trichlorofluoromethane	<27		3190	3030		ug/Kg	*	95	55 - 128	2	30	
Vinyl chloride	<17		3190	3390		ug/Kg	*	106	64 - 126	5	30	
Xylenes, Total	<14		6370	5860		ug/Kg	*	92	70 - 125	1	30	

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	90		75 - 126
4-Bromofluorobenzene (Surr)	95		72 - 124
Dibromofluoromethane (Surr)	94		75 - 120
Toluene-d8 (Surr)	100		75 - 120

**Lab Sample ID: MB 500-624639/6**  
**Matrix: Solid**  
**Analysis Batch: 624639**

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/Kg			10/21/21 10:52	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/Kg			10/21/21 10:52	1
1,1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/Kg			10/21/21 10:52	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/Kg			10/21/21 10:52	1

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# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

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

**Lab Sample ID: MB 500-624639/6**  
**Matrix: Solid**  
**Analysis Batch: 624639**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	<0.41		1.0	0.41	ug/Kg			10/21/21 10:52	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/Kg			10/21/21 10:52	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/Kg			10/21/21 10:52	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/Kg			10/21/21 10:52	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/Kg			10/21/21 10:52	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/Kg			10/21/21 10:52	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/Kg			10/21/21 10:52	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/Kg			10/21/21 10:52	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/Kg			10/21/21 10:52	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/Kg			10/21/21 10:52	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/Kg			10/21/21 10:52	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/Kg			10/21/21 10:52	1
1,3,5-Trimethylbenzene	<0.38		1.0	0.38	ug/Kg			10/21/21 10:52	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/Kg			10/21/21 10:52	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/Kg			10/21/21 10:52	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/Kg			10/21/21 10:52	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/Kg			10/21/21 10:52	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/Kg			10/21/21 10:52	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/Kg			10/21/21 10:52	1
Benzene	<0.15		0.25	0.15	ug/Kg			10/21/21 10:52	1
Bromobenzene	<0.36		1.0	0.36	ug/Kg			10/21/21 10:52	1
Bromochloromethane	<0.43		1.0	0.43	ug/Kg			10/21/21 10:52	1
Bromodichloromethane	<0.37		1.0	0.37	ug/Kg			10/21/21 10:52	1
Bromoform	<0.48		1.0	0.48	ug/Kg			10/21/21 10:52	1
Bromomethane	<0.80		3.0	0.80	ug/Kg			10/21/21 10:52	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/Kg			10/21/21 10:52	1
Chlorobenzene	<0.39		1.0	0.39	ug/Kg			10/21/21 10:52	1
Chloroethane	<0.50		1.0	0.50	ug/Kg			10/21/21 10:52	1
Chloroform	<0.37		2.0	0.37	ug/Kg			10/21/21 10:52	1
Chloromethane	<0.32		1.0	0.32	ug/Kg			10/21/21 10:52	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/Kg			10/21/21 10:52	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/Kg			10/21/21 10:52	1
Dibromochloromethane	<0.49		1.0	0.49	ug/Kg			10/21/21 10:52	1
Dibromomethane	<0.27		1.0	0.27	ug/Kg			10/21/21 10:52	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/Kg			10/21/21 10:52	1
Ethylbenzene	<0.18		0.25	0.18	ug/Kg			10/21/21 10:52	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/Kg			10/21/21 10:52	1
Isopropyl ether	<0.28		1.0	0.28	ug/Kg			10/21/21 10:52	1
Isopropylbenzene	<0.38		1.0	0.38	ug/Kg			10/21/21 10:52	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/Kg			10/21/21 10:52	1
Methylene Chloride	<1.6		5.0	1.6	ug/Kg			10/21/21 10:52	1
Naphthalene	<0.33		1.0	0.33	ug/Kg			10/21/21 10:52	1
n-Butylbenzene	<0.39		1.0	0.39	ug/Kg			10/21/21 10:52	1
N-Propylbenzene	<0.41		1.0	0.41	ug/Kg			10/21/21 10:52	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/Kg			10/21/21 10:52	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/Kg			10/21/21 10:52	1
Styrene	<0.39		1.0	0.39	ug/Kg			10/21/21 10:52	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/Kg			10/21/21 10:52	1
Tetrachloroethene	<0.37		1.0	0.37	ug/Kg			10/21/21 10:52	1

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# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

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

**Lab Sample ID: MB 500-624639/6**  
**Matrix: Solid**  
**Analysis Batch: 624639**

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

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Toluene	<0.15		0.25	0.15	ug/Kg			10/21/21 10:52	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/Kg			10/21/21 10:52	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/Kg			10/21/21 10:52	1
Trichloroethene	<0.16		0.50	0.16	ug/Kg			10/21/21 10:52	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/Kg			10/21/21 10:52	1
Vinyl chloride	<0.26		1.0	0.26	ug/Kg			10/21/21 10:52	1
Xylenes, Total	<0.22		0.50	0.22	ug/Kg			10/21/21 10:52	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	112		75 - 126		10/21/21 10:52	1
4-Bromofluorobenzene (Surr)	86		72 - 124		10/21/21 10:52	1
Dibromofluoromethane (Surr)	96		75 - 120		10/21/21 10:52	1
Toluene-d8 (Surr)	97		75 - 120		10/21/21 10:52	1

**Lab Sample ID: LCS 500-624639/4**  
**Matrix: Solid**  
**Analysis Batch: 624639**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	55.0		ug/Kg		110	70 - 125
1,1,1,2-Tetrachloroethane	50.0	34.6		ug/Kg		69	62 - 140
1,1,2-Trichloroethane	50.0	42.2		ug/Kg		84	71 - 130
1,1-Dichloroethane	50.0	46.5		ug/Kg		93	70 - 125
1,1-Dichloroethene	50.0	55.5		ug/Kg		111	67 - 122
1,1-Dichloropropene	50.0	49.6		ug/Kg		99	70 - 121
1,2,3-Trichlorobenzene	50.0	53.9		ug/Kg		108	51 - 145
1,2,3-Trichloropropane	50.0	36.8		ug/Kg		74	50 - 133
1,2,4-Trichlorobenzene	50.0	52.2		ug/Kg		104	57 - 137
1,2,4-Trimethylbenzene	50.0	48.5		ug/Kg		97	70 - 123
1,2-Dibromo-3-Chloropropane	50.0	33.4		ug/Kg		67	56 - 123
Ethylene Dibromide	50.0	40.1		ug/Kg		80	70 - 125
1,2-Dichlorobenzene	50.0	44.1		ug/Kg		88	70 - 125
1,2-Dichloroethane	50.0	50.3		ug/Kg		101	68 - 127
1,2-Dichloropropane	50.0	41.9		ug/Kg		84	67 - 130
1,3,5-Trimethylbenzene	50.0	49.2		ug/Kg		98	70 - 123
1,3-Dichlorobenzene	50.0	44.3		ug/Kg		89	70 - 125
1,3-Dichloropropane	50.0	41.0		ug/Kg		82	62 - 136
1,4-Dichlorobenzene	50.0	43.6		ug/Kg		87	70 - 120
2,2-Dichloropropane	50.0	44.8		ug/Kg		90	58 - 139
2-Chlorotoluene	50.0	45.9		ug/Kg		92	70 - 125
4-Chlorotoluene	50.0	45.2		ug/Kg		90	68 - 124
Benzene	50.0	46.5		ug/Kg		93	70 - 120
Bromobenzene	50.0	37.8		ug/Kg		76	70 - 122
Bromochloromethane	50.0	48.4		ug/Kg		97	65 - 122
Bromodichloromethane	50.0	41.1		ug/Kg		82	69 - 120
Bromoform	50.0	31.9		ug/Kg		64	56 - 132
Bromomethane	50.0	64.0		ug/Kg		128	40 - 152

Eurofins TestAmerica, Chicago

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

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

**Lab Sample ID: LCS 500-624639/4**  
**Matrix: Solid**  
**Analysis Batch: 624639**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon tetrachloride	50.0	52.4		ug/Kg		105	59 - 133
Chlorobenzene	50.0	46.5		ug/Kg		93	70 - 120
Chloroethane	50.0	61.4		ug/Kg		123	48 - 136
Chloroform	50.0	49.2		ug/Kg		98	70 - 120
Chloromethane	50.0	44.8		ug/Kg		90	56 - 152
cis-1,2-Dichloroethene	50.0	48.5		ug/Kg		97	70 - 125
cis-1,3-Dichloropropene	50.0	38.2		ug/Kg		76	64 - 127
Dibromochloromethane	50.0	36.1		ug/Kg		72	68 - 125
Dibromomethane	50.0	45.6		ug/Kg		91	70 - 120
Dichlorodifluoromethane	50.0	56.0		ug/Kg		112	40 - 159
Ethylbenzene	50.0	50.6		ug/Kg		101	70 - 123
Hexachlorobutadiene	50.0	62.1		ug/Kg		124	51 - 150
Isopropylbenzene	50.0	48.5		ug/Kg		97	70 - 126
Methyl tert-butyl ether	50.0	34.3		ug/Kg		69	55 - 123
Methylene Chloride	50.0	48.6		ug/Kg		97	69 - 125
Naphthalene	50.0	49.5		ug/Kg		99	53 - 144
n-Butylbenzene	50.0	57.1		ug/Kg		114	68 - 125
N-Propylbenzene	50.0	48.1		ug/Kg		96	69 - 127
p-Isopropyltoluene	50.0	55.6		ug/Kg		111	70 - 125
sec-Butylbenzene	50.0	53.2		ug/Kg		106	70 - 123
Styrene	50.0	45.4		ug/Kg		91	70 - 120
tert-Butylbenzene	50.0	52.6		ug/Kg		105	70 - 121
Tetrachloroethene	50.0	52.4		ug/Kg		105	70 - 128
Toluene	50.0	48.6		ug/Kg		97	70 - 125
trans-1,2-Dichloroethene	50.0	50.4		ug/Kg		101	70 - 125
trans-1,3-Dichloropropene	50.0	35.4		ug/Kg		71	62 - 128
Trichloroethene	50.0	47.7		ug/Kg		95	70 - 125
Trichlorofluoromethane	50.0	58.3		ug/Kg		117	55 - 128
Vinyl chloride	50.0	55.1		ug/Kg		110	64 - 126
Xylenes, Total	100	109		ug/Kg		109	70 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	104		75 - 126
4-Bromofluorobenzene (Surr)	85		72 - 124
Dibromofluoromethane (Surr)	96		75 - 120
Toluene-d8 (Surr)	101		75 - 120

**Lab Sample ID: MB 500-624645/7**  
**Matrix: Solid**  
**Analysis Batch: 624645**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/Kg			10/21/21 10:19	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/Kg			10/21/21 10:19	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/Kg			10/21/21 10:19	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/Kg			10/21/21 10:19	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/Kg			10/21/21 10:19	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/Kg			10/21/21 10:19	1

Eurofins TestAmerica, Chicago

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

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

**Lab Sample ID: MB 500-624645/7**  
**Matrix: Solid**  
**Analysis Batch: 624645**

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
	Result	Qualifier							
1,1-Dichloropropene	<0.30		1.0	0.30	ug/Kg			10/21/21 10:19	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/Kg			10/21/21 10:19	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/Kg			10/21/21 10:19	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/Kg			10/21/21 10:19	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/Kg			10/21/21 10:19	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/Kg			10/21/21 10:19	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/Kg			10/21/21 10:19	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/Kg			10/21/21 10:19	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/Kg			10/21/21 10:19	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/Kg			10/21/21 10:19	1
1,3,5-Trimethylbenzene	<0.38		1.0	0.38	ug/Kg			10/21/21 10:19	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/Kg			10/21/21 10:19	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/Kg			10/21/21 10:19	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/Kg			10/21/21 10:19	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/Kg			10/21/21 10:19	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/Kg			10/21/21 10:19	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/Kg			10/21/21 10:19	1
Benzene	<0.15		0.25	0.15	ug/Kg			10/21/21 10:19	1
Bromobenzene	<0.36		1.0	0.36	ug/Kg			10/21/21 10:19	1
Bromochloromethane	<0.43		1.0	0.43	ug/Kg			10/21/21 10:19	1
Bromodichloromethane	<0.37		1.0	0.37	ug/Kg			10/21/21 10:19	1
Bromoform	<0.48		1.0	0.48	ug/Kg			10/21/21 10:19	1
Bromomethane	<0.80		3.0	0.80	ug/Kg			10/21/21 10:19	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/Kg			10/21/21 10:19	1
Chlorobenzene	<0.39		1.0	0.39	ug/Kg			10/21/21 10:19	1
Chloroethane	<0.50		1.0	0.50	ug/Kg			10/21/21 10:19	1
Chloroform	<0.37		2.0	0.37	ug/Kg			10/21/21 10:19	1
Chloromethane	<0.32		1.0	0.32	ug/Kg			10/21/21 10:19	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/Kg			10/21/21 10:19	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/Kg			10/21/21 10:19	1
Dibromochloromethane	<0.49		1.0	0.49	ug/Kg			10/21/21 10:19	1
Dibromomethane	<0.27		1.0	0.27	ug/Kg			10/21/21 10:19	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/Kg			10/21/21 10:19	1
Ethylbenzene	<0.18		0.25	0.18	ug/Kg			10/21/21 10:19	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/Kg			10/21/21 10:19	1
Isopropyl ether	<0.28		1.0	0.28	ug/Kg			10/21/21 10:19	1
Isopropylbenzene	<0.38		1.0	0.38	ug/Kg			10/21/21 10:19	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/Kg			10/21/21 10:19	1
Methylene Chloride	<1.6		5.0	1.6	ug/Kg			10/21/21 10:19	1
Naphthalene	0.398	J	1.0	0.33	ug/Kg			10/21/21 10:19	1
n-Butylbenzene	<0.39		1.0	0.39	ug/Kg			10/21/21 10:19	1
N-Propylbenzene	<0.41		1.0	0.41	ug/Kg			10/21/21 10:19	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/Kg			10/21/21 10:19	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/Kg			10/21/21 10:19	1
Styrene	<0.39		1.0	0.39	ug/Kg			10/21/21 10:19	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/Kg			10/21/21 10:19	1
Tetrachloroethene	<0.37		1.0	0.37	ug/Kg			10/21/21 10:19	1
Toluene	<0.15		0.25	0.15	ug/Kg			10/21/21 10:19	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/Kg			10/21/21 10:19	1

Eurofins TestAmerica, Chicago



# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

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

**Lab Sample ID: MB 500-624645/7**  
**Matrix: Solid**  
**Analysis Batch: 624645**

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/Kg			10/21/21 10:19	1
Trichloroethene	<0.16		0.50	0.16	ug/Kg			10/21/21 10:19	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/Kg			10/21/21 10:19	1
Vinyl chloride	<0.26		1.0	0.26	ug/Kg			10/21/21 10:19	1
Xylenes, Total	<0.22		0.50	0.22	ug/Kg			10/21/21 10:19	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	92		75 - 126		10/21/21 10:19	1
4-Bromofluorobenzene (Surr)	93		72 - 124		10/21/21 10:19	1
Dibromofluoromethane (Surr)	94		75 - 120		10/21/21 10:19	1
Toluene-d8 (Surr)	100		75 - 120		10/21/21 10:19	1

**Lab Sample ID: LCS 500-624645/5**  
**Matrix: Solid**  
**Analysis Batch: 624645**

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec.
		Result	Qualifier				Limits
1,1,1,2-Tetrachloroethane	50.0	45.0		ug/Kg		90	70 - 125
1,1,1-Trichloroethane	50.0	49.4		ug/Kg		99	70 - 125
1,1,1,2-Tetrachloroethane	50.0	44.6		ug/Kg		89	62 - 140
1,1,2-Trichloroethane	50.0	45.2		ug/Kg		90	71 - 130
1,1-Dichloroethane	50.0	50.0		ug/Kg		100	70 - 125
1,1-Dichloroethene	50.0	52.5		ug/Kg		105	67 - 122
1,1-Dichloropropene	50.0	49.4		ug/Kg		99	70 - 121
1,2,3-Trichlorobenzene	50.0	47.2		ug/Kg		94	51 - 145
1,2,3-Trichloropropane	50.0	45.2		ug/Kg		90	50 - 133
1,2,4-Trichlorobenzene	50.0	48.6		ug/Kg		97	57 - 137
1,2,4-Trimethylbenzene	50.0	49.8		ug/Kg		100	70 - 123
1,2-Dibromo-3-Chloropropane	50.0	39.4		ug/Kg		79	56 - 123
Ethylene Dibromide	50.0	47.6		ug/Kg		95	70 - 125
1,2-Dichlorobenzene	50.0	49.0		ug/Kg		98	70 - 125
1,2-Dichloroethane	50.0	45.6		ug/Kg		91	68 - 127
1,2-Dichloropropane	50.0	49.2		ug/Kg		98	67 - 130
1,3,5-Trimethylbenzene	50.0	50.3		ug/Kg		101	70 - 123
1,3-Dichlorobenzene	50.0	50.1		ug/Kg		100	70 - 125
1,3-Dichloropropane	50.0	45.3		ug/Kg		91	62 - 136
1,4-Dichlorobenzene	50.0	49.1		ug/Kg		98	70 - 120
2,2-Dichloropropane	50.0	44.8		ug/Kg		90	58 - 139
2-Chlorotoluene	50.0	50.3		ug/Kg		101	70 - 125
4-Chlorotoluene	50.0	49.5		ug/Kg		99	68 - 124
Benzene	50.0	45.9		ug/Kg		92	70 - 120
Bromobenzene	50.0	49.7		ug/Kg		99	70 - 122
Bromochloromethane	50.0	47.3		ug/Kg		95	65 - 122
Bromodichloromethane	50.0	45.5		ug/Kg		91	69 - 120
Bromoform	50.0	42.9		ug/Kg		86	56 - 132
Bromomethane	50.0	75.8		ug/Kg		152	40 - 152
Carbon tetrachloride	50.0	48.8		ug/Kg		98	59 - 133
Chlorobenzene	50.0	49.0		ug/Kg		98	70 - 120

Eurofins TestAmerica, Chicago

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

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

**Lab Sample ID: LCS 500-624645/5**  
**Matrix: Solid**  
**Analysis Batch: 624645**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	50.0	60.7		ug/Kg		121	48 - 136
Chloroform	50.0	47.0		ug/Kg		94	70 - 120
Chloromethane	50.0	56.8		ug/Kg		114	56 - 152
cis-1,2-Dichloroethene	50.0	49.4		ug/Kg		99	70 - 125
cis-1,3-Dichloropropene	50.0	44.8		ug/Kg		90	64 - 127
Dibromochloromethane	50.0	45.2		ug/Kg		90	68 - 125
Dibromomethane	50.0	45.1		ug/Kg		90	70 - 120
Dichlorodifluoromethane	50.0	55.0		ug/Kg		110	40 - 159
Ethylbenzene	50.0	49.1		ug/Kg		98	70 - 123
Hexachlorobutadiene	50.0	52.6		ug/Kg		105	51 - 150
Isopropylbenzene	50.0	50.9		ug/Kg		102	70 - 126
Methyl tert-butyl ether	50.0	44.1		ug/Kg		88	55 - 123
Methylene Chloride	50.0	46.4		ug/Kg		93	69 - 125
Naphthalene	50.0	44.0		ug/Kg		88	53 - 144
n-Butylbenzene	50.0	51.8		ug/Kg		104	68 - 125
N-Propylbenzene	50.0	51.4		ug/Kg		103	69 - 127
p-Isopropyltoluene	50.0	50.6		ug/Kg		101	70 - 125
sec-Butylbenzene	50.0	51.4		ug/Kg		103	70 - 123
Styrene	50.0	47.9		ug/Kg		96	70 - 120
tert-Butylbenzene	50.0	49.7		ug/Kg		99	70 - 121
Tetrachloroethene	50.0	52.0		ug/Kg		104	70 - 128
Toluene	50.0	47.3		ug/Kg		95	70 - 125
trans-1,2-Dichloroethene	50.0	51.9		ug/Kg		104	70 - 125
trans-1,3-Dichloropropene	50.0	42.1		ug/Kg		84	62 - 128
Trichloroethene	50.0	47.7		ug/Kg		95	70 - 125
Trichlorofluoromethane	50.0	56.3		ug/Kg		113	55 - 128
Vinyl chloride	50.0	57.9		ug/Kg		116	64 - 126
Xylenes, Total	100	96.0		ug/Kg		96	70 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	89		75 - 126
4-Bromofluorobenzene (Surr)	95		72 - 124
Dibromofluoromethane (Surr)	95		75 - 120
Toluene-d8 (Surr)	100		75 - 120

**Lab Sample ID: LCS 500-624850/8**  
**Matrix: Solid**  
**Analysis Batch: 624850**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	47.6		ug/Kg		95	70 - 125
1,1,1-Trichloroethane	50.0	51.4		ug/Kg		103	70 - 125
1,1,1,2,2-Tetrachloroethane	50.0	46.5		ug/Kg		93	62 - 140
1,1,2-Trichloroethane	50.0	47.6		ug/Kg		95	71 - 130
1,1-Dichloroethane	50.0	52.0		ug/Kg		104	70 - 125
1,1-Dichloroethene	50.0	54.4		ug/Kg		109	67 - 122
1,1-Dichloropropene	50.0	51.1		ug/Kg		102	70 - 121
1,2,3-Trichlorobenzene	50.0	48.9		ug/Kg		98	51 - 145

Eurofins TestAmerica, Chicago

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

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

**Lab Sample ID: LCS 500-624850/8**

**Matrix: Solid**

**Analysis Batch: 624850**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	45.0		ug/Kg		90	50 - 133
1,2,4-Trichlorobenzene	50.0	50.4		ug/Kg		101	57 - 137
1,2,4-Trimethylbenzene	50.0	51.8		ug/Kg		104	70 - 123
1,2-Dibromo-3-Chloropropane	50.0	40.5		ug/Kg		81	56 - 123
Ethylene Dibromide	50.0	49.6		ug/Kg		99	70 - 125
1,2-Dichlorobenzene	50.0	50.6		ug/Kg		101	70 - 125
1,2-Dichloroethane	50.0	47.1		ug/Kg		94	68 - 127
1,2-Dichloropropane	50.0	50.1		ug/Kg		100	67 - 130
1,3,5-Trimethylbenzene	50.0	51.9		ug/Kg		104	70 - 123
1,3-Dichlorobenzene	50.0	52.1		ug/Kg		104	70 - 125
1,3-Dichloropropane	50.0	47.9		ug/Kg		96	62 - 136
1,4-Dichlorobenzene	50.0	51.3		ug/Kg		103	70 - 120
2,2-Dichloropropane	50.0	47.5		ug/Kg		95	58 - 139
2-Chlorotoluene	50.0	51.0		ug/Kg		102	70 - 125
4-Chlorotoluene	50.0	51.4		ug/Kg		103	68 - 124
Benzene	50.0	47.3		ug/Kg		95	70 - 120
Bromobenzene	50.0	50.7		ug/Kg		101	70 - 122
Bromochloromethane	50.0	49.4		ug/Kg		99	65 - 122
Bromodichloromethane	50.0	47.2		ug/Kg		94	69 - 120
Bromoform	50.0	45.8		ug/Kg		92	56 - 132
Bromomethane	50.0	74.7		ug/Kg		149	40 - 152
Carbon tetrachloride	50.0	51.5		ug/Kg		103	59 - 133
Chlorobenzene	50.0	50.9		ug/Kg		102	70 - 120
Chloroethane	50.0	61.5		ug/Kg		123	48 - 136
Chloroform	50.0	48.5		ug/Kg		97	70 - 120
Chloromethane	50.0	59.7		ug/Kg		119	56 - 152
cis-1,2-Dichloroethene	50.0	50.6		ug/Kg		101	70 - 125
cis-1,3-Dichloropropene	50.0	46.7		ug/Kg		93	64 - 127
Dibromochloromethane	50.0	47.3		ug/Kg		95	68 - 125
Dibromomethane	50.0	46.1		ug/Kg		92	70 - 120
Dichlorodifluoromethane	50.0	64.8		ug/Kg		130	40 - 159
Ethylbenzene	50.0	51.9		ug/Kg		104	70 - 123
Hexachlorobutadiene	50.0	54.4		ug/Kg		109	51 - 150
Isopropylbenzene	50.0	53.1		ug/Kg		106	70 - 126
Methyl tert-butyl ether	50.0	45.2		ug/Kg		90	55 - 123
Methylene Chloride	50.0	51.4		ug/Kg		103	69 - 125
Naphthalene	50.0	45.6		ug/Kg		91	53 - 144
n-Butylbenzene	50.0	54.5		ug/Kg		109	68 - 125
N-Propylbenzene	50.0	53.0		ug/Kg		106	69 - 127
p-Isopropyltoluene	50.0	52.6		ug/Kg		105	70 - 125
sec-Butylbenzene	50.0	53.4		ug/Kg		107	70 - 123
Styrene	50.0	50.4		ug/Kg		101	70 - 120
tert-Butylbenzene	50.0	51.1		ug/Kg		102	70 - 121
Tetrachloroethene	50.0	55.2		ug/Kg		110	70 - 128
Toluene	50.0	50.1		ug/Kg		100	70 - 125
trans-1,2-Dichloroethene	50.0	52.7		ug/Kg		105	70 - 125
trans-1,3-Dichloropropene	50.0	45.0		ug/Kg		90	62 - 128
Trichloroethene	50.0	49.4		ug/Kg		99	70 - 125
Trichlorofluoromethane	50.0	58.1		ug/Kg		116	55 - 128

Eurofins TestAmerica, Chicago

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

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

Lab Sample ID: LCS 500-624850/8

Matrix: Solid

Analysis Batch: 624850

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Vinyl chloride	50.0	60.1		ug/Kg		120	64 - 126
Xylenes, Total	100	101		ug/Kg		101	70 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	87		75 - 126
4-Bromofluorobenzene (Surr)	94		72 - 124
Dibromofluoromethane (Surr)	93		75 - 120
Toluene-d8 (Surr)	101		75 - 120



# Lab Chronicle

Client: Giles Engineering Associates  
Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-1 (0-2)**

**Date Collected: 10/12/21 09:40**

**Date Received: 10/13/21 09:55**

**Lab Sample ID: 500-206744-1**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	623453	10/14/21 09:58	LWN	TAL CHI

**Client Sample ID: B-1 (0-2)**

**Date Collected: 10/12/21 09:40**

**Date Received: 10/13/21 09:55**

**Lab Sample ID: 500-206744-1**

**Matrix: Solid**

**Percent Solids: 93.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			623945	10/12/21 09:40	WRE	TAL CHI
Total/NA	Analysis	8260B		50	624645	10/21/21 12:08	PMF	TAL CHI

**Client Sample ID: B-1 (12-14)**

**Date Collected: 10/12/21 10:25**

**Date Received: 10/13/21 09:55**

**Lab Sample ID: 500-206744-2**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	623453	10/14/21 09:58	LWN	TAL CHI

**Client Sample ID: B-1 (12-14)**

**Date Collected: 10/12/21 10:25**

**Date Received: 10/13/21 09:55**

**Lab Sample ID: 500-206744-2**

**Matrix: Solid**

**Percent Solids: 86.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			623945	10/12/21 10:25	WRE	TAL CHI
Total/NA	Analysis	8260B		100	624645	10/21/21 12:30	PMF	TAL CHI
Total/NA	Prep	5035	DL		623945	10/12/21 10:25	WRE	TAL CHI
Total/NA	Analysis	8260B	DL	1000	624645	10/21/21 12:52	PMF	TAL CHI

**Client Sample ID: B-1A (2-4)**

**Date Collected: 10/12/21 10:30**

**Date Received: 10/13/21 09:55**

**Lab Sample ID: 500-206744-3**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	623453	10/14/21 09:58	LWN	TAL CHI

**Client Sample ID: B-1A (2-4)**

**Date Collected: 10/12/21 10:30**

**Date Received: 10/13/21 09:55**

**Lab Sample ID: 500-206744-3**

**Matrix: Solid**

**Percent Solids: 91.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			623945	10/12/21 10:30	WRE	TAL CHI
Total/NA	Analysis	8260B		50	624645	10/21/21 13:14	PMF	TAL CHI

# Lab Chronicle

Client: Giles Engineering Associates  
Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

## Client Sample ID: B-1A (12-14)

Date Collected: 10/12/21 10:35

Date Received: 10/13/21 09:55

## Lab Sample ID: 500-206744-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	623453	10/14/21 09:58	LWN	TAL CHI

## Client Sample ID: B-1A (12-14)

Date Collected: 10/12/21 10:35

Date Received: 10/13/21 09:55

## Lab Sample ID: 500-206744-4

Matrix: Solid

Percent Solids: 82.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			623945	10/12/21 10:35	WRE	TAL CHI
Total/NA	Analysis	8260B		100	624645	10/21/21 13:36	PMF	TAL CHI
Total/NA	Prep	5035	DL		623945	10/12/21 10:35	WRE	TAL CHI
Total/NA	Analysis	8260B	DL	1000	624645	10/21/21 13:58	PMF	TAL CHI

## Client Sample ID: B-1B (0-2)

Date Collected: 10/12/21 12:35

Date Received: 10/13/21 09:55

## Lab Sample ID: 500-206744-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	623453	10/14/21 09:58	LWN	TAL CHI

## Client Sample ID: B-1B (0-2)

Date Collected: 10/12/21 12:35

Date Received: 10/13/21 09:55

## Lab Sample ID: 500-206744-5

Matrix: Solid

Percent Solids: 92.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			623945	10/12/21 12:35	WRE	TAL CHI
Total/NA	Analysis	8260B		50	624645	10/21/21 14:20	PMF	TAL CHI

## Client Sample ID: B-1B (10-12)

Date Collected: 10/12/21 12:40

Date Received: 10/13/21 09:55

## Lab Sample ID: 500-206744-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	623453	10/14/21 09:58	LWN	TAL CHI

## Client Sample ID: B-1B (10-12)

Date Collected: 10/12/21 12:40

Date Received: 10/13/21 09:55

## Lab Sample ID: 500-206744-6

Matrix: Solid

Percent Solids: 84.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			623945	10/12/21 12:40	WRE	TAL CHI
Total/NA	Analysis	8260B		50	624645	10/21/21 14:42	PMF	TAL CHI

# Lab Chronicle

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-1C (0-2)**  
**Date Collected: 10/12/21 11:00**  
**Date Received: 10/13/21 09:55**

**Lab Sample ID: 500-206744-7**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	623453	10/14/21 09:58	LWN	TAL CHI

**Client Sample ID: B-1C (0-2)**  
**Date Collected: 10/12/21 11:00**  
**Date Received: 10/13/21 09:55**

**Lab Sample ID: 500-206744-7**  
**Matrix: Solid**  
**Percent Solids: 92.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			623945	10/12/21 11:00	WRE	TAL CHI
Total/NA	Analysis	8260B		50	624645	10/21/21 15:04	PMF	TAL CHI

**Client Sample ID: B-1C (12-13.5)**  
**Date Collected: 10/12/21 11:05**  
**Date Received: 10/13/21 09:55**

**Lab Sample ID: 500-206744-8**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	623453	10/14/21 09:58	LWN	TAL CHI

**Client Sample ID: B-1C (12-13.5)**  
**Date Collected: 10/12/21 11:05**  
**Date Received: 10/13/21 09:55**

**Lab Sample ID: 500-206744-8**  
**Matrix: Solid**  
**Percent Solids: 89.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			623945	10/12/21 11:05	WRE	TAL CHI
Total/NA	Analysis	8260B		50	624645	10/21/21 15:27	PMF	TAL CHI

**Client Sample ID: B-2 (2-4)**  
**Date Collected: 10/12/21 14:20**  
**Date Received: 10/13/21 09:55**

**Lab Sample ID: 500-206744-9**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	623453	10/14/21 09:58	LWN	TAL CHI

**Client Sample ID: B-2 (2-4)**  
**Date Collected: 10/12/21 14:20**  
**Date Received: 10/13/21 09:55**

**Lab Sample ID: 500-206744-9**  
**Matrix: Solid**  
**Percent Solids: 84.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			623945	10/12/21 14:20	WRE	TAL CHI
Total/NA	Analysis	8260B		100	624645	10/21/21 15:48	PMF	TAL CHI
Total/NA	Prep	5035	DL		623945	10/12/21 14:20	WRE	TAL CHI
Total/NA	Analysis	8260B	DL	1000	624645	10/21/21 16:10	PMF	TAL CHI

# Lab Chronicle

Client: Giles Engineering Associates  
Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-2 (10-12)**

**Date Collected: 10/12/21 14:25**

**Date Received: 10/13/21 09:55**

**Lab Sample ID: 500-206744-10**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	623453	10/14/21 09:58	LWN	TAL CHI

**Client Sample ID: B-2 (10-12)**

**Date Collected: 10/12/21 14:25**

**Date Received: 10/13/21 09:55**

**Lab Sample ID: 500-206744-10**

**Matrix: Solid**

**Percent Solids: 87.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			623945	10/12/21 14:25	WRE	TAL CHI
Total/NA	Analysis	8260B		50	624645	10/21/21 16:32	PMF	TAL CHI

**Client Sample ID: B-2A (2-4)**

**Date Collected: 10/12/21 14:30**

**Date Received: 10/13/21 09:55**

**Lab Sample ID: 500-206744-11**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	623453	10/14/21 09:58	LWN	TAL CHI

**Client Sample ID: B-2A (2-4)**

**Date Collected: 10/12/21 14:30**

**Date Received: 10/13/21 09:55**

**Lab Sample ID: 500-206744-11**

**Matrix: Solid**

**Percent Solids: 89.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			623945	10/12/21 14:30	WRE	TAL CHI
Total/NA	Analysis	8260B		50	624645	10/21/21 16:54	PMF	TAL CHI
Total/NA	Prep	5035	DL		623945	10/12/21 14:30	WRE	TAL CHI
Total/NA	Analysis	8260B	DL	500	624850	10/22/21 11:11	PMF	TAL CHI

**Client Sample ID: B-2A (8-10)**

**Date Collected: 10/12/21 14:35**

**Date Received: 10/13/21 09:55**

**Lab Sample ID: 500-206744-12**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	623453	10/14/21 09:58	LWN	TAL CHI

**Client Sample ID: B-2A (8-10)**

**Date Collected: 10/12/21 14:35**

**Date Received: 10/13/21 09:55**

**Lab Sample ID: 500-206744-12**

**Matrix: Solid**

**Percent Solids: 89.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			623945	10/12/21 14:35	WRE	TAL CHI
Total/NA	Analysis	8260B		50	624645	10/21/21 17:16	PMF	TAL CHI



# Lab Chronicle

Client: Giles Engineering Associates  
Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-2B (2-4)**

**Date Collected: 10/12/21 14:40**

**Date Received: 10/13/21 09:55**

**Lab Sample ID: 500-206744-13**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	623453	10/14/21 09:58	LWN	TAL CHI

**Client Sample ID: B-2B (2-4)**

**Date Collected: 10/12/21 14:40**

**Date Received: 10/13/21 09:55**

**Lab Sample ID: 500-206744-13**

**Matrix: Solid**

**Percent Solids: 85.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			623945	10/12/21 14:40	WRE	TAL CHI
Total/NA	Analysis	8260B		50	624639	10/21/21 17:01	PMF	TAL CHI

**Client Sample ID: B-2B (8-10)**

**Date Collected: 10/12/21 14:45**

**Date Received: 10/13/21 09:55**

**Lab Sample ID: 500-206744-14**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	623453	10/14/21 09:58	LWN	TAL CHI

**Client Sample ID: B-2B (8-10)**

**Date Collected: 10/12/21 14:45**

**Date Received: 10/13/21 09:55**

**Lab Sample ID: 500-206744-14**

**Matrix: Solid**

**Percent Solids: 87.7**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			623945	10/12/21 14:45	WRE	TAL CHI
Total/NA	Analysis	8260B		50	624639	10/21/21 17:28	PMF	TAL CHI

**Client Sample ID: B-2C (2-4)**

**Date Collected: 10/12/21 14:50**

**Date Received: 10/13/21 09:55**

**Lab Sample ID: 500-206744-15**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	623453	10/14/21 09:58	LWN	TAL CHI

**Client Sample ID: B-2C (2-4)**

**Date Collected: 10/12/21 14:50**

**Date Received: 10/13/21 09:55**

**Lab Sample ID: 500-206744-15**

**Matrix: Solid**

**Percent Solids: 85.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			623945	10/12/21 14:50	WRE	TAL CHI
Total/NA	Analysis	8260B		50	624639	10/21/21 17:56	PMF	TAL CHI

**Client Sample ID: B-2C (8-10)**

**Date Collected: 10/12/21 14:55**

**Date Received: 10/13/21 09:55**

**Lab Sample ID: 500-206744-16**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	623453	10/14/21 09:58	LWN	TAL CHI

Eurofins TestAmerica, Chicago

# Lab Chronicle

Client: Giles Engineering Associates  
Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

**Client Sample ID: B-2C (8-10)**

**Lab Sample ID: 500-206744-16**

**Date Collected: 10/12/21 14:55**

**Matrix: Solid**

**Date Received: 10/13/21 09:55**

**Percent Solids: 88.1**

<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	Prep	5035			623945	10/12/21 14:55	WRE	TAL CHI
Total/NA	Analysis	8260B		50	624645	10/21/21 17:38	PMF	TAL CHI

**Laboratory References:**

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

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# Accreditation/Certification Summary

Client: Giles Engineering Associates  
Project/Site: 301 Main Martinizing Racine 1E-2108003

Job ID: 500-206744-1

## Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-22

- 1
- 2
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- 10
- 11
- 12
- 13
- 14
- 15

**Eurofins TestAmerica, Chicago**

2417 Bond Street  
 University Park IL 60484  
 Phone (708) 534-5200 Phone (708) 534-5211

**Chain of Custody Record**



<b>Client Information</b>		Sampler SCOTT BENDER		Lab PM Fredrick Sandie		Carrier Tracking No(s)		COC No 500-95074-42094 1			
Client Contact Kelly Hayden		Phone		E-Mail sandra.fredrick@eurofinset.com		State of Origin		Page Page 1 of 2			
Company Giles Engineering Associates				PWSID		<b>Analysis Requested</b>					
Address N8 W 22350 Johnson Road		Due Date Requested		Field Filtered Sample (Yes or No) Perform: MS/MSD (Yes or No) 8260B VOC PFC_IDA_WI PFAS		Total Number of containers 500-206744 COC		Job # 500-206744			
City Waukesha		TAT Requested (days) STANDARD - 7 BUSINESS DAY						Preservation Codes			
State Zip: WI 53186		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No						A HCL M Hexane			
Phone		PO # Purchase Order not required						B NaOH N None			
Email khayden@gilesegr.com		WO #						C Zn Acetate O AsNaO2			
Project Name 301 Main Martinizing Racine 1E-2108003		Project # 50006545		D Nitric Acid P Na2O4S		E NaHSO4 Q Na2SO3		F MeOH R Na2S2O3			
Site		SSOW#		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:							
<b>Sample Identification</b>		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform: MS/MSD (Yes or No)	8260B VOC	PFC_IDA_WI PFAS	Total Number of containers	Special Instructions/Note
				Preservation Code:		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	F			
1	B-1 (10-2)	10/12/21	9 46	G	Solid			X			
2	B-1 (12-14)	10/12/21	10 25	G	Solid			X			
3	B-1A (2-4)	10/12/21	10.30	G	Solid			X			
4	B-1A (12-14)	10/12/21	10 35	G	Solid			X			
5	B-1B (6-2)	10/12/21	12 35	G	Solid			X			
6	B-1B (10-12)	10/12/21	12 40	G	Solid			X			
7	B-1C (10-2)	10/12/21	11.00	G	Solid			X			
8	B-1C (12-13)	10/12/21	11.05	G	Solid			X			
9	B-2 (2-4)	10/12/21	14.20	G	Solid			X			
10	B-2 (10-12)	10/12/21	14 25	G	Solid			X			
<b>Possible Hazard Identification</b>						<b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b>					
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological						<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months					
Deliverable Requested I II III IV Other (specify)						Special Instructions/QC Requirements					
Empty Kit Relinquished by				Date		Time		Method of Shipment:			
Relinquished by <i>Scott Bender</i>				Date/Time 10/12/21 16:20		Company GILES		Received by <i>Stephanie Hernandez</i>		Date/Time 10/13/21 0955	
Relinquished by				Date/Time		Company		Received by		Date/Time	
Relinquished by				Date/Time		Company		Received by		Date/Time	
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks. 2.4							



ORIGIN ID:ZMLA (262) 544-0118  
SCOTT BENDER  
GILES ENGINEERING ASSOCIATES INC  
N8 W22350 JOHNSON DRIVE  
SUITE A1  
WAUKESHA, WI 53186  
UNITED STATES US

SHIP DATE 27SEP21  
ACTWGT 25 00 LB  
CAD 5697471/INET4400

BILL RECIPIENT

TO **SAMPLE RECEIVING**  
**TEST AMERICA**  
**2417 BOND ST**



56DJ3169AIFE4A

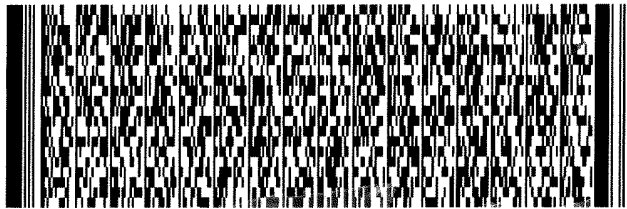
**UNIVERSITY PARK IL 60484**

(920) 342-1197  
INV  
PO

REF 1E 2108003

500-206744 Wayb

DEPT



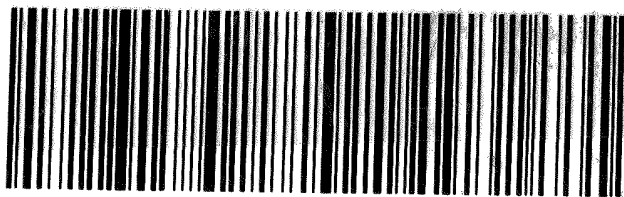
FedEx

TRK# 2842 5161 0263  
0201

WED - 13 OCT  
PRIORITY OVERNIGHT

**79 JOTA**

60484  
IL - US ORO



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# Login Sample Receipt Checklist

Client: Giles Engineering Associates

Job Number: 500-206744-1

**Login Number: 206744**

**List Source: Eurofins TestAmerica, Chicago**

**List Number: 1**

**Creator: Hernandez, Stephanie**

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	2.4
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## **APPENDIX D**

### **Analytical Laboratory Report (Groundwater)**



## ANALYTICAL REPORT

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

Laboratory Job ID: 500-208032-1  
Client Project/Site: 301 Main Martinizing 1E-2108003

For:  
Giles Engineering Associates  
N8 W 22350 Johnson Road  
Waukesha, Wisconsin 53186

Attn: Kelly Hayden



Authorized for release by:  
11/16/2021 8:18:06 AM

Sandie Fredrick, Project Manager II  
(920)261-1660  
[sandra.fredrick@eurofinset.com](mailto:sandra.fredrick@eurofinset.com)

### LINKS

Review your project  
results through  
**TotalAccess**

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[www.eurofinsus.com/Env](http://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.*



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# Case Narrative

Client: Giles Engineering Associates  
Project/Site: 301 Main Martinizing 1E-2108003

Job ID: 500-208032-1

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## Job ID: 500-208032-1

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Laboratory: Eurofins TestAmerica, Chicago

### Narrative

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#### Job Narrative 500-208032-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 11/6/2021 9:55 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.8° C.

#### GC/MS VOA

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

#### LCMS

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

#### Organic Prep

Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-542231. Method code: 3535\_PFC\_28D Matrix: Aqueous

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



# Detection Summary

Client: Giles Engineering Associates  
Project/Site: 301 Main Martinizing 1E-2108003

Job ID: 500-208032-1

## Client Sample ID: BTW-2

## Lab Sample ID: 500-208032-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.44	J	1.0	0.34	ug/L	1		8260B	Total/NA
Tetrachloroethene	8.4		1.0	0.37	ug/L	1		8260B	Total/NA
Perfluorobutanoic acid (PFBA)	6.6		4.8	2.3	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	8.3		1.9	0.47	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	9.5		1.9	0.56	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	5.0		1.9	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	17		1.9	0.82	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.47	J	1.9	0.26	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.4	J	1.9	0.19	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	0.40	J	1.9	0.29	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	5.0		1.9	0.55	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	4.1		1.9	0.52	ng/L	1		537 (modified)	Total/NA
6:2 FTS	6.9		4.8	2.4	ng/L	1		537 (modified)	Total/NA

## Client Sample ID: Trip Blank

## Lab Sample ID: 500-208032-2

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

# Method Summary

Client: Giles Engineering Associates  
Project/Site: 301 Main Martinizing 1E-2108003

Job ID: 500-208032-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC
3535	Solid-Phase Extraction (SPE)	SW846	TAL SAC
5030B	Purge and Trap	SW846	TAL CHI

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

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

# Sample Summary

Client: Giles Engineering Associates  
Project/Site: 301 Main Martinizing 1E-2108003

Job ID: 500-208032-1

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-208032-1	BTW-2	Water	11/05/21 09:50	11/06/21 09:55
500-208032-2	Trip Blank	Water	11/05/21 00:00	11/06/21 09:55

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

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing 1E-2108003

Job ID: 500-208032-1

**Client Sample ID: BTW-2**

**Lab Sample ID: 500-208032-1**

**Date Collected: 11/05/21 09:50**

**Matrix: Water**

**Date Received: 11/06/21 09:55**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			11/15/21 12:11	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			11/15/21 12:11	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			11/15/21 12:11	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			11/15/21 12:11	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			11/15/21 12:11	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			11/15/21 12:11	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			11/15/21 12:11	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			11/15/21 12:11	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			11/15/21 12:11	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			11/15/21 12:11	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			11/15/21 12:11	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			11/15/21 12:11	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			11/15/21 12:11	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			11/15/21 12:11	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			11/15/21 12:11	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			11/15/21 12:11	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			11/15/21 12:11	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			11/15/21 12:11	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			11/15/21 12:11	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			11/15/21 12:11	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			11/15/21 12:11	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			11/15/21 12:11	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			11/15/21 12:11	1
Benzene	<0.15		0.50	0.15	ug/L			11/15/21 12:11	1
Bromobenzene	<0.36		1.0	0.36	ug/L			11/15/21 12:11	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			11/15/21 12:11	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			11/15/21 12:11	1
Bromoform	<0.48		1.0	0.48	ug/L			11/15/21 12:11	1
Bromomethane	<0.80		3.0	0.80	ug/L			11/15/21 12:11	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			11/15/21 12:11	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			11/15/21 12:11	1
Chloroethane	<0.51		1.0	0.51	ug/L			11/15/21 12:11	1
Chloroform	<0.37		2.0	0.37	ug/L			11/15/21 12:11	1
Chloromethane	<0.32		1.0	0.32	ug/L			11/15/21 12:11	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			11/15/21 12:11	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			11/15/21 12:11	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			11/15/21 12:11	1
Dibromomethane	<0.27		1.0	0.27	ug/L			11/15/21 12:11	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			11/15/21 12:11	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			11/15/21 12:11	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			11/15/21 12:11	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			11/15/21 12:11	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			11/15/21 12:11	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			11/15/21 12:11	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			11/15/21 12:11	1
<b>Naphthalene</b>	<b>0.44</b>	<b>J</b>	1.0	0.34	ug/L			11/15/21 12:11	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			11/15/21 12:11	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			11/15/21 12:11	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			11/15/21 12:11	1

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing 1E-2108003

Job ID: 500-208032-1

**Client Sample ID: BTW-2**

**Lab Sample ID: 500-208032-1**

**Date Collected: 11/05/21 09:50**

**Matrix: Water**

**Date Received: 11/06/21 09:55**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			11/15/21 12:11	1
Styrene	<0.39		1.0	0.39	ug/L			11/15/21 12:11	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			11/15/21 12:11	1
<b>Tetrachloroethene</b>	<b>8.4</b>		1.0	0.37	ug/L			11/15/21 12:11	1
Toluene	<0.15		0.50	0.15	ug/L			11/15/21 12:11	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			11/15/21 12:11	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			11/15/21 12:11	1
Trichloroethene	<0.16		0.50	0.16	ug/L			11/15/21 12:11	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			11/15/21 12:11	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			11/15/21 12:11	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			11/15/21 12:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		75 - 126		11/15/21 12:11	1
4-Bromofluorobenzene (Surr)	85		72 - 124		11/15/21 12:11	1
Dibromofluoromethane (Surr)	98		75 - 120		11/15/21 12:11	1
Toluene-d8 (Surr)	96		75 - 120		11/15/21 12:11	1

**Method: 537 (modified) - Fluorinated Alkyl Substances**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Perfluorobutanoic acid (PFBA)</b>	<b>6.6</b>		4.8	2.3	ng/L		11/12/21 12:27	11/13/21 22:14	1
<b>Perfluoropentanoic acid (PFPeA)</b>	<b>8.3</b>		1.9	0.47	ng/L		11/12/21 12:27	11/13/21 22:14	1
<b>Perfluorohexanoic acid (PFHxA)</b>	<b>9.5</b>		1.9	0.56	ng/L		11/12/21 12:27	11/13/21 22:14	1
<b>Perfluoroheptanoic acid (PFHpA)</b>	<b>5.0</b>		1.9	0.24	ng/L		11/12/21 12:27	11/13/21 22:14	1
<b>Perfluorooctanoic acid (PFOA)</b>	<b>17</b>		1.9	0.82	ng/L		11/12/21 12:27	11/13/21 22:14	1
<b>Perfluorononanoic acid (PFNA)</b>	<b>0.47 J</b>		1.9	0.26	ng/L		11/12/21 12:27	11/13/21 22:14	1
Perfluorodecanoic acid (PFDA)	<0.30		1.9	0.30	ng/L		11/12/21 12:27	11/13/21 22:14	1
Perfluoroundecanoic acid (PFUnA)	<1.1		1.9	1.1	ng/L		11/12/21 12:27	11/13/21 22:14	1
Perfluorododecanoic acid (PFDoA)	<0.53		1.9	0.53	ng/L		11/12/21 12:27	11/13/21 22:14	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.9	1.2	ng/L		11/12/21 12:27	11/13/21 22:14	1
Perfluorotetradecanoic acid (PFTeA)	<0.70		1.9	0.70	ng/L		11/12/21 12:27	11/13/21 22:14	1
<b>Perfluorobutanesulfonic acid (PFBS)</b>	<b>1.4 J</b>		1.9	0.19	ng/L		11/12/21 12:27	11/13/21 22:14	1
<b>Perfluoropentanesulfonic acid (PFPeS)</b>	<b>0.40 J</b>		1.9	0.29	ng/L		11/12/21 12:27	11/13/21 22:14	1
<b>Perfluorohexanesulfonic acid (PFHxS)</b>	<b>5.0</b>		1.9	0.55	ng/L		11/12/21 12:27	11/13/21 22:14	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.18		1.9	0.18	ng/L		11/12/21 12:27	11/13/21 22:14	1
<b>Perfluorooctanesulfonic acid (PFOS)</b>	<b>4.1</b>		1.9	0.52	ng/L		11/12/21 12:27	11/13/21 22:14	1
Perfluorononanesulfonic acid (PFNS)	<0.36		1.9	0.36	ng/L		11/12/21 12:27	11/13/21 22:14	1
Perfluorodecanesulfonic acid (PFDS)	<0.31		1.9	0.31	ng/L		11/12/21 12:27	11/13/21 22:14	1
Perfluorododecanesulfonic acid (PFDoS)	<0.93		1.9	0.93	ng/L		11/12/21 12:27	11/13/21 22:14	1
Perfluorooctanesulfonamide (FOSA)	<0.94		1.9	0.94	ng/L		11/12/21 12:27	11/13/21 22:14	1
NEtFOSA	<0.83		1.9	0.83	ng/L		11/12/21 12:27	11/13/21 22:14	1
NMeFOSA	<0.41		1.9	0.41	ng/L		11/12/21 12:27	11/13/21 22:14	1
NMeFOSAA	<1.2		4.8	1.2	ng/L		11/12/21 12:27	11/13/21 22:14	1
NEtFOSAA	<1.2		4.8	1.2	ng/L		11/12/21 12:27	11/13/21 22:14	1
NMeFOSE	<1.3		3.8	1.3	ng/L		11/12/21 12:27	11/13/21 22:14	1

Eurofins TestAmerica, Chicago



# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing 1E-2108003

Job ID: 500-208032-1

**Client Sample ID: BTW-2**

**Lab Sample ID: 500-208032-1**

**Date Collected: 11/05/21 09:50**

**Matrix: Water**

**Date Received: 11/06/21 09:55**

**Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
NEtFOSE	<0.82		1.9	0.82	ng/L		11/12/21 12:27	11/13/21 22:14	1
4:2 FTS	<0.23		1.9	0.23	ng/L		11/12/21 12:27	11/13/21 22:14	1
<b>6:2 FTS</b>	<b>6.9</b>		4.8	2.4	ng/L		11/12/21 12:27	11/13/21 22:14	1
8:2 FTS	<0.44		1.9	0.44	ng/L		11/12/21 12:27	11/13/21 22:14	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.38		1.9	0.38	ng/L		11/12/21 12:27	11/13/21 22:14	1
HFPO-DA (GenX)	<1.4		3.8	1.4	ng/L		11/12/21 12:27	11/13/21 22:14	1
9CI-PF3ONS	<0.23		1.9	0.23	ng/L		11/12/21 12:27	11/13/21 22:14	1
11CI-PF3OUdS	<0.31		1.9	0.31	ng/L		11/12/21 12:27	11/13/21 22:14	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	68		25 - 150				11/12/21 12:27	11/13/21 22:14	1
13C5 PFPeA	99		25 - 150				11/12/21 12:27	11/13/21 22:14	1
13C2 PFHxA	118		25 - 150				11/12/21 12:27	11/13/21 22:14	1
13C4 PFHpA	113		25 - 150				11/12/21 12:27	11/13/21 22:14	1
13C4 PFOA	108		25 - 150				11/12/21 12:27	11/13/21 22:14	1
13C5 PFNA	117		25 - 150				11/12/21 12:27	11/13/21 22:14	1
13C2 PFDA	110		25 - 150				11/12/21 12:27	11/13/21 22:14	1
13C2 PFUnA	118		25 - 150				11/12/21 12:27	11/13/21 22:14	1
13C2 PFDoA	103		25 - 150				11/12/21 12:27	11/13/21 22:14	1
13C2 PFTeDA	90		25 - 150				11/12/21 12:27	11/13/21 22:14	1
13C3 PFBS	120		25 - 150				11/12/21 12:27	11/13/21 22:14	1
18O2 PFHxS	109		25 - 150				11/12/21 12:27	11/13/21 22:14	1
13C4 PFOS	113		25 - 150				11/12/21 12:27	11/13/21 22:14	1
13C8 FOSA	106		10 - 150				11/12/21 12:27	11/13/21 22:14	1
d3-NMeFOSAA	105		25 - 150				11/12/21 12:27	11/13/21 22:14	1
d5-NEtFOSAA	109		25 - 150				11/12/21 12:27	11/13/21 22:14	1
d-N-MeFOSA-M	90		10 - 150				11/12/21 12:27	11/13/21 22:14	1
d-N-EtFOSA-M	88		10 - 150				11/12/21 12:27	11/13/21 22:14	1
d7-N-MeFOSE-M	79		10 - 150				11/12/21 12:27	11/13/21 22:14	1
d9-N-EtFOSE-M	90		10 - 150				11/12/21 12:27	11/13/21 22:14	1
M2-4:2 FTS	122		25 - 150				11/12/21 12:27	11/13/21 22:14	1
M2-6:2 FTS	101		25 - 150				11/12/21 12:27	11/13/21 22:14	1
M2-8:2 FTS	115		25 - 150				11/12/21 12:27	11/13/21 22:14	1
13C3 HFPO-DA	96		25 - 150				11/12/21 12:27	11/13/21 22:14	1
13C2 10:2 FTS	130		25 - 150				11/12/21 12:27	11/13/21 22:14	1

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing 1E-2108003

Job ID: 500-208032-1

**Client Sample ID: Trip Blank**

**Lab Sample ID: 500-208032-2**

**Date Collected: 11/05/21 00:00**

**Matrix: Water**

**Date Received: 11/06/21 09:55**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			11/15/21 11:44	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			11/15/21 11:44	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			11/15/21 11:44	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			11/15/21 11:44	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			11/15/21 11:44	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			11/15/21 11:44	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			11/15/21 11:44	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			11/15/21 11:44	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			11/15/21 11:44	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			11/15/21 11:44	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			11/15/21 11:44	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			11/15/21 11:44	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			11/15/21 11:44	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			11/15/21 11:44	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			11/15/21 11:44	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			11/15/21 11:44	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			11/15/21 11:44	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			11/15/21 11:44	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			11/15/21 11:44	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			11/15/21 11:44	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			11/15/21 11:44	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			11/15/21 11:44	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			11/15/21 11:44	1
Benzene	<0.15		0.50	0.15	ug/L			11/15/21 11:44	1
Bromobenzene	<0.36		1.0	0.36	ug/L			11/15/21 11:44	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			11/15/21 11:44	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			11/15/21 11:44	1
Bromoform	<0.48		1.0	0.48	ug/L			11/15/21 11:44	1
Bromomethane	<0.80		3.0	0.80	ug/L			11/15/21 11:44	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			11/15/21 11:44	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			11/15/21 11:44	1
Chloroethane	<0.51		1.0	0.51	ug/L			11/15/21 11:44	1
Chloroform	<0.37		2.0	0.37	ug/L			11/15/21 11:44	1
Chloromethane	<0.32		1.0	0.32	ug/L			11/15/21 11:44	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			11/15/21 11:44	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			11/15/21 11:44	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			11/15/21 11:44	1
Dibromomethane	<0.27		1.0	0.27	ug/L			11/15/21 11:44	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			11/15/21 11:44	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			11/15/21 11:44	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			11/15/21 11:44	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			11/15/21 11:44	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			11/15/21 11:44	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			11/15/21 11:44	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			11/15/21 11:44	1
Naphthalene	<0.34		1.0	0.34	ug/L			11/15/21 11:44	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			11/15/21 11:44	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			11/15/21 11:44	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			11/15/21 11:44	1

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing 1E-2108003

Job ID: 500-208032-1

**Client Sample ID: Trip Blank**

**Lab Sample ID: 500-208032-2**

**Date Collected: 11/05/21 00:00**

**Matrix: Water**

**Date Received: 11/06/21 09:55**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			11/15/21 11:44	1
Styrene	<0.39		1.0	0.39	ug/L			11/15/21 11:44	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			11/15/21 11:44	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			11/15/21 11:44	1
Toluene	<0.15		0.50	0.15	ug/L			11/15/21 11:44	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			11/15/21 11:44	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			11/15/21 11:44	1
Trichloroethene	<0.16		0.50	0.16	ug/L			11/15/21 11:44	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			11/15/21 11:44	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			11/15/21 11:44	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			11/15/21 11:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		75 - 126		11/15/21 11:44	1
4-Bromofluorobenzene (Surr)	86		72 - 124		11/15/21 11:44	1
Dibromofluoromethane (Surr)	93		75 - 120		11/15/21 11:44	1
Toluene-d8 (Surr)	96		75 - 120		11/15/21 11:44	1

# Definitions/Glossary

Client: Giles Engineering Associates  
Project/Site: 301 Main Martinizing 1E-2108003

Job ID: 500-208032-1

## Qualifiers

### GC/MS VOA

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

### LCMS

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

## Glossary

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

# QC Association Summary

Client: Giles Engineering Associates  
Project/Site: 301 Main Martinizing 1E-2108003

Job ID: 500-208032-1

## GC/MS VOA

### Analysis Batch: 628837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-208032-1	BTW-2	Total/NA	Water	8260B	
500-208032-2	Trip Blank	Total/NA	Water	8260B	
MB 500-628837/6	Method Blank	Total/NA	Water	8260B	
LCS 500-628837/4	Lab Control Sample	Total/NA	Water	8260B	

## LCMS

### Prep Batch: 542231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-208032-1	BTW-2	Total/NA	Water	3535	
MB 320-542231/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-542231/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-542231/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

### Analysis Batch: 542509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-208032-1	BTW-2	Total/NA	Water	537 (modified)	542231
MB 320-542231/1-A	Method Blank	Total/NA	Water	537 (modified)	542231
LCS 320-542231/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	542231
LCSD 320-542231/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	542231

# Surrogate Summary

Client: Giles Engineering Associates  
Project/Site: 301 Main Martinizing 1E-2108003

Job ID: 500-208032-1

**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	BFB	DBFM	TOL
		(75-126)	(72-124)	(75-120)	(75-120)
500-208032-1	BTW-2	103	85	98	96
500-208032-2	Trip Blank	100	86	93	96
LCS 500-628837/4	Lab Control Sample	98	87	97	97
MB 500-628837/6	Method Blank	102	87	97	97

### Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing 1E-2108003

Job ID: 500-208032-1

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

**Lab Sample ID: MB 500-628837/6**  
**Matrix: Water**  
**Analysis Batch: 628837**

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			11/15/21 11:16	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			11/15/21 11:16	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			11/15/21 11:16	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			11/15/21 11:16	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			11/15/21 11:16	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			11/15/21 11:16	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			11/15/21 11:16	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			11/15/21 11:16	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			11/15/21 11:16	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			11/15/21 11:16	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			11/15/21 11:16	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			11/15/21 11:16	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			11/15/21 11:16	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			11/15/21 11:16	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			11/15/21 11:16	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			11/15/21 11:16	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			11/15/21 11:16	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			11/15/21 11:16	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			11/15/21 11:16	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			11/15/21 11:16	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			11/15/21 11:16	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			11/15/21 11:16	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			11/15/21 11:16	1
Benzene	<0.15		0.50	0.15	ug/L			11/15/21 11:16	1
Bromobenzene	<0.36		1.0	0.36	ug/L			11/15/21 11:16	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			11/15/21 11:16	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			11/15/21 11:16	1
Bromoform	<0.48		1.0	0.48	ug/L			11/15/21 11:16	1
Bromomethane	<0.80		3.0	0.80	ug/L			11/15/21 11:16	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			11/15/21 11:16	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			11/15/21 11:16	1
Chloroethane	<0.51		1.0	0.51	ug/L			11/15/21 11:16	1
Chloroform	<0.37		2.0	0.37	ug/L			11/15/21 11:16	1
Chloromethane	<0.32		1.0	0.32	ug/L			11/15/21 11:16	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			11/15/21 11:16	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			11/15/21 11:16	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			11/15/21 11:16	1
Dibromomethane	<0.27		1.0	0.27	ug/L			11/15/21 11:16	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			11/15/21 11:16	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			11/15/21 11:16	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			11/15/21 11:16	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			11/15/21 11:16	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			11/15/21 11:16	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			11/15/21 11:16	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			11/15/21 11:16	1
Naphthalene	<0.34		1.0	0.34	ug/L			11/15/21 11:16	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			11/15/21 11:16	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			11/15/21 11:16	1

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing 1E-2108003

Job ID: 500-208032-1

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

**Lab Sample ID: MB 500-628837/6**  
**Matrix: Water**  
**Analysis Batch: 628837**

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			11/15/21 11:16	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			11/15/21 11:16	1
Styrene	<0.39		1.0	0.39	ug/L			11/15/21 11:16	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			11/15/21 11:16	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			11/15/21 11:16	1
Toluene	<0.15		0.50	0.15	ug/L			11/15/21 11:16	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			11/15/21 11:16	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			11/15/21 11:16	1
Trichloroethene	<0.16		0.50	0.16	ug/L			11/15/21 11:16	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			11/15/21 11:16	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			11/15/21 11:16	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			11/15/21 11:16	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	102		75 - 126		11/15/21 11:16	1
4-Bromofluorobenzene (Surr)	87		72 - 124		11/15/21 11:16	1
Dibromofluoromethane (Surr)	97		75 - 120		11/15/21 11:16	1
Toluene-d8 (Surr)	97		75 - 120		11/15/21 11:16	1

**Lab Sample ID: LCS 500-628837/4**  
**Matrix: Water**  
**Analysis Batch: 628837**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	51.5		ug/L		103	70 - 125
1,1,1,2-Tetrachloroethane	50.0	37.1		ug/L		74	62 - 140
1,1,2-Trichloroethane	50.0	42.4		ug/L		85	71 - 130
1,1-Dichloroethane	50.0	48.4		ug/L		97	70 - 125
1,1-Dichloroethene	50.0	51.7		ug/L		103	67 - 122
1,1-Dichloropropene	50.0	51.2		ug/L		102	70 - 121
1,2,3-Trichlorobenzene	50.0	46.9		ug/L		94	51 - 145
1,2,3-Trichloropropane	50.0	39.4		ug/L		79	50 - 133
1,2,4-Trichlorobenzene	50.0	45.2		ug/L		90	57 - 137
1,2,4-Trimethylbenzene	50.0	46.8		ug/L		94	70 - 123
1,2-Dibromo-3-Chloropropane	50.0	35.7		ug/L		71	56 - 123
Ethylene Dibromide	50.0	40.7		ug/L		81	70 - 125
1,2-Dichlorobenzene	50.0	44.9		ug/L		90	70 - 125
1,2-Dichloroethane	50.0	48.6		ug/L		97	68 - 127
1,2-Dichloropropane	50.0	45.6		ug/L		91	67 - 130
1,3,5-Trimethylbenzene	50.0	47.6		ug/L		95	70 - 123
1,3-Dichlorobenzene	50.0	45.5		ug/L		91	70 - 125
1,3-Dichloropropane	50.0	42.6		ug/L		85	62 - 136
1,4-Dichlorobenzene	50.0	45.1		ug/L		90	70 - 120
2,2-Dichloropropane	50.0	46.3		ug/L		93	58 - 139
2-Chlorotoluene	50.0	46.1		ug/L		92	70 - 125
4-Chlorotoluene	50.0	44.9		ug/L		90	68 - 124
Benzene	50.0	48.2		ug/L		96	70 - 120

Eurofins TestAmerica, Chicago



# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing 1E-2108003

Job ID: 500-208032-1

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

**Lab Sample ID: LCS 500-628837/4**  
**Matrix: Water**  
**Analysis Batch: 628837**

**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	40.4		ug/L		81	70 - 122
Bromochloromethane	50.0	49.0		ug/L		98	65 - 122
Bromodichloromethane	50.0	40.5		ug/L		81	69 - 120
Bromoform	50.0	31.7		ug/L		63	56 - 132
Bromomethane	50.0	62.8		ug/L		126	40 - 152
Carbon tetrachloride	50.0	50.4		ug/L		101	59 - 133
Chlorobenzene	50.0	47.6		ug/L		95	70 - 120
Chloroethane	50.0	65.8		ug/L		132	48 - 136
Chloroform	50.0	47.1		ug/L		94	70 - 120
Chloromethane	50.0	56.0		ug/L		112	56 - 152
cis-1,2-Dichloroethene	50.0	48.2		ug/L		96	70 - 125
cis-1,3-Dichloropropene	50.0	39.6		ug/L		79	64 - 127
Dibromochloromethane	50.0	36.0		ug/L		72	68 - 125
Dibromomethane	50.0	46.0		ug/L		92	70 - 120
Dichlorodifluoromethane	50.0	62.6		ug/L		125	40 - 159
Ethylbenzene	50.0	48.9		ug/L		98	70 - 123
Hexachlorobutadiene	50.0	49.4		ug/L		99	51 - 150
Isopropylbenzene	50.0	47.4		ug/L		95	70 - 126
Methyl tert-butyl ether	50.0	32.9		ug/L		66	55 - 123
Methylene Chloride	50.0	47.7		ug/L		95	69 - 125
Naphthalene	50.0	48.2		ug/L		96	53 - 144
n-Butylbenzene	50.0	51.7		ug/L		103	68 - 125
N-Propylbenzene	50.0	47.1		ug/L		94	69 - 127
p-Isopropyltoluene	50.0	52.4		ug/L		105	70 - 125
sec-Butylbenzene	50.0	50.1		ug/L		100	70 - 123
Styrene	50.0	45.6		ug/L		91	70 - 120
tert-Butylbenzene	50.0	51.1		ug/L		102	70 - 121
Tetrachloroethene	50.0	49.4		ug/L		99	70 - 128
Toluene	50.0	47.1		ug/L		94	70 - 125
trans-1,2-Dichloroethene	50.0	49.1		ug/L		98	70 - 125
trans-1,3-Dichloropropene	50.0	36.9		ug/L		74	62 - 128
Trichloroethene	50.0	49.8		ug/L		100	70 - 125
Trichlorofluoromethane	50.0	52.5		ug/L		105	55 - 128
Vinyl chloride	50.0	57.6		ug/L		115	64 - 126
Xylenes, Total	100	105		ug/L		105	70 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	98		75 - 126
4-Bromofluorobenzene (Surr)	87		72 - 124
Dibromofluoromethane (Surr)	97		75 - 120
Toluene-d8 (Surr)	97		75 - 120

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing 1E-2108003

Job ID: 500-208032-1

## Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-542231/1-A

Matrix: Water

Analysis Batch: 542509

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 542231

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Perfluorobutanoic acid (PFBA)	<2.4		5.0	2.4	ng/L		11/12/21 12:27	11/13/21 21:32	1
Perfluoropentanoic acid (PFPeA)	<0.49		2.0	0.49	ng/L		11/12/21 12:27	11/13/21 21:32	1
Perfluorohexanoic acid (PFHxA)	<0.58		2.0	0.58	ng/L		11/12/21 12:27	11/13/21 21:32	1
Perfluoroheptanoic acid (PFHpA)	<0.25		2.0	0.25	ng/L		11/12/21 12:27	11/13/21 21:32	1
Perfluorooctanoic acid (PFOA)	<0.85		2.0	0.85	ng/L		11/12/21 12:27	11/13/21 21:32	1
Perfluorononanoic acid (PFNA)	<0.27		2.0	0.27	ng/L		11/12/21 12:27	11/13/21 21:32	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	0.31	ng/L		11/12/21 12:27	11/13/21 21:32	1
Perfluoroundecanoic acid (PFUnA)	<1.1		2.0	1.1	ng/L		11/12/21 12:27	11/13/21 21:32	1
Perfluorododecanoic acid (PFDoA)	<0.55		2.0	0.55	ng/L		11/12/21 12:27	11/13/21 21:32	1
Perfluorotridecanoic acid (PFTrDA)	<1.3		2.0	1.3	ng/L		11/12/21 12:27	11/13/21 21:32	1
Perfluorotetradecanoic acid (PFTeA)	<0.73		2.0	0.73	ng/L		11/12/21 12:27	11/13/21 21:32	1
Perfluorobutanesulfonic acid (PFBS)	<0.20		2.0	0.20	ng/L		11/12/21 12:27	11/13/21 21:32	1
Perfluoropentanesulfonic acid (PFPeS)	<0.30		2.0	0.30	ng/L		11/12/21 12:27	11/13/21 21:32	1
Perfluorohexanesulfonic acid (PFHxS)	<0.57		2.0	0.57	ng/L		11/12/21 12:27	11/13/21 21:32	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.19		2.0	0.19	ng/L		11/12/21 12:27	11/13/21 21:32	1
Perfluorooctanesulfonic acid (PFOS)	<0.54		2.0	0.54	ng/L		11/12/21 12:27	11/13/21 21:32	1
Perfluorononanesulfonic acid (PFNS)	<0.37		2.0	0.37	ng/L		11/12/21 12:27	11/13/21 21:32	1
Perfluorodecanesulfonic acid (PFDS)	<0.32		2.0	0.32	ng/L		11/12/21 12:27	11/13/21 21:32	1
Perfluorododecanesulfonic acid (PFDoS)	<0.97		2.0	0.97	ng/L		11/12/21 12:27	11/13/21 21:32	1
Perfluorooctanesulfonamide (FOSA)	<0.98		2.0	0.98	ng/L		11/12/21 12:27	11/13/21 21:32	1
NEtFOSA	<0.87		2.0	0.87	ng/L		11/12/21 12:27	11/13/21 21:32	1
NMeFOSA	<0.43		2.0	0.43	ng/L		11/12/21 12:27	11/13/21 21:32	1
NMeFOSAA	<1.2		5.0	1.2	ng/L		11/12/21 12:27	11/13/21 21:32	1
NEtFOSAA	<1.3		5.0	1.3	ng/L		11/12/21 12:27	11/13/21 21:32	1
NMeFOSE	<1.4		4.0	1.4	ng/L		11/12/21 12:27	11/13/21 21:32	1
NEtFOSE	<0.85		2.0	0.85	ng/L		11/12/21 12:27	11/13/21 21:32	1
4:2 FTS	<0.24		2.0	0.24	ng/L		11/12/21 12:27	11/13/21 21:32	1
6:2 FTS	<2.5		5.0	2.5	ng/L		11/12/21 12:27	11/13/21 21:32	1
8:2 FTS	<0.46		2.0	0.46	ng/L		11/12/21 12:27	11/13/21 21:32	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.40		2.0	0.40	ng/L		11/12/21 12:27	11/13/21 21:32	1
HFPO-DA (GenX)	<1.5		4.0	1.5	ng/L		11/12/21 12:27	11/13/21 21:32	1
9CI-PF3ONS	<0.24		2.0	0.24	ng/L		11/12/21 12:27	11/13/21 21:32	1
11CI-PF3OUdS	<0.32		2.0	0.32	ng/L		11/12/21 12:27	11/13/21 21:32	1

Isotope Dilution	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C4 PFBA	117		25 - 150	11/12/21 12:27	11/13/21 21:32	1
13C5 PFPeA	123		25 - 150	11/12/21 12:27	11/13/21 21:32	1
13C2 PFHxA	136		25 - 150	11/12/21 12:27	11/13/21 21:32	1
13C4 PFHpA	127		25 - 150	11/12/21 12:27	11/13/21 21:32	1
13C4 PFOA	126		25 - 150	11/12/21 12:27	11/13/21 21:32	1
13C5 PFNA	123		25 - 150	11/12/21 12:27	11/13/21 21:32	1
13C2 PFDA	122		25 - 150	11/12/21 12:27	11/13/21 21:32	1
13C2 PFUnA	131		25 - 150	11/12/21 12:27	11/13/21 21:32	1
13C2 PFDoA	114		25 - 150	11/12/21 12:27	11/13/21 21:32	1
13C2 PFTeDA	112		25 - 150	11/12/21 12:27	11/13/21 21:32	1

Eurofins TestAmerica, Chicago

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing 1E-2108003

Job ID: 500-208032-1

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: MB 320-542231/1-A**  
**Matrix: Water**  
**Analysis Batch: 542509**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 542231**

Isotope Dilution	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C3 PFBS	145		25 - 150	11/12/21 12:27	11/13/21 21:32	1
18O2 PFHxS	115		25 - 150	11/12/21 12:27	11/13/21 21:32	1
13C4 PFOS	124		25 - 150	11/12/21 12:27	11/13/21 21:32	1
13C8 FOSA	111		10 - 150	11/12/21 12:27	11/13/21 21:32	1
d3-NMeFOSAA	126		25 - 150	11/12/21 12:27	11/13/21 21:32	1
d5-NEtFOSAA	137		25 - 150	11/12/21 12:27	11/13/21 21:32	1
d-N-MeFOSA-M	97		10 - 150	11/12/21 12:27	11/13/21 21:32	1
d-N-EtFOSA-M	108		10 - 150	11/12/21 12:27	11/13/21 21:32	1
d7-N-MeFOSE-M	100		10 - 150	11/12/21 12:27	11/13/21 21:32	1
d9-N-EtFOSE-M	112		10 - 150	11/12/21 12:27	11/13/21 21:32	1
M2-4:2 FTS	116		25 - 150	11/12/21 12:27	11/13/21 21:32	1
M2-6:2 FTS	105		25 - 150	11/12/21 12:27	11/13/21 21:32	1
M2-8:2 FTS	115		25 - 150	11/12/21 12:27	11/13/21 21:32	1
13C3 HFPO-DA	112		25 - 150	11/12/21 12:27	11/13/21 21:32	1
13C2 10:2 FTS	104		25 - 150	11/12/21 12:27	11/13/21 21:32	1

**Lab Sample ID: LCS 320-542231/2-A**  
**Matrix: Water**  
**Analysis Batch: 542509**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 542231**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluoropentanoic acid (PFPeA)	40.0	38.9		ng/L		97	60 - 135
Perfluorohexanoic acid (PFHxA)	40.0	38.7		ng/L		97	60 - 135
Perfluoroheptanoic acid (PFHpA)	40.0	40.1		ng/L		100	60 - 135
Perfluorooctanoic acid (PFOA)	40.0	39.4		ng/L		98	60 - 135
Perfluorononanoic acid (PFNA)	40.0	40.3		ng/L		101	60 - 135
Perfluorodecanoic acid (PFDA)	40.0	39.5		ng/L		99	60 - 135
Perfluoroundecanoic acid (PFUnA)	40.0	40.8		ng/L		102	60 - 135
Perfluorododecanoic acid (PFDoA)	40.0	41.9		ng/L		105	60 - 135
Perfluorotridecanoic acid (PFTrDA)	40.0	37.8		ng/L		94	60 - 135
Perfluorotetradecanoic acid (PFTeA)	40.0	38.0		ng/L		95	60 - 135
Perfluorobutanesulfonic acid (PFBS)	35.4	31.0		ng/L		88	60 - 135
Perfluoropentanesulfonic acid (PFPeS)	37.5	37.1		ng/L		99	60 - 135
Perfluorohexanesulfonic acid (PFHxS)	36.4	35.4		ng/L		97	60 - 135
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	37.0		ng/L		97	60 - 135
Perfluorooctanesulfonic acid (PFOS)	37.1	35.1		ng/L		95	60 - 135
Perfluorononanesulfonic acid (PFNS)	38.4	38.3		ng/L		100	60 - 135
Perfluorodecanesulfonic acid (PFDS)	38.6	38.6		ng/L		100	60 - 135
Perfluorododecanesulfonic acid (PFDoS)	38.7	36.8		ng/L		95	60 - 135

Eurofins TestAmerica, Chicago

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing 1E-2108003

Job ID: 500-208032-1

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-542231/2-A**  
**Matrix: Water**  
**Analysis Batch: 542509**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 542231**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorooctanesulfonamide (FOSA)	40.0	40.8		ng/L		102	60 - 135
NEtFOSA	40.0	42.1		ng/L		105	60 - 135
NMeFOSA	40.0	44.9		ng/L		112	60 - 135
NMeFOSAA	40.0	38.9		ng/L		97	60 - 135
NEtFOSAA	40.0	40.1		ng/L		100	60 - 135
NMeFOSE	40.0	40.9		ng/L		102	60 - 135
NEtFOSE	40.0	37.1		ng/L		93	60 - 135
4:2 FTS	37.4	38.1		ng/L		102	60 - 135
6:2 FTS	37.9	38.3		ng/L		101	60 - 135
8:2 FTS	38.3	34.2		ng/L		89	60 - 135
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	37.7	37.9		ng/L		101	60 - 135
HFPO-DA (GenX)	40.0	42.0		ng/L		105	60 - 135
9Cl-PF3ONS	37.3	34.7		ng/L		93	60 - 135
11Cl-PF3OUdS	37.7	37.6		ng/L		100	60 - 135

Isotope Dilution	LCS LCS		Limits
	%Recovery	Qualifier	
13C4 PFBA	114		25 - 150
13C5 PFPeA	121		25 - 150
13C2 PFHxA	126		25 - 150
13C4 PFHpA	119		25 - 150
13C4 PFOA	121		25 - 150
13C5 PFNA	115		25 - 150
13C2 PFDA	120		25 - 150
13C2 PFUnA	120		25 - 150
13C2 PFDoA	114		25 - 150
13C2 PFTeDA	111		25 - 150
13C3 PFBS	135		25 - 150
18O2 PFHxS	118		25 - 150
13C4 PFOS	121		25 - 150
13C8 FOSA	109		10 - 150
d3-NMeFOSAA	119		25 - 150
d5-NEtFOSAA	124		25 - 150
d-N-MeFOSA-M	96		10 - 150
d-N-EtFOSA-M	100		10 - 150
d7-N-MeFOSE-M	101		10 - 150
d9-N-EtFOSE-M	112		10 - 150
M2-4:2 FTS	106		25 - 150
M2-6:2 FTS	93		25 - 150
M2-8:2 FTS	114		25 - 150
13C3 HFPO-DA	107		25 - 150
13C2 10:2 FTS	97		25 - 150

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing 1E-2108003

Job ID: 500-208032-1

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCSD 320-542231/3-A**

**Matrix: Water**

**Analysis Batch: 542509**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 542231**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	40.0	40.4		ng/L		101	60 - 135	1	30
Perfluoropentanoic acid (PFPeA)	40.0	36.3		ng/L		91	60 - 135	7	30
Perfluorohexanoic acid (PFHxA)	40.0	36.8		ng/L		92	60 - 135	5	30
Perfluoroheptanoic acid (PFHpA)	40.0	41.5		ng/L		104	60 - 135	3	30
Perfluorooctanoic acid (PFOA)	40.0	40.9		ng/L		102	60 - 135	4	30
Perfluorononanoic acid (PFNA)	40.0	40.4		ng/L		101	60 - 135	0	30
Perfluorodecanoic acid (PFDA)	40.0	40.7		ng/L		102	60 - 135	3	30
Perfluoroundecanoic acid (PFUnA)	40.0	42.2		ng/L		105	60 - 135	3	30
Perfluorododecanoic acid (PFDoA)	40.0	45.0		ng/L		113	60 - 135	7	30
Perfluorotridecanoic acid (PFTrDA)	40.0	37.1		ng/L		93	60 - 135	2	30
Perfluorotetradecanoic acid (PFTeA)	40.0	37.5		ng/L		94	60 - 135	1	30
Perfluorobutanesulfonic acid (PFBS)	35.4	31.3		ng/L		88	60 - 135	1	30
Perfluoropentanesulfonic acid (PFPeS)	37.5	36.0		ng/L		96	60 - 135	3	30
Perfluorohexanesulfonic acid (PFHxS)	36.4	33.6		ng/L		92	60 - 135	5	30
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	37.9		ng/L		99	60 - 135	2	30
Perfluorooctanesulfonic acid (PFOS)	37.1	36.0		ng/L		97	60 - 135	2	30
Perfluorononanesulfonic acid (PFNS)	38.4	40.3		ng/L		105	60 - 135	5	30
Perfluorodecanesulfonic acid (PFDS)	38.6	39.6		ng/L		103	60 - 135	2	30
Perfluorododecanesulfonic acid (PFDoS)	38.7	36.2		ng/L		93	60 - 135	2	30
Perfluorooctanesulfonamide (FOSA)	40.0	42.5		ng/L		106	60 - 135	4	30
NEtFOSA	40.0	42.8		ng/L		107	60 - 135	2	30
NMeFOSA	40.0	43.5		ng/L		109	60 - 135	3	30
NMeFOSAA	40.0	39.6		ng/L		99	60 - 135	2	30
NEtFOSAA	40.0	37.8		ng/L		94	60 - 135	6	30
NMeFOSE	40.0	37.8		ng/L		95	60 - 135	8	30
NEtFOSE	40.0	36.6		ng/L		92	60 - 135	1	30
4:2 FTS	37.4	33.3		ng/L		89	60 - 135	13	30
6:2 FTS	37.9	39.2		ng/L		103	60 - 135	2	30
8:2 FTS	38.3	42.9		ng/L		112	60 - 135	22	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	37.7	40.8		ng/L		108	60 - 135	7	30
HFPO-DA (GenX)	40.0	42.1		ng/L		105	60 - 135	0	30
9CI-PF3ONS	37.3	38.4		ng/L		103	60 - 135	10	30
11CI-PF3OUdS	37.7	40.5		ng/L		107	60 - 135	7	30

Isotope Dilution	LCSD		Limits
	%Recovery	Qualifier	
13C4 PFBA	104		25 - 150
13C5 PFPeA	111		25 - 150
13C2 PFHxA	116		25 - 150

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing 1E-2108003

Job ID: 500-208032-1

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 320-542231/3-A  
 Matrix: Water  
 Analysis Batch: 542509

Client Sample ID: Lab Control Sample Dup  
 Prep Type: Total/NA  
 Prep Batch: 542231

Isotope Dilution	LCSD		Limits
	%Recovery	Qualifier	
13C4 PFHpA	112		25 - 150
13C4 PFOA	106		25 - 150
13C5 PFNA	102		25 - 150
13C2 PFDA	106		25 - 150
13C2 PFUnA	107		25 - 150
13C2 PFDoA	100		25 - 150
13C2 PFTeDA	96		25 - 150
13C3 PFBS	120		25 - 150
18O2 PFHxS	103		25 - 150
13C4 PFOS	102		25 - 150
13C8 FOSA	92		10 - 150
d3-NMeFOSAA	104		25 - 150
d5-NEtFOSAA	112		25 - 150
d-N-MeFOSA-M	85		10 - 150
d-N-EtFOSA-M	85		10 - 150
d7-N-MeFOSE-M	101		10 - 150
d9-N-EtFOSE-M	102		10 - 150
M2-4:2 FTS	100		25 - 150
M2-6:2 FTS	83		25 - 150
M2-8:2 FTS	90		25 - 150
13C3 HFPO-DA	102		25 - 150
13C2 10:2 FTS	84		25 - 150



# Lab Chronicle

Client: Giles Engineering Associates  
Project/Site: 301 Main Martinizing 1E-2108003

Job ID: 500-208032-1

**Client Sample ID: BTW-2**

**Date Collected: 11/05/21 09:50**

**Date Received: 11/06/21 09:55**

**Lab Sample ID: 500-208032-1**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	628837	11/15/21 12:11	STW	TAL CHI
Total/NA	Prep	3535			542231	11/12/21 12:27	KJW	TAL SAC
Total/NA	Analysis	537 (modified)		1	542509	11/13/21 22:14	S1M	TAL SAC

**Client Sample ID: Trip Blank**

**Date Collected: 11/05/21 00:00**

**Date Received: 11/06/21 09:55**

**Lab Sample ID: 500-208032-2**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	628837	11/15/21 11:44	STW	TAL CHI

### Laboratory References:

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

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

# Accreditation/Certification Summary

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing 1E-2108003

Job ID: 500-208032-1

## Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-22

## Laboratory: Eurofins TestAmerica, Sacramento

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

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	17-020	02-20-24
ANAB	Dept. of Defense ELAP	L2468	01-20-24
ANAB	Dept. of Energy	L2468.01	01-20-24
ANAB	ISO/IEC 17025	L2468	01-20-24
Arizona	State	AZ0708	08-11-22
Arkansas DEQ	State	88-0691	06-17-21 *
California	State	2897	01-31-22
Colorado	State	CA0004	08-31-22
Florida	NELAP	E87570	06-30-22
Georgia	State	4040	01-29-22
Hawaii	State	<cert No.>	01-29-22
Illinois	NELAP	200060	03-18-22
Louisiana	NELAP	01944	06-30-22
Maine	State	CA00004	04-14-22
Michigan	State	9947	01-29-22
Nevada	State	CA00044	08-31-22
New Hampshire	NELAP	2997	04-18-22
New Jersey	NELAP	CA005	06-30-22
New York	NELAP	11666	04-01-22
Ohio	State	41252	01-29-22
Oregon	NELAP	4040	01-29-22
Texas	NELAP	T104704399-19-13	05-31-22
US Fish & Wildlife	US Federal Programs	58448	07-31-22
USDA	US Federal Programs	P330-18-00239	07-31-24
Utah	NELAP	CA000442021-12	03-01-22
Virginia	NELAP	460278	03-14-22
Washington	State	C581	05-05-22
West Virginia (DW)	State	9930C	12-31-21
Wisconsin	State	998204680	08-31-22
Wyoming	State Program	8TMS-L	01-28-19 *

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





# Login Sample Receipt Checklist

Client: Giles Engineering Associates

Job Number: 500-208032-1

**Login Number: 208032**

**List Source: Eurofins TestAmerica, Chicago**

**List Number: 1**

**Creator: Buckley, Paula M**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> 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	2.7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <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: Giles Engineering Associates

Job Number: 500-208032-1

**Login Number: 208032**

**List Number: 2**

**Creator: Simmons, Jason C**

**List Source: Eurofins TestAmerica, Sacramento**

**List Creation: 11/09/21 01:46 PM**

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	1715108
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	1.8c
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?	False	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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

# Isotope Dilution Summary

Client: Giles Engineering Associates  
 Project/Site: 301 Main Martinizing 1E-2108003

Job ID: 500-208032-1

## 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)	C4PFHA (25-150)	PFOA (25-150)	PFNA (25-150)	PFDA (25-150)	PFUnA (25-150)
500-208032-1	BTW-2	68	99	118	113	108	117	110	118
LCS 320-542231/2-A	Lab Control Sample	114	121	126	119	121	115	120	120
LCSD 320-542231/3-A	Lab Control Sample Dup	104	111	116	112	106	102	106	107
MB 320-542231/1-A	Method Blank	117	123	136	127	126	123	122	131

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFDoA (25-150)	PFTDA (25-150)	C3PFBS (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (10-150)	d3NMFOS (25-150)	d5NEFOS (25-150)
500-208032-1	BTW-2	103	90	120	109	113	106	105	109
LCS 320-542231/2-A	Lab Control Sample	114	111	135	118	121	109	119	124
LCSD 320-542231/3-A	Lab Control Sample Dup	100	96	120	103	102	92	104	112
MB 320-542231/1-A	Method Blank	114	112	145	115	124	111	126	137

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	dMeFOSA (10-150)	dEtFOSA (10-150)	NMFM (10-150)	NEFM (10-150)	M242FTS (25-150)	M262FTS (25-150)	M282FTS (25-150)	HFPODA (25-150)
500-208032-1	BTW-2	90	88	79	90	122	101	115	96
LCS 320-542231/2-A	Lab Control Sample	96	100	101	112	106	93	114	107
LCSD 320-542231/3-A	Lab Control Sample Dup	85	85	101	102	100	83	90	102
MB 320-542231/1-A	Method Blank	97	108	100	112	116	105	115	112

		M102FTS (25-150)
Lab Sample ID	Client Sample ID	
500-208032-1	BTW-2	130
LCS 320-542231/2-A	Lab Control Sample	97
LCSD 320-542231/3-A	Lab Control Sample Dup	84
MB 320-542231/1-A	Method Blank	104

### Surrogate Legend

- PFBA = 13C4 PFBA
- PFPeA = 13C5 PFPeA
- PFHxA = 13C2 PFHxA
- C4PFHA = 13C4 PFHpA
- PFOA = 13C4 PFOA
- PFNA = 13C5 PFNA
- PFDA = 13C2 PFDA
- PFUnA = 13C2 PFUnA
- PFDoA = 13C2 PFDoA
- PFTDA = 13C2 PFTeDA
- C3PFBS = 13C3 PFBS
- PFHxS = 18O2 PFHxS
- PFOS = 13C4 PFOS
- PFOSA = 13C8 FOSA
- d3NMFOS = d3-NMeFOSAA
- d5NEFOS = d5-NEtFOSAA
- dMeFOSA = d-N-MeFOSA-M
- dEtFOSA = d-N-EtFOSA-M
- NMFM = d7-N-MeFOSE-M
- NEFM = d9-N-EtFOSE-M
- M242FTS = M2-4:2 FTS
- M262FTS = M2-6:2 FTS

# Isotope Dilution Summary

Client: Giles Engineering Associates  
Project/Site: 301 Main Martinizing 1E-2108003  
M282FTS = M2-8:2 FTS  
HFPODA = 13C3 HFPO-DA  
M102FTS = 13C2 10:2 FTS

Job ID: 500-208032-1

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## **APPENDIX E**

### **Analytical Laboratory Report (Sub-Slab Vapor)**

## ANALYTICAL REPORT

Eurofins TestAmerica, Knoxville  
5815 Middlebrook Pike  
Knoxville, TN 37921  
Tel: (865)291-3000

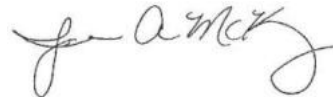
Laboratory Job ID: 140-24105-1

Client Project/Site: 301 MAIN ST/RACINE, WI/1EP-2107057

**For:**

Giles Engineering Associates  
N8 W 22350 Johnson Road  
Waukesha, Wisconsin 53186

Attn: Mr. Kevin Bugel



*Authorized for release by:  
8/16/2021 7:49:40 PM*

Jamie McKinney, Senior Project Manager  
(865)291-3000  
[Jamie.McKinney@Eurofinset.com](mailto:Jamie.McKinney@Eurofinset.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



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[www.eurofinsus.com/Env](http://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.*



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# Definitions/Glossary

Client: Giles Engineering Associates  
Project/Site: 301 MAIN ST/RACINE, WI/1EP-2107057

Job ID: 140-24105-1

## Qualifiers

### Air - GC/MS VOA

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

## Glossary

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

# Case Narrative

Client: Giles Engineering Associates  
Project/Site: 301 MAIN ST/RACINE, WI/1EP-2107057

Job ID: 140-24105-1

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## Job ID: 140-24105-1

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Laboratory: Eurofins TestAmerica, Knoxville

### Narrative

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#### Job Narrative 140-24105-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 8/6/2021 9:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice.

#### Receipt Exceptions

The Field Sampler was not listed on the Chain of Custody.

#### Air - GC/MS VOA

Methods TO 15 LL, TO-14A, TO-14A Low, TO-15: EPA methods TO-14A and TO-15 specify the use of humidified "zero air" as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of "zero air" by TestAmerica Knoxville.

Method TO-15: The continuing calibration verification (CCV) associated with batch 140-52686 exhibited % difference of > 30% for the following analyte(s) 3-Chloro-1-propene and 4-Methyl-2-pentanone (MIBK); however, the results were within the LCS acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 30% difference from the initial calibration. According to the laboratory standard operating procedure, the continuing calibration is acceptable if it meets the laboratory control sample acceptance criteria.

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



# Detection Summary

Client: Giles Engineering Associates  
Project/Site: 301 MAIN ST/RACINE, WI/1EP-2107057

Job ID: 140-24105-1

## Client Sample ID: VP-1

## Lab Sample ID: 140-24105-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	27	J B	180	14	ug/m3	13.2		TO-15	Total/NA
Tetrachloroethene	14000		200	40	ug/m3	13.2		TO-15	Total/NA
Trichloroethene	67	J	160	25	ug/m3	13.2		TO-15	Total/NA

## Client Sample ID: VP-2

## Lab Sample ID: 140-24105-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	19	J B	150	12	ug/m3	11.94		TO-15	Total/NA
Tetrachloroethene	8200		160	32	ug/m3	11.94		TO-15	Total/NA
Trichloroethene	21	J	130	21	ug/m3	11.94		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Knoxville

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 MAIN ST/RACINE, WI/1EP-2107057

Job ID: 140-24105-1

**Client Sample ID: VP-1**

**Lab Sample ID: 140-24105-1**

**Date Collected: 08/05/21 10:55**

**Matrix: Air**

**Date Received: 08/06/21 09:00**

**Sample Container: Summa Canister 6L**

**Method: TO-15 - Volatile Organic Compounds in Ambient Air**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		160	24	ug/m3			08/15/21 14:16	13.2
1,1,2,2-Tetrachloroethane	ND		200	61	ug/m3			08/15/21 14:16	13.2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		220	35	ug/m3			08/15/21 14:16	13.2
1,1,2-Trichloroethane	ND		160	42	ug/m3			08/15/21 14:16	13.2
1,1-Dichloroethane	ND		120	15	ug/m3			08/15/21 14:16	13.2
1,1-Dichloroethene	ND		120	20	ug/m3			08/15/21 14:16	13.2
1,2,4-Trichlorobenzene	ND		1100	110	ug/m3			08/15/21 14:16	13.2
1,2,4-Trimethylbenzene	ND		140	45	ug/m3			08/15/21 14:16	13.2
1,2-Dibromoethane (EDB)	ND		230	50	ug/m3			08/15/21 14:16	13.2
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		210	33	ug/m3			08/15/21 14:16	13.2
1,2-Dichlorobenzene	ND		350	62	ug/m3			08/15/21 14:16	13.2
1,2-Dichloroethane	ND		120	28	ug/m3			08/15/21 14:16	13.2
1,2-Dichloropropane	ND		140	35	ug/m3			08/15/21 14:16	13.2
1,3,5-Trimethylbenzene	ND		140	47	ug/m3			08/15/21 14:16	13.2
1,3-Butadiene	ND		130	21	ug/m3			08/15/21 14:16	13.2
1,3-Dichlorobenzene	ND		180	57	ug/m3			08/15/21 14:16	13.2
1,4-Dichlorobenzene	ND		180	56	ug/m3			08/15/21 14:16	13.2
2-Butanone (MEK)	ND		430	87	ug/m3			08/15/21 14:16	13.2
2-Hexanone	ND		240	35	ug/m3			08/15/21 14:16	13.2
3-Chloropropene	ND		92	22	ug/m3			08/15/21 14:16	13.2
4-Methyl-2-pentanone (MIBK)	ND		600	120	ug/m3			08/15/21 14:16	13.2
Acetone	ND		2600	490	ug/m3			08/15/21 14:16	13.2
Acrylonitrile	ND		640	64	ug/m3			08/15/21 14:16	13.2
Benzene	ND		94	26	ug/m3			08/15/21 14:16	13.2
Benzyl chloride	ND		300	59	ug/m3			08/15/21 14:16	13.2
Bromodichloromethane	ND		200	43	ug/m3			08/15/21 14:16	13.2
Bromoform	ND		300	73	ug/m3			08/15/21 14:16	13.2
Bromomethane	ND		110	18	ug/m3			08/15/21 14:16	13.2
Butane	ND		350	25	ug/m3			08/15/21 14:16	13.2
<b>Carbon disulfide</b>	<b>27</b>	<b>J B</b>	180	14	ug/m3			08/15/21 14:16	13.2
Carbon tetrachloride	ND		180	35	ug/m3			08/15/21 14:16	13.2
Chlorobenzene	ND		140	33	ug/m3			08/15/21 14:16	13.2
Chlorodifluoromethane	ND		100	19	ug/m3			08/15/21 14:16	13.2
Chloroethane	ND		77	14	ug/m3			08/15/21 14:16	13.2
Chloroform	ND		140	27	ug/m3			08/15/21 14:16	13.2
Chloromethane	ND		300	48	ug/m3			08/15/21 14:16	13.2
cis-1,2-Dichloroethene	ND		120	35	ug/m3			08/15/21 14:16	13.2
cis-1,3-Dichloropropene	ND		270	49	ug/m3			08/15/21 14:16	13.2
Cyclohexane	ND		200	20	ug/m3			08/15/21 14:16	13.2
Dibromochloromethane	ND		250	52	ug/m3			08/15/21 14:16	13.2
Dibromomethane	ND		420	42	ug/m3			08/15/21 14:16	13.2
Dichlorodifluoromethane	ND		150	49	ug/m3			08/15/21 14:16	13.2
Ethylbenzene	ND		130	43	ug/m3			08/15/21 14:16	13.2
Heptane	ND		240	28	ug/m3			08/15/21 14:16	13.2
Hexachlorobutadiene	ND		1600	120	ug/m3			08/15/21 14:16	13.2
Hexane	ND		210	17	ug/m3			08/15/21 14:16	13.2
Isopropylbenzene	ND		290	43	ug/m3			08/15/21 14:16	13.2
Methyl tert-butyl ether	ND		530	90	ug/m3			08/15/21 14:16	13.2

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 MAIN ST/RACINE, WI/1EP-2107057

Job ID: 140-24105-1

**Client Sample ID: VP-1**

**Lab Sample ID: 140-24105-1**

Date Collected: 08/05/21 10:55

Matrix: Air

Date Received: 08/06/21 09:00

Sample Container: Summa Canister 6L

**Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		510	490	ug/m3			08/15/21 14:16	13.2
m-Xylene & p-Xylene	ND		130	76	ug/m3			08/15/21 14:16	13.2
Naphthalene	ND		310	69	ug/m3			08/15/21 14:16	13.2
o-Xylene	ND		130	39	ug/m3			08/15/21 14:16	13.2
Propylbenzene	ND		290	40	ug/m3			08/15/21 14:16	13.2
Styrene	ND		120	36	ug/m3			08/15/21 14:16	13.2
<b>Tetrachloroethene</b>	<b>14000</b>		200	40	ug/m3			08/15/21 14:16	13.2
Toluene	ND		550	66	ug/m3			08/15/21 14:16	13.2
trans-1,2-Dichloroethene	ND		120	29	ug/m3			08/15/21 14:16	13.2
trans-1,3-Dichloropropene	ND		130	32	ug/m3			08/15/21 14:16	13.2
<b>Trichloroethene</b>	<b>67 J</b>		160	25	ug/m3			08/15/21 14:16	13.2
Trichlorofluoromethane	ND		160	21	ug/m3			08/15/21 14:16	13.2
Vinyl chloride	ND		150	27	ug/m3			08/15/21 14:16	13.2
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	94		60 - 140					08/15/21 14:16	13.2

**Client Sample ID: VP-2**

**Lab Sample ID: 140-24105-2**

Date Collected: 08/05/21 11:15

Matrix: Air

Date Received: 08/06/21 09:00

Sample Container: Summa Canister 6L

**Method: TO-15 - Volatile Organic Compounds in Ambient Air**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		130	20	ug/m3			08/15/21 15:02	11.94
1,1,2,2-Tetrachloroethane	ND		160	50	ug/m3			08/15/21 15:02	11.94
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		180	28	ug/m3			08/15/21 15:02	11.94
1,1,2-Trichloroethane	ND		130	34	ug/m3			08/15/21 15:02	11.94
1,1-Dichloroethane	ND		97	13	ug/m3			08/15/21 15:02	11.94
1,1-Dichloroethene	ND		95	16	ug/m3			08/15/21 15:02	11.94
1,2,4-Trichlorobenzene	ND		890	87	ug/m3			08/15/21 15:02	11.94
1,2,4-Trimethylbenzene	ND		120	37	ug/m3			08/15/21 15:02	11.94
1,2-Dibromoethane (EDB)	ND		180	40	ug/m3			08/15/21 15:02	11.94
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		170	27	ug/m3			08/15/21 15:02	11.94
1,2-Dichlorobenzene	ND		290	50	ug/m3			08/15/21 15:02	11.94
1,2-Dichloroethane	ND		97	23	ug/m3			08/15/21 15:02	11.94
1,2-Dichloropropane	ND		110	29	ug/m3			08/15/21 15:02	11.94
1,3,5-Trimethylbenzene	ND		120	38	ug/m3			08/15/21 15:02	11.94
1,3-Butadiene	ND		110	17	ug/m3			08/15/21 15:02	11.94
1,3-Dichlorobenzene	ND		140	47	ug/m3			08/15/21 15:02	11.94
1,4-Dichlorobenzene	ND		140	46	ug/m3			08/15/21 15:02	11.94
2-Butanone (MEK)	ND		350	70	ug/m3			08/15/21 15:02	11.94
2-Hexanone	ND		200	28	ug/m3			08/15/21 15:02	11.94
3-Chloropropene	ND		75	18	ug/m3			08/15/21 15:02	11.94
4-Methyl-2-pentanone (MIBK)	ND		490	98	ug/m3			08/15/21 15:02	11.94
Acetone	ND		2100	400	ug/m3			08/15/21 15:02	11.94
Acrylonitrile	ND		520	52	ug/m3			08/15/21 15:02	11.94
Benzene	ND		76	21	ug/m3			08/15/21 15:02	11.94
Benzyl chloride	ND		250	48	ug/m3			08/15/21 15:02	11.94

Eurofins TestAmerica, Knoxville

# Client Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 MAIN ST/RACINE, WI/1EP-2107057

Job ID: 140-24105-1

**Client Sample ID: VP-2**

**Lab Sample ID: 140-24105-2**

Date Collected: 08/05/21 11:15

Matrix: Air

Date Received: 08/06/21 09:00

Sample Container: Summa Canister 6L

**Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		160	35	ug/m3			08/15/21 15:02	11.94
Bromoform	ND		250	59	ug/m3			08/15/21 15:02	11.94
Bromomethane	ND		93	15	ug/m3			08/15/21 15:02	11.94
Butane	ND		280	21	ug/m3			08/15/21 15:02	11.94
<b>Carbon disulfide</b>	<b>19</b>	<b>J B</b>	150	12	ug/m3			08/15/21 15:02	11.94
Carbon tetrachloride	ND		150	29	ug/m3			08/15/21 15:02	11.94
Chlorobenzene	ND		110	27	ug/m3			08/15/21 15:02	11.94
Chlorodifluoromethane	ND		84	16	ug/m3			08/15/21 15:02	11.94
Chloroethane	ND		63	11	ug/m3			08/15/21 15:02	11.94
Chloroform	ND		120	22	ug/m3			08/15/21 15:02	11.94
Chloromethane	ND		250	39	ug/m3			08/15/21 15:02	11.94
cis-1,2-Dichloroethene	ND		95	28	ug/m3			08/15/21 15:02	11.94
cis-1,3-Dichloropropene	ND		220	40	ug/m3			08/15/21 15:02	11.94
Cyclohexane	ND		160	16	ug/m3			08/15/21 15:02	11.94
Dibromochloromethane	ND		200	43	ug/m3			08/15/21 15:02	11.94
Dibromomethane	ND		340	34	ug/m3			08/15/21 15:02	11.94
Dichlorodifluoromethane	ND		120	40	ug/m3			08/15/21 15:02	11.94
Ethylbenzene	ND		100	35	ug/m3			08/15/21 15:02	11.94
Heptane	ND		200	23	ug/m3			08/15/21 15:02	11.94
Hexachlorobutadiene	ND		1300	99	ug/m3			08/15/21 15:02	11.94
Hexane	ND		170	13	ug/m3			08/15/21 15:02	11.94
Isopropylbenzene	ND		230	35	ug/m3			08/15/21 15:02	11.94
Methyl tert-butyl ether	ND		430	73	ug/m3			08/15/21 15:02	11.94
Methylene Chloride	ND		410	400	ug/m3			08/15/21 15:02	11.94
m-Xylene & p-Xylene	ND		100	62	ug/m3			08/15/21 15:02	11.94
Naphthalene	ND		250	56	ug/m3			08/15/21 15:02	11.94
o-Xylene	ND		100	32	ug/m3			08/15/21 15:02	11.94
Propylbenzene	ND		230	33	ug/m3			08/15/21 15:02	11.94
Styrene	ND		100	29	ug/m3			08/15/21 15:02	11.94
<b>Tetrachloroethene</b>	<b>8200</b>		160	32	ug/m3			08/15/21 15:02	11.94
Toluene	ND		450	54	ug/m3			08/15/21 15:02	11.94
trans-1,2-Dichloroethene	ND		95	24	ug/m3			08/15/21 15:02	11.94
trans-1,3-Dichloropropene	ND		110	26	ug/m3			08/15/21 15:02	11.94
<b>Trichloroethene</b>	<b>21</b>	<b>J</b>	130	21	ug/m3			08/15/21 15:02	11.94
Trichlorofluoromethane	ND		130	17	ug/m3			08/15/21 15:02	11.94
Vinyl chloride	ND		120	22	ug/m3			08/15/21 15:02	11.94

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		60 - 140		08/15/21 15:02	11.94

## Default Detection Limits

Client: Giles Engineering Associates  
 Project/Site: 301 MAIN ST/RACINE, WI/1EP-2107057

Job ID: 140-24105-1

### Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	RL	MDL	Units
1,1,1-Trichloroethane	1.1	0.16	ug/m3
1,1,2,2-Tetrachloroethane	1.4	0.42	ug/m3
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5	0.24	ug/m3
1,1,2-Trichloroethane	1.1	0.28	ug/m3
1,1-Dichloroethane	0.81	0.11	ug/m3
1,1-Dichloroethene	0.79	0.13	ug/m3
1,2,4-Trichlorobenzene	7.4	0.73	ug/m3
1,2,4-Trimethylbenzene	0.98	0.31	ug/m3
1,2-Dibromoethane (EDB)	1.5	0.34	ug/m3
1,2-Dichloro-1,1,2,2-tetrafluoroethane	1.4	0.22	ug/m3
1,2-Dichlorobenzene	2.4	0.42	ug/m3
1,2-Dichloroethane	0.81	0.19	ug/m3
1,2-Dichloropropane	0.92	0.24	ug/m3
1,3,5-Trimethylbenzene	0.98	0.32	ug/m3
1,3-Butadiene	0.88	0.14	ug/m3
1,3-Dichlorobenzene	1.2	0.39	ug/m3
1,4-Dichlorobenzene	1.2	0.38	ug/m3
2-Butanone (MEK)	2.9	0.59	ug/m3
2-Hexanone	1.6	0.24	ug/m3
3-Chloropropene	0.63	0.15	ug/m3
4-Methyl-2-pentanone (MIBK)	4.1	0.82	ug/m3
Acetone	18	3.3	ug/m3
Acrylonitrile	4.3	0.43	ug/m3
Benzene	0.64	0.18	ug/m3
Benzyl chloride	2.1	0.40	ug/m3
Bromodichloromethane	1.3	0.29	ug/m3
Bromoform	2.1	0.50	ug/m3
Bromomethane	0.78	0.12	ug/m3
Butane	2.4	0.17	ug/m3
Carbon disulfide	1.2	0.097	ug/m3
Carbon tetrachloride	1.3	0.24	ug/m3
Chlorobenzene	0.92	0.23	ug/m3
Chlorodifluoromethane	0.71	0.13	ug/m3
Chloroethane	0.53	0.092	ug/m3
Chloroform	0.98	0.19	ug/m3
Chloromethane	2.1	0.33	ug/m3
cis-1,2-Dichloroethene	0.79	0.24	ug/m3
cis-1,3-Dichloropropene	1.8	0.34	ug/m3
Cyclohexane	1.4	0.14	ug/m3
Dibromochloromethane	1.7	0.36	ug/m3
Dibromomethane	2.8	0.28	ug/m3
Dichlorodifluoromethane	0.99	0.34	ug/m3
Ethylbenzene	0.87	0.30	ug/m3
Heptane	1.6	0.19	ug/m3
Hexachlorobutadiene	11	0.83	ug/m3
Hexane	1.4	0.11	ug/m3
Isopropylbenzene	2.0	0.29	ug/m3
Methyl tert-butyl ether	3.6	0.61	ug/m3
Methylene Chloride	3.5	3.4	ug/m3
m-Xylene & p-Xylene	0.87	0.52	ug/m3
Naphthalene	2.1	0.47	ug/m3
o-Xylene	0.87	0.26	ug/m3
Propylbenzene	2.0	0.28	ug/m3

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## Default Detection Limits

Client: Giles Engineering Associates  
Project/Site: 301 MAIN ST/RACINE, WI/1EP-2107057

Job ID: 140-24105-1

### Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	RL	MDL	Units
Styrene	0.85	0.25	ug/m3
Tetrachloroethene	1.4	0.27	ug/m3
Toluene	3.8	0.45	ug/m3
trans-1,2-Dichloroethene	0.79	0.20	ug/m3
trans-1,3-Dichloropropene	0.91	0.22	ug/m3
Trichloroethene	1.1	0.17	ug/m3
Trichlorofluoromethane	1.1	0.14	ug/m3
Vinyl chloride	1.0	0.18	ug/m3



# Surrogate Summary

Client: Giles Engineering Associates  
Project/Site: 301 MAIN ST/RACINE, WI/1EP-2107057

Job ID: 140-24105-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air

Matrix: Air

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB (60-140)
140-24105-1	VP-1	94
140-24105-2	VP-2	94
LCS 140-52686/1002	Lab Control Sample	109
MB 140-52686/5	Method Blank	98

#### Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 MAIN ST/RACINE, WI/1EP-2107057

Job ID: 140-24105-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air

**Lab Sample ID: MB 140-52686/5**  
**Matrix: Air**  
**Analysis Batch: 52686**

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	ND		1.1	0.16	ug/m3			08/15/21 10:50	1
1,1,2,2-Tetrachloroethane	ND		1.4	0.42	ug/m3			08/15/21 10:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.5	0.24	ug/m3			08/15/21 10:50	1
1,1,2-Trichloroethane	ND		1.1	0.28	ug/m3			08/15/21 10:50	1
1,1-Dichloroethane	ND		0.81	0.11	ug/m3			08/15/21 10:50	1
1,1-Dichloroethene	ND		0.79	0.13	ug/m3			08/15/21 10:50	1
1,2,4-Trichlorobenzene	ND		7.4	0.73	ug/m3			08/15/21 10:50	1
1,2,4-Trimethylbenzene	ND		0.98	0.31	ug/m3			08/15/21 10:50	1
1,2-Dibromoethane (EDB)	ND		1.5	0.34	ug/m3			08/15/21 10:50	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		1.4	0.22	ug/m3			08/15/21 10:50	1
1,2-Dichlorobenzene	ND		2.4	0.42	ug/m3			08/15/21 10:50	1
1,2-Dichloroethane	ND		0.81	0.19	ug/m3			08/15/21 10:50	1
1,2-Dichloropropane	ND		0.92	0.24	ug/m3			08/15/21 10:50	1
1,3,5-Trimethylbenzene	ND		0.98	0.32	ug/m3			08/15/21 10:50	1
1,3-Butadiene	ND		0.88	0.14	ug/m3			08/15/21 10:50	1
1,3-Dichlorobenzene	ND		1.2	0.39	ug/m3			08/15/21 10:50	1
1,4-Dichlorobenzene	ND		1.2	0.38	ug/m3			08/15/21 10:50	1
2-Butanone (MEK)	ND		2.9	0.59	ug/m3			08/15/21 10:50	1
2-Hexanone	ND		1.6	0.24	ug/m3			08/15/21 10:50	1
3-Chloropropene	ND		0.63	0.15	ug/m3			08/15/21 10:50	1
4-Methyl-2-pentanone (MIBK)	ND		4.1	0.82	ug/m3			08/15/21 10:50	1
Acetone	ND		18	3.3	ug/m3			08/15/21 10:50	1
Acrylonitrile	ND		4.3	0.43	ug/m3			08/15/21 10:50	1
Benzene	ND		0.64	0.18	ug/m3			08/15/21 10:50	1
Benzyl chloride	ND		2.1	0.40	ug/m3			08/15/21 10:50	1
Bromodichloromethane	ND		1.3	0.29	ug/m3			08/15/21 10:50	1
Bromoform	ND		2.1	0.50	ug/m3			08/15/21 10:50	1
Bromomethane	ND		0.78	0.12	ug/m3			08/15/21 10:50	1
Butane	ND		2.4	0.17	ug/m3			08/15/21 10:50	1
Carbon disulfide	0.161	J	1.2	0.097	ug/m3			08/15/21 10:50	1
Carbon tetrachloride	ND		1.3	0.24	ug/m3			08/15/21 10:50	1
Chlorobenzene	ND		0.92	0.23	ug/m3			08/15/21 10:50	1
Chlorodifluoromethane	ND		0.71	0.13	ug/m3			08/15/21 10:50	1
Chloroethane	ND		0.53	0.092	ug/m3			08/15/21 10:50	1
Chloroform	ND		0.98	0.19	ug/m3			08/15/21 10:50	1
Chloromethane	ND		2.1	0.33	ug/m3			08/15/21 10:50	1
cis-1,2-Dichloroethene	ND		0.79	0.24	ug/m3			08/15/21 10:50	1
cis-1,3-Dichloropropene	ND		1.8	0.34	ug/m3			08/15/21 10:50	1
Cyclohexane	ND		1.4	0.14	ug/m3			08/15/21 10:50	1
Dibromochloromethane	ND		1.7	0.36	ug/m3			08/15/21 10:50	1
Dibromomethane	ND		2.8	0.28	ug/m3			08/15/21 10:50	1
Dichlorodifluoromethane	ND		0.99	0.34	ug/m3			08/15/21 10:50	1
Ethylbenzene	ND		0.87	0.30	ug/m3			08/15/21 10:50	1
Heptane	ND		1.6	0.19	ug/m3			08/15/21 10:50	1
Hexachlorobutadiene	ND		11	0.83	ug/m3			08/15/21 10:50	1
Hexane	ND		1.4	0.11	ug/m3			08/15/21 10:50	1
Isopropylbenzene	ND		2.0	0.29	ug/m3			08/15/21 10:50	1
Methyl tert-butyl ether	ND		3.6	0.61	ug/m3			08/15/21 10:50	1

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 MAIN ST/RACINE, WI/1EP-2107057

Job ID: 140-24105-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Lab Sample ID: MB 140-52686/5**  
**Matrix: Air**  
**Analysis Batch: 52686**

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Methylene Chloride	ND		3.5	3.4	ug/m3			08/15/21 10:50	1
m-Xylene & p-Xylene	ND		0.87	0.52	ug/m3			08/15/21 10:50	1
Naphthalene	ND		2.1	0.47	ug/m3			08/15/21 10:50	1
o-Xylene	ND		0.87	0.26	ug/m3			08/15/21 10:50	1
Propylbenzene	ND		2.0	0.28	ug/m3			08/15/21 10:50	1
Styrene	ND		0.85	0.25	ug/m3			08/15/21 10:50	1
Tetrachloroethene	ND		1.4	0.27	ug/m3			08/15/21 10:50	1
Toluene	ND		3.8	0.45	ug/m3			08/15/21 10:50	1
trans-1,2-Dichloroethene	ND		0.79	0.20	ug/m3			08/15/21 10:50	1
trans-1,3-Dichloropropene	ND		0.91	0.22	ug/m3			08/15/21 10:50	1
Trichloroethene	ND		1.1	0.17	ug/m3			08/15/21 10:50	1
Trichlorofluoromethane	ND		1.1	0.14	ug/m3			08/15/21 10:50	1
Vinyl chloride	ND		1.0	0.18	ug/m3			08/15/21 10:50	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	98		60 - 140		08/15/21 10:50	1

**Lab Sample ID: LCS 140-52686/1002**  
**Matrix: Air**  
**Analysis Batch: 52686**

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
1,1,1-Trichloroethane	10.9	10.3		ug/m3		95	70 - 130
1,1,1,2-Tetrachloroethane	13.7	14.2		ug/m3		104	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	15.3	14.2		ug/m3		92	70 - 130
1,1,2-Trichloroethane	10.9	10.7		ug/m3		98	70 - 130
1,1-Dichloroethane	8.09	7.43		ug/m3		92	70 - 130
1,1-Dichloroethene	7.93	7.68		ug/m3		97	70 - 130
1,2,4-Trichlorobenzene	14.8	11.2		ug/m3		75	60 - 140
1,2,4-Trimethylbenzene	9.83	9.42		ug/m3		96	70 - 130
1,2-Dibromoethane (EDB)	15.4	14.4		ug/m3		94	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	14.0	12.5		ug/m3		89	60 - 140
1,2-Dichlorobenzene	12.0	10.3		ug/m3		86	70 - 130
1,2-Dichloroethane	8.09	7.17		ug/m3		89	70 - 130
1,2-Dichloropropane	9.24	8.73		ug/m3		94	70 - 130
1,3,5-Trimethylbenzene	9.83	9.68		ug/m3		98	70 - 130
1,3-Butadiene	4.42	4.41		ug/m3		100	60 - 140
1,3-Dichlorobenzene	12.0	10.1		ug/m3		84	70 - 130
1,4-Dichlorobenzene	12.0	10.0		ug/m3		83	70 - 130
2-Butanone (MEK)	5.90	5.10		ug/m3		86	60 - 140
2-Hexanone	8.20	6.92		ug/m3		84	60 - 140
3-Chloropropene	6.26	4.18		ug/m3		67	60 - 140
4-Methyl-2-pentanone (MIBK)	8.19	5.48		ug/m3		67	60 - 140
Acetone	14.3	14.1		ug/m3		99	60 - 140
Acrylonitrile	4.34	3.57		ug/m3		82	60 - 140
Benzene	6.39	6.02		ug/m3		94	70 - 130
Benzyl chloride	10.4	10.2		ug/m3		98	70 - 130

Eurofins TestAmerica, Knoxville

# QC Sample Results

Client: Giles Engineering Associates  
 Project/Site: 301 MAIN ST/RACINE, WI/1EP-2107057

Job ID: 140-24105-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Lab Sample ID: LCS 140-52686/1002**  
**Matrix: Air**  
**Analysis Batch: 52686**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromodichloromethane	13.4	13.3		ug/m3		99	70 - 130
Bromoform	20.7	21.0		ug/m3		102	60 - 140
Bromomethane	7.77	9.51		ug/m3		123	70 - 130
Butane	4.75	3.70		ug/m3		78	60 - 140
Carbon disulfide	6.23	6.17		ug/m3		99	70 - 130
Carbon tetrachloride	12.6	12.2		ug/m3		97	70 - 130
Chlorobenzene	9.21	8.30		ug/m3		90	70 - 130
Chlorodifluoromethane	7.07	5.79		ug/m3		82	60 - 140
Chloroethane	5.28	5.96		ug/m3		113	70 - 130
Chloroform	9.77	9.25		ug/m3		95	70 - 130
Chloromethane	4.13	3.56		ug/m3		86	60 - 140
cis-1,2-Dichloroethene	7.93	7.47		ug/m3		94	70 - 130
cis-1,3-Dichloropropene	9.08	8.77		ug/m3		97	70 - 130
Cyclohexane	6.88	6.45		ug/m3		94	70 - 130
Dibromochloromethane	17.0	16.6		ug/m3		97	70 - 130
Dibromomethane	14.2	13.7		ug/m3		97	70 - 130
Dichlorodifluoromethane	9.89	9.57		ug/m3		97	60 - 140
Ethylbenzene	8.68	8.33		ug/m3		96	70 - 130
Heptane	8.20	7.79		ug/m3		95	70 - 130
Hexachlorobutadiene	21.3	17.2		ug/m3		81	60 - 140
Hexane	7.05	6.13		ug/m3		87	70 - 130
Isopropylbenzene	9.83	9.19		ug/m3		93	70 - 130
Methyl tert-butyl ether	7.21	6.72		ug/m3		93	60 - 140
Methylene Chloride	6.95	6.49		ug/m3		93	70 - 130
m-Xylene & p-Xylene	17.4	16.5		ug/m3		95	70 - 130
Naphthalene	10.5	7.47		ug/m3		71	60 - 140
o-Xylene	8.68	8.43		ug/m3		97	70 - 130
Propylbenzene	9.83	9.34		ug/m3		95	70 - 130
Styrene	8.52	8.10		ug/m3		95	70 - 130
Tetrachloroethene	13.6	12.0		ug/m3		89	70 - 130
Toluene	7.54	7.18		ug/m3		95	70 - 130
trans-1,2-Dichloroethene	7.93	7.69		ug/m3		97	70 - 130
trans-1,3-Dichloropropene	9.08	8.62		ug/m3		95	70 - 130
Trichloroethene	10.7	9.51		ug/m3		89	70 - 130
Trichlorofluoromethane	11.2	13.9		ug/m3		124	60 - 140
Vinyl chloride	5.11	5.20		ug/m3		102	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		60 - 140

# QC Association Summary

Client: Giles Engineering Associates  
Project/Site: 301 MAIN ST/RACINE, WI/1EP-2107057

Job ID: 140-24105-1

## Air - GC/MS VOA

### Analysis Batch: 52686

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-24105-1	VP-1	Total/NA	Air	TO-15	
140-24105-2	VP-2	Total/NA	Air	TO-15	
MB 140-52686/5	Method Blank	Total/NA	Air	TO-15	
LCS 140-52686/1002	Lab Control Sample	Total/NA	Air	TO-15	

- 1
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# Lab Chronicle

Client: Giles Engineering Associates  
 Project/Site: 301 MAIN ST/RACINE, WI/1EP-2107057

Job ID: 140-24105-1

**Client Sample ID: VP-1**

**Lab Sample ID: 140-24105-1**

Date Collected: 08/05/21 10:55

Matrix: Air

Date Received: 08/06/21 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		13.2	18 mL	500 mL	52686	08/15/21 14:16	S1K	TAL KNX
Instrument ID: MS										

**Client Sample ID: VP-2**

**Lab Sample ID: 140-24105-2**

Date Collected: 08/05/21 11:15

Matrix: Air

Date Received: 08/06/21 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		11.94	20 mL	500 mL	52686	08/15/21 15:02	S1K	TAL KNX
Instrument ID: MS										

**Client Sample ID: Method Blank**

**Lab Sample ID: MB 140-52686/5**

Date Collected: N/A

Matrix: Air

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	200 mL	500 mL	52686	08/15/21 10:50	S1K	TAL KNX
Instrument ID: MS										

**Client Sample ID: Lab Control Sample**

**Lab Sample ID: LCS 140-52686/1002**

Date Collected: N/A

Matrix: Air

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	500 mL	500 mL	52686	08/15/21 07:58	S1K	TAL KNX
Instrument ID: MS										

**Laboratory References:**

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

# Accreditation/Certification Summary

Client: Giles Engineering Associates  
 Project/Site: 301 MAIN ST/RACINE, WI/1EP-2107057

Job ID: 140-24105-1

## Laboratory: Eurofins TestAmerica, Knoxville

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

Authority	Program	Identification Number	Expiration Date
	AFCEE	N/A	
ANAB	Dept. of Defense ELAP	L2311	02-13-22
ANAB	Dept. of Energy	L2311.01	02-13-22
ANAB	ISO/IEC 17025	L2311	02-13-22
Arkansas DEQ	State	88-0688	06-17-22
California	State	2423	06-30-22
Colorado	State	TN00009	02-28-22
Connecticut	State	PH-0223	09-30-21
Florida	NELAP	E87177	06-30-22
Georgia (DW)	State	906	12-11-22
Hawaii	State	NA	12-11-21
Kansas	NELAP	E-10349	10-31-21
Kentucky (DW)	State	90101	12-31-21
Louisiana	NELAP	83979	06-30-22
Louisiana (DW)	State	LA019	12-31-21
Maryland	State	277	03-31-22
Michigan	State	9933	12-11-22
Nevada	State	TN00009	07-31-22
New Hampshire	NELAP	299919	01-17-22
New Jersey	NELAP	TN001	06-30-22
New York	NELAP	10781	03-31-22
North Carolina (DW)	State	21705	07-31-22
North Carolina (WW/SW)	State	64	12-31-21
Ohio VAP	State	CL0059	06-02-23
Oklahoma	State	9415	08-31-21
Oregon	NELAP	TNI0189	01-01-22
Pennsylvania	NELAP	68-00576	12-31-21
Tennessee	State	02014	12-11-22
Texas	NELAP	T104704380-18-12	08-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-19-00236	08-20-22
Utah	NELAP	TN00009	07-31-21 *
Virginia	NELAP	460176	09-14-21
Washington	State	C593	01-19-22
West Virginia (DW)	State	9955C	01-02-22
West Virginia DEP	State	345	04-30-22
Wisconsin	State	998044300	08-31-21

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

# Method Summary

Client: Giles Engineering Associates  
Project/Site: 301 MAIN ST/RACINE, WI/1EP-2107057

Job ID: 140-24105-1

Method	Method Description	Protocol	Laboratory
TO-15	Volatile Organic Compounds in Ambient Air	EPA	TAL KNX

**Protocol References:**

EPA = US Environmental Protection Agency

**Laboratory References:**

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

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# Sample Summary

Client: Giles Engineering Associates  
Project/Site: 301 MAIN ST/RACINE, WI/1EP-2107057

Job ID: 140-24105-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
140-24105-1	VP-1	Air	08/05/21 10:55	08/06/21 09:00	Air Canister (6-Liter) #34001507
140-24105-2	VP-2	Air	08/05/21 11:15	08/06/21 09:00	Air Canister (6-Liter) #09917

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# Canister Samples Chain of Custody Record



140-24105 Chain of Custody

Knoxville, TN 37921-5947  
phone 865.291.3000 fax 865.584.4315

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

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

Client Contact Information		Client Project Manager: Kevin Bugel				Samples Collected By:										COC No:															
Company Name: Giles		Phone:				<table border="1"> <tr><td>TO-14/15 (Standard / Low Level)</td><td>TO-15 SIM</td><td>EPA 3C</td><td>EPA 25C</td><td>ASTM D-1946</td><td>EPA 15/16</td><td>Other (Please specify in notes section)</td><td>Sample Type</td><td>Indoor Air/Ambient Air</td><td>Sub-Slab</td><td>Soil Gas</td><td>Soil Vapor Extraction (SVE)</td><td>Landfill Gas</td><td>Other (Please specify in notes section)</td></tr> </table>										TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	1 of 1 COCs	
TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16											Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)								
Address: N8 W22350 Johnson Dr., Suite A1		Email:														14001840															
City/State/Zip Waukesha, WI 53186-1679		Site Contact:														For Lab Use Only:															
Phone: (262) 544-0118		Tel/Fax														Walk-in Client:															
FAX: (262) 549-5868		Analysis Turnaround Time				Lab Sampling:																									
Project Name: 301 Main St./ Racine, WI 168-2107057		Standard (Specific):				Job / SDG No.:		(See below for Add'l Items)																							
Site/Location: Racine, WI		Rush (Specify):				Sample Specific Notes:																									
P O #																															
Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)									
VP-1	8-5-21	10:25	8-5-21	10:55	-30	-5	9019	34001507	X																						
VP-2	8-5-21	10:45	8-5-21	11:15	-30	-5	09098	09917	X																						
End	→																														
		Temperature (Fahrenheit)				Received @ ambient, 1 box FedEx Po #KHS264 0969 1680, FedEx Po Custody seal intact KW 8/16/21																									
		Start Interior		Ambient																											
		Pressure (inches of Hg)																													
		Start Interior		Ambient																											
Special Instructions/QC Requirements & Comments:																															
Samples Shipped by: <i>John Hule</i>		Date / Time: 8-5-21 / 13:30		Samples Received by: <i>Me-ha</i>		ETA 8/16/21 0900		2 cans, 2 KR																							
Samples Relinquished by: <i>Bob</i>		Date / Time:		Received by:																											
Relinquished by:		Date / Time:		Received by:																											
Lab Use Only: Shipper Name:		Opened by:		Condition:																											



EUROFINS/TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST

Log In Number:

Loc: 140  
24105

Review Items	Yes	No	NA	If No, what was the problem?	Comments/Actions Taken
1. Are the shipping containers intact?	/			<input type="checkbox"/> Containers, Broken	
2. Were ambient air containers received intact?			/	<input checked="" type="checkbox"/> Checked in lab	/O.
3. The coolers/containers custody seal if present, is it intact?	/			<input type="checkbox"/> Yes <input type="checkbox"/> NA	
4. Is the cooler temperature within limits? (> freezing temp. of water to 6°C, VOST: 10°C) Thermometer ID : _____ Correction factor: _____			/	<input type="checkbox"/> Cooler Out of Temp, Client Contacted, Proceed/Cancel <input type="checkbox"/> Cooler Out of Temp, Same Day Receipt	
5. Were all of the sample containers received intact?	/			<input type="checkbox"/> Containers, Broken	
6. Were samples received in appropriate containers?	/			<input type="checkbox"/> Containers, Improper; Client Contacted; Proceed/Cancel	
7. Do sample container labels match COC? (IDs, Dates, Times)	/			<input type="checkbox"/> COC & Samples Do Not Match <input type="checkbox"/> COC Incorrect/Incomplete <input type="checkbox"/> COC Not Received	
8. Were all of the samples listed on the COC received?	/			<input type="checkbox"/> Sample Received, Not on COC <input type="checkbox"/> Sample on COC, Not Received	
9. Is the date/time of sample collection noted?	/			<input type="checkbox"/> COC; No Date/Time; Client Contacted	
10. Was the sampler identified on the COC?		/		<input checked="" type="checkbox"/> Sampler Not Listed on COC	Labeling Verified by: _____ Date: _____
11. Is the client and project name/# identified?	/			<input type="checkbox"/> COC Incorrect/Incomplete	pH test strip lot number: _____
12. Are tests/parameters listed for each sample?	/			<input type="checkbox"/> COC No tests on COC	
13. Is the matrix of the samples noted?	/			<input type="checkbox"/> COC Incorrect/Incomplete	
14. Was COC relinquished? (Signed/Dated/Timed)	/			<input type="checkbox"/> COC Incorrect/Incomplete	Box 16A: pH Preservation Box 18A: Residual Chlorine
15. Were samples received within holding time?	/			<input type="checkbox"/> Holding Time - Receipt	Preservative: _____ Lot Number: _____ Exp Date: _____ Analyst: _____ Date: _____ Time: _____
16. Were samples received with correct chemical preservative (excluding Encore)?			/	<input type="checkbox"/> pH Adjusted, pH Included (See box 16A) <input type="checkbox"/> Incorrect Preservative	
17. Were VOA samples received without headspace?			/	<input type="checkbox"/> Headspace (VOA only)	
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number: _____			/	<input type="checkbox"/> Residual Chlorine	
19. For 1613B water samples is pH<9?			/	<input type="checkbox"/> If no, notify lab to adjust	
20. For rad samples was sample activity info. Provided?			/	<input type="checkbox"/> Project missing info	
Project #: <u>14001840</u> PM Instructions: _____					

Sample Receiving Associate: Kenn WA

Date: 8/6/21

QA026R32.doc, 062719





## Summa Canister Dilution Worksheet

Client: Giles Engineering Associates  
 Project/Site: 301 MAIN ST/RACINE, WI/1EP-2107057

Job No.: 140-24105-1

Lab Sample ID	Canister Volume (L)	Preadjusted Pressure ("Hg)	Preadjusted Pressure (atm)	Preadjusted Volume (L)	Adjusted Pressure (psig)	Adjusted Pressure (atm)	Adjusted Volume (L)	Initial Volume (mL)	Dilution Factor	Final Dilution Factor	Pressure Gauge ID	Date	Analyst Initials
140-24105-1	6	-5.3	0.82	4.94	33.7	3.29	19.76		4.00	4.00	g5	08/08/21 10:56	AFB
140-24105-1	6	0	1.00	6.00	33.8	3.30	19.80		3.30	13.20	g5	08/08/21 12:11	AFB
140-24105-2	6	-3.6	0.88	5.28	32.6	3.22	19.31		3.66	3.66	g5	08/08/21 10:56	AFB
140-24105-2	6	0	1.00	6.00	33.3	3.27	19.59		3.27	11.94	g5	08/08/21 12:11	AFB

**Formulae:**

Preadjusted Volume (L) = ( Preadjusted Pressure ("Hg) + 29.92 "Hg \* Vol L ) / 29.92 "Hg

Adjusted Volume (L) = ( Adjusted Pressure (psig) + 14.7 psig \* Vol L ) / 14.7 psig

Dilution Factor = Adjusted Volume (L) / Preadjusted Volume (L)

**Where:**

29.92 "Hg = Standard atmospheric pressure in inches of Mercury ("Hg)

14.7 psig = Standard atmospheric pressure in pounds per square inch gauge (psig)

## **APPENDIX F**

### **Giles Field Standard Operating Procedures**



## **Field Standard Operating Procedures**

Field Note Documentation

Completion of Soil Borings

Field Screening and Visual Soil Classification

Soil Sample Collection and Analyses

Monitoring Well Installation and Development

Groundwater Level Measurements

Groundwater Quality Measurements

Groundwater Sample Collection and Analyses

Decontamination

Sub-Slab Soil Gas Collection

Indoor Air Collection

Chain-of-Custody



**GILES**  
ENGINEERING ASSOCIATES, INC.

## Standard Operating Procedures For Field Note Documentation

Giles site visits under this QAPP require the completion of the documentation of the site visit in a dedicated project field book. The dedicated field book will be kept in the project file at the respective Giles office. The field book/notes will supplement field forms. **Note: Field notes are not intended to substitute for the completion of all Giles field forms.** Field notes are used to document the following;

- Chronological account of the field day,
- Objectives for the day,
- Phone discussions,
- Changes in scope or methodologies,
- Site conditions,
- Weather conditions,
- Subcontractor and subcontractor personnel,
- Times onsite and times offsite for applicable personnel,
- Site visits and discussions with client personnel or regulatory personnel,
- Photographs taken,
- Equipment calibration results (if in-field re-calibration is necessary),
- Health and safety meeting proceedings or incidents, if any,
- Other pertinent information such as tons removed, trucks leaving site, gallons pumped, feet drilled, bailers used, samples collected, drums left onsite, etc.
- Cross-reference the field forms completed for that event. Examples of field forms to be completed will include the following;
  - *Record of Subsurface Exploration,*
  - *Photoionization Detector Calibration Documentation,*
  - *Summary sheet for groundwater sampling,*
  - *Natural attenuation parameters.*

Other forms such as *Giles Equipment Billing (Unit Rates), Expense* forms, in-house drilling forms, and WDNR forms, (i.e.; Monitoring Well Construction, Development, Well/Drillhole/Borehole Abandonment, and Groundwater Monitoring Well Information) will be finalized at the office, immediately following field activities.

On a per day and per site basis, field notes will always be started on the left hand page of the field note book. The title block of each daily site entry will start with the following;

Date;  
Project Name:  
Project Number:  
Objective for the day:  
Giles personnel:  
Subcontractor name, personnel, and arrival time:  
Current weather conditions (and if they drastically change during the day):  
Arrival time onsite:

Following the title block data, the field note entries then document the site activities on a chronological basis, beginning each entry with the time of the day. Field notes will adhere to the following guidelines.



- Notes will be legibly printed or typed into a lap top computer.
- If pages are skipped to start on the left-hand page, a strike through of the skipped page will be made with one line diagonally across the page, and the strike through will be initialized and dated by the person making the strike through.
- All pages will be numbered in the upper right-hand corner of each page and will be labeled 1/6 or 1 of 6, indicating page 1 of 6 pages per one day.
- No lines will be skipped.
- The documentation will be in pen, and must be made immediately after activity, measurement, or event.
- An error in documentation will be struck through with a single line and initialized.
- The pages will be initialized and dated at the bottom of each page by the person taking notes.
- The field notes will be finalized before leaving the site on a daily basis.
- Figures are drawn on the right-hand page and adhere to the following guidelines.
  1. The plan view North arrow and scale (if applicable) must be put in upper right-hand corner of page.
  2. Dimensions should be shown on the figure.
  3. Monitoring well/soil boring locations must be put on figure with a minimum of 2 dimensions (X,Y coordinates) to permanent points (i.e.; building corners),
  4. The figures must show at minimum; approximate property lines, buildings (dimensioned), monitoring well/soil boring locations, pavement/grass areas, tree lines, known utility/UST locations, overhead obstructions (i.e.; power lines), manhole locations, and surface water impoundment areas.
  5. Offsite adjacent properties integral to the site activities, such as adjacent surface waters, may be required on site figure.

## **Standard Operating Procedure for Completion of Direct-Push Soil Borings**

Soil borings will be advanced with a direct-push unit to retrieve a soil sample from a desired depth interval and/or install a temporary well for groundwater sample collection. The direct-push unit uses a 1 or 2-inch diameter Macrocore sampler to reach the top of the desired sampling depth. Once the sampler is positioned at the desired depth, a soil sample obtained with the Macrocore sampler lined with an acetate liner. To push the soil sample into the liner, the rod is advanced 2 or 4 feet with a hydraulically driven percussion hammer.

When the liner containing soil is brought to the surface and removed from the Macrocore sampler, the liner is cut open to allow access to the soil. Soil retrieved from the liner is used for PID/FID screening and visual classification (*Standard Operating Procedure for Field Screening and Visual Soil Classification*) and collection of soil sample for laboratory analyses (*Standard Operating Procedure for Soil Sample Collection and Analyses*).

Prior to reinserting the Macrocore sampler for retrieval of another soil sample, the Macrocore sampler will be decontaminated to prevent cross-contamination between the sampling intervals. A new plastic liner will be inserted into the Macrocore sampler to be advanced to the top of the next sample interval. The sampling procedure will be repeated at 2- or 4-foot continuous depth intervals until the end of each direct-push boring.

The information collected during direct-push advancement will be presented on the final borehole logs. The logs will include information on sampling intervals and other pertinent information related to the direct-push activities. Soil investigative waste management and disposal will follow the Standard Operating Procedure for Investigative Derived Waste.

## **Standard Operating Procedure for Field Screening and Visual Soil Classification**

A portion of each soil sample will be screened for organic vapors, using a photoionization detector (PID) or a flame ionization detector (FID). The volatile vapor scan technique with either a PID or FID is a field screening method used to assess the presence of total volatile compounds. The PID will typically be equipped with a 10.6 electron-volt (eV) lamp. However, this may vary depending upon contaminant type anticipated. The PID will be zeroed, using ambient air, and then calibrated with 100 parts per million (ppm) isobutylene gas (benzene equivalent) in accordance with the manufacturer's specifications prior to use. The PID calibration data will be recorded on the *Photoionization Detector Calibration Documentation* form.

At the discretion of the Giles project manager, an FID may be used instead of the PID. An FID must be rented, and subsequently calibrated to the manufacturer's specifications prior to use in the field for the first time and daily thereafter.

Note: This SOP for Soil Sample Field Screening and Soil Sample Collection must be applied to all sites regulated by the Wisconsin Department of Natural Resources (WDNR). This protocol may not be approved or recognized as an acceptable SOP for soil sample screening/sampling in other states and therefore, should be re-evaluated for other states, or when the EPA has regulatory jurisdiction.

This protocol has been adopted with consideration given for field-time constraints, reducing the amount of hazardous waste (methanol) generated, and unnecessary use/waste of glass-ware. However, this protocol can only be implemented properly if the field technician allows adequate time to perform the following tasks correctly. The Giles technician, being the environmental technician onsite, is the manager of the field activity, and the drilling crew must adhere to the speed the field representative dictates. Environmental field screening and soil sample collection will always dictate the work (drilling) rate. If work rate problems arise, contact the Giles project manager immediately.

- Prior to drilling each borehole, prepare heavy-duty re-sealable containers (i.e. zip-lock bags) freezer bags for each soil sample interval anticipated to be collected per boring. The re-sealable container will be used for field screening. With a ball point pen (avoid indelible large markers), write the sample interval depth on the bags (ie; 0-2, 2-4, etc.). Laboratory supplied glassware will be provided for samples to be submitted for analysis.
- Once the drilling crew provides the split-spoon or sleeve sample (interval of soil), a representative portion of the entire spoon length will be collected and split into replicate portions and placed in the laboratory supplied glassware and re-sealable container. The laboratory samples will be immediately placed in a sample cooler on ice, and cooled to 4 degrees Celsius; the re-sealable container will be placed in a location to promote volatilization. Volatilization will occur by warming the sample, preferably to room temperature if possible.
- The split portion of the interval will be classified by Giles field personnel in general accordance with the Unified Soil Classification System (USCS) guidelines.

- Once the boring has been completed and the split soil samples have been containerized for field screening and potential laboratory analysis, field screening will be performed. Field screening will be performed by inserting the probe end of the PID into re-sealable container. The PID should register a stable value within 5 seconds. Avoid subjecting the PID unit to excessive moisture by using a moisture trap on the probe end at all times. After removing the PID probe from the sample, allow the PID several seconds to return to background prior to subjecting the instrument to the next field screening sample. Measure and record the readings of the field screening soil samples one after another.
- Based on the field screening results and the field protocol determined by the Project Manager, select the split portion of the sample intervals for laboratory analysis preparation from the cooler. Follow the SOP for Soil Sample Collection and Analyses.
- The samples not selected for laboratory submittal and the field-screened samples will be managed in the same manner as the soil cuttings.

Soil samples should be containerized within 30 minutes of collection from the split spoon or sleeve sample. Again note the lamp of a PID may become saturated and produce false (high) readings if subjected to high repeated moisture. Moisture traps should always be used and then be replaced after use.

Upon completion of soil classification of each soil sample, the soil sample description will be logged on the soil boring log. The description of each soil sample interval will include information on soil type, gradation, color, moisture content, field PID/FID readings, sample recoveries, N values (if applicable), total boring depth, and whether a well/piezometer was installed. Sample intervals where the soil was collected for laboratory analysis will be clearly marked on the logs. The appearance of the soil samples and any incidental odors will also be noted on the logs.

## **Standard Operating Procedure for Soil Sample Collection and Analyses**

The results of soil sample field screening combined with visual and olfactory observations will aid in selecting samples for laboratory analysis. The select soil samples will be submitted to a laboratory for analyses as required by the sampling plan. Depending on suspected contaminants at a specific site, these analyses may include volatile organic compounds (VOCs)

Upon opening of the sampling device (e.g., split-spoon or plastic liner), the soil sample will be split for organic vapor field screening and collection of laboratory analyses, in accordance with the SOP for Field Screening and Visual Classification. The recovered soil will be partitioned in the sampling device and will be placed in two re-sealable containers per interval. One re-sealable container will be immediately placed in a cooler and stored at 4 degrees Celsius. The second re-sealable container per interval will be set aside for field screening. This will provide temporary sample preservation while field screening is performed on the replicate portion of the sample. Sticks, rocks, and large debris will be removed from the sample aliquots sent to the laboratory. A new pair of Nitrile gloves will be worn for the handling of each sampling interval.

The soil sample collection, storage, and transportation will be performed in general accordance with USEPA, and/or Wisconsin Department of Natural Resources (WDNR) specifications and follow standard Chain-of-Custody (COC) requirements (including keeping samples in a refrigerator or on ice in a cooler).

Certain soil analyses require that a specific amount of soil be weighed in the field before placing in the sample container. To weigh appropriate amount of soil, the field scale will be used. Prior to use, the scale will be properly calibrated in accordance with the calibration procedure described in the *Standard Operating Procedure for Use of Field Equipment*. Calibration will be recorded in a field book or on the appropriate form.

Specific requirements for sample container type, preservative, and holding times are discussed in the following section of this SOP and summarized in Table 1, attached. Please note that the type of containers may vary for different laboratories. The following section describes the specific container types.

### VOCs

Soil samples collected for the VOC analysis will be preserved with methanol, which must be noted on the Chain-of-Custody. The soil samples must be preserved with methanol using one of the following techniques:

#### Standard Soil Sample Collection - Immediate Methanol Preservation.

After field screening, collect soil into tarred VOC vials and preserve immediately with methanol. Store samples on ice or at 4 ° C. Vials should be shipped in an upright position. Vials should also be placed in separate “zip lock” bags to limit the potential for cross contamination. Field personnel should be aware that laboratories use a variety of vial tare methods, so it is important to use only vials supplied by the specific laboratory.

The sample containers designated for laboratory analyses will be labeled and identified by sample number, date and time of collection, sample depth interval, analyses to be performed, and the project number. The same information will be recorded on the COC.

Table 1. Sample Container, Preservation, and Holding Time Requirements for Select Soil Analyses.

<b>Analysis</b>	<b>Container</b>	<b>Preservation</b>	<b>Holding Time</b>
VOCs	1-2oz glass jar	Methanol & Cool to 4° C	14 days

Table 2. QA/QC Sample Requirements

<b>QA/QC Sample Type</b>	<b>Frequency of Sample Analysis</b>	<b>Details</b>
Methanol Trip Blank	1 blank per sampling event	To prepare the methanol trip blank sample, field personnel will transfer methanol from a premeasured vial to an empty, but tarred, vial. (This QA/QC sample is not required for samples preserved with methanol in the laboratory.)

## **Standard Operating Procedure for Monitoring Well Installation and Development**

Monitoring wells will be installed in a manner that permits the screened interval to intercept the water table through seasonal water table level fluctuations. Monitoring wells will be constructed of 0.01-inch slotted, 1-inch diameter (1-inch for the outer diameter), flush-threaded, Schedule 40 polyvinyl chloride (PVC) pre-packed screen. The screen will be 10 feet in length for monitoring wells. The riser pipe will consist of Schedule 40, flush threaded PVC. A 4-inch long flush threaded, Schedule 40 PVC cap will be placed on the bottom of the monitoring well screens.

The annular space surrounding each well screen will be backfilled with clean, well-sorted silica sand as a filter between the formation material and the well screen. Monitoring wells will be constructed inside of the direct-push boring. Care will be taken to properly place an additional continuous filter pack between the well screen and the borehole wall. The filter packs will extend approximately 1 to 2 feet above the top of the well screens. The top of the filter pack will be measured with a weighted measuring tape for depth confirmation.

A bentonite seal, 2 to 3 feet thick, will be placed in the annular space above the filter pack. The seal will be composed of commercially-manufactured bentonite chips. The bentonite will be slowly poured through the hollow-stem augers to minimize the potential for bridging. The finished bentonite surface will be measured with a weighted measuring tape for depth confirmation. The well screen will be positioned so as to intercept the chemicals of concern or assess the hydrogeologic properties of the saturated zone.

Granular bentonite will be placed above the bentonite seal to the ground surface. The bentonite will be slowly poured to minimize the potential for bridging. The bentonite will be backfilled until it is observed near the ground surface.

During well construction, a cap will be installed at the top of the riser to prevent material from entering the well. A flush-mount (road box) type, protective casings will be used in high traffic areas. A compression cap will be installed on monitoring wells, completed with a road box; the protective casing cover will be bolted in place.

### **Monitoring Well Development**

The Monitoring wells will be developed following well installation.

The objectives of the well development are to:

- assure that groundwater enters the well screen freely, thus yielding a representative groundwater sample and water level measurement;
- remove fine-grained sediment in the filter pack and the nearby formation adjacent to the filter pack to minimize groundwater sample turbidity and silting of the well; and,

Well development will consist of purging with a peristaltic pump until the well no longer yields water.

## **Standard Operating Procedure for Groundwater Level Measurements**

Static water level measurements will be made using a Solinst Model 102 groundwater level indicator (or equivalent) prior to groundwater monitoring well development, purging, down-hole groundwater quality measurements and groundwater sample collection.

- The groundwater level indicator will be decontaminated before and after each measurement location with a solution of water/Alconox solution and 2 water rinses.
- Monitoring wells will be opened and allowed to equilibrate for a minimum of 10 minutes prior to measurements.
- The depth to groundwater within each well will be recorded at the time the measurement is completed.
- The measurement shall be made referenced to a mark in the PVC top of casing, which is also indicated by a mark made on the northern most edge of the top of the casing.
- Groundwater measurements will be recorded to the nearest 0.01-foot.
- The data will be recorded in the filed notes. The notes will contain the following information: monitoring well number, time and date of the measurement, depth to groundwater from top of casing, location of the site, weather conditions, and any additional observations noted (i.e. well protector top condition).



## **Standard Operating Procedure for Groundwater Sample Collection and Analyses**

Groundwater samples will be submitted to a laboratory for analyses as required. The analysis will consist of volatile organic compounds / chlorinated volatile organic compounds analysis (VOCs/CVOCs) and per- and polyfluoroalkyl substances (PFAS).

Groundwater samples will be collected using a peristaltic pump fitted with new ¼-inch outer diameter disposable polyethylene and silicone tubing. The tubing will be extended to the bottom of the well then lifted approximately 6 inches. Water will be pumped at the lowest rate practicable during purging and sampling. The wells will be purged for several minutes, and the volume of water evacuated during purging will be recorded. The wells will be allowed to recharge prior to sampling. Samples will be collected within 24 hours of purging.

PFAS samples will be collected first. Special considerations are required when collecting PFAS samples:

- Do not handle any packaged food or drinks around the sampling site.
- No pre-packaged food, chemical ice packs, fast food wrappers or containers
- ZipLoc® resealable plastic storage bags are allowable.
- All PFAS sample containers must be laboratory-supplied and made of HDPE or polypropylene. Caps must be unlined and made of HDPE or polypropylene (no Teflon® -lined caps)
- Bottles must be pre-labeled before arrival at the sampling site; mark labels with a ball-point pen only, NO markers.
- Field equipment must not contain Teflon® (aka PTFE) or LDPE materials.
- All sampling materials must be made from stainless steel, HDPE, acetate, silicone, or polypropylene.
- No waterproof field books can be used.
- No plastic clipboards, binders, or spiral hard cover notebooks can be used.
- No adhesives (i.e. Post-It® Notes) can be used
- Sharpies and permanent markers not allowed; regular ball point pens are acceptable.
- Aluminum foil must not be used.
- Keep PFAS samples in a sealed ZipLoc bag within the cooler, away from sampling containers that may contain PFAS.
- Coolers filled with regular ice only
- Use laboratory-supplied “PFAS-free” water on-site for decontamination of sample equipment. No other water sources to be used.
- Only Alconox and Liquinox can be used as decontamination materials.
- New nitrile gloves must be used during sample collection. Care must be taken to ensure the gloves have not come into contact with PFAS-containing materials. Therefore, gloves should be taken from a new/unopened box and used immediately or placed in a sealed ZipLoc bag. Hands must be washed thoroughly before any handling of gloves.
- Be aware that PFAS are contained in many personal care products and clothing, so care must be taken to ensure that sampling equipment does not come into contact with potential PFAS-containing materials.

The date and time of sample collection among other pertinent information (i.e., project number, sample identification number, and analysis requested) will be recorded on the sample container and on the sampling log. The groundwater sample collection, storage, and transportation will be performed in general accordance with ASTM and WDNR specifications and will follow standard COC requirements. The specific requirements for sample container type, preservative, and holding times are discussed in the following section of this SOP and summarized in Table 1, attached. Please note that the type of containers may vary for different laboratories. The

following section describes the specific container types that are currently provided by the laboratory.

### PFAS

Wash hands thoroughly with PFAS-free soap and clean water prior to putting on new nitrile gloves. Do not touch potentially PFAS-containing surfaces after washing or after putting on gloves. Care must also be taken to ensure the sample tubing has not come into contact with PFAS-containing materials. Each sample requires two laboratory-supplied 250-ml HDPE containers be filled to the neck from the discharge tubing. Close containers securely. Place containers in sealed ZipLoc® bags and into a cooler with ice.

Field blanks will be collected when sampling for PFAS. To collect the field blank, locate the laboratory-supplied Reagent Water. The Reagent Water container will be pre-filled with PFAS-free water and is preserved with Trizma. Locate the empty container labeled "Field Blank". Open both containers near the sample location and proceed to transfer contents of the "Reagent Water" container into the "Field Blank" container.

### VOCs

Groundwater collected for VOCs will be collected in three laboratory-supplied, 40-ml glass vials with septa-style lids preserved with hydrochloric acid. Tip the container at a slight angle and allow a slow, steady stream of water to run down its inner wall. Fill the sample container until the water forms a positive meniscus at the vial rim, then immediately replace the cap. Invert the sample container and tap it lightly to check for bubbles. If bubbles are present, fill a new sample container. Trip blank sample will also be analyzed for VOCs to serve as QA checks (see Table 2, attached).

The groundwater samples collected for laboratory analysis will be placed on ice in a cooler immediately following collection. Samples accompanied by COC will be picked up from the Giles office by the laboratory courier the next day. Overnight storage must be at a minimum temperature of 4°C (i.e., on ice or in a refrigerator).

Groundwater generated as a part of purging will be contained in labeled drums/buckets and temporarily staged pending receipt of groundwater analytical results. If the analytical results indicate the water contains detectable concentrations of contaminants; the containerized groundwater will be disposed of in the sanitary sewer system (if approved) or off site by a licensed waste hauler. If groundwater does not contain any detectable contaminants, it will be dispersed on site (thin spread on pavement). Due to small quantity, the groundwater evacuated from temporary wells set in Geoprobe boreholes will be dispersed on site.

Table 1. Sample Container, Preservation, and Holding Time Requirements for Select Groundwater Sample Analyses.

<b>Analysis</b>	<b>Container</b>	<b>Preservation</b>	<b>Holding Time</b>
PFAS	2-250 ml, HDPE	Cool to 4° C	14 days
VOCs	3-40 ml, glass vials	HCL, cool to 4° C	14 days

Table 2. QA/QC Sample Requirements

<b>QA/QC Sample Type</b>	<b>Frequency of Sample Analysis</b>	<b>Details</b>
Trip Blanks	1 trip blank per cooler containing samples for VOC analysis	Trip blank is a laboratory-prepared blank containing DI water. The trip blank will be submitted for VOC analysis to assess potential contamination during sample container shipment and storage.
Field Blanks	1 field blank per day collected for PFAS analysis	Field blank is a background atmospheric blank sample. The field blank consists of laboratory reagent grade (contaminant-free) water that is exposed to the atmosphere where the water sampling is taken place. The field blank will be submitted for PFAS analysis to assess the potential for background contamination during sampling. Additional analyses may be requested depending on Site conditions.

## **Standard Operating Procedure for Decontamination**

The objective of decontamination is to limit false positives and potential cross-contamination by the removal of contaminants from environmental investigation/remedial equipment and personal protective equipment (PPE), or directly from the field technician's body. Decontamination will serve two purposes for the Giles field technician prior to sampling; equipment decontamination, and personnel decontamination. For high profile projects, a regulatory agency may require that an equipment rinsate blank be submitted to verify that decontamination procedures adequately remove contaminants from sampling equipment. Personnel decontamination procedures are used in order to protect Giles field personnel from accidental absorption, ingestion, and inhalation of residual contaminants, to which the field technician may have become exposed and to prevent false positives through cross-contamination.

Giles environmental field activities will be performed wearing Level-D PPE. Level D PPE includes a minimum standard of steel-toed shoes or boots, full length pants, and nitrile/latex gloves. Level D PPE may also include wearing a hard hat, long-sleeve shirt, hearing, and eye protection. Disposable coveralls will be made available to field personnel if warranted. When site activities include the handling or exposure to potentially contaminated soil/groundwater, decontamination proceedings such as hand washing (soap and warm water), should take place prior to taking breaks where food or drink may be consumed. Soil/sludge should be removed from boots prior to leaving site. Disposable PPE should be removed and containerized onsite. Onsite personnel decontamination stations should be made available whenever possible. Equipment decontamination stations should not be used for personal decontamination.

Equipment (ie; water level indicators, down-hole measuring devices) will be decontaminated between sampling points (ie; monitoring wells). Multiple equipment uses while at a same monitoring point do not require decontamination. Decontamination should be conducted with a stationary set of wash buckets positioned outside the work area. Equipment decontamination should include a minimum of three separate 5-gallon bucket wash/rinse cycles. The first bucket should contain a De-ionized (DI) water/Alconox detergent solution (or equivalent), in which scrub brushes will be used to clean residual debris from the instrument. The following two buckets are rinses. If equipment appears unclean, repeat the procedure, and replace decontamination water with clean water. Cleaned equipment shall be placed on clean plastic sheeting for immediate use. If use is prolonged the equipment should be dried, and stored in the equipment case. Water used for decontamination should be replaced with clean water at minimum, on a daily basis. Depending upon the severity of contamination to which the equipment is being exposed, several water changes may be required daily.

To further reduce cross-contamination, and by using prior site data, measurements with field equipment should always progress from the least contaminated monitoring point to the most contaminated. The sampling order should be established prior to the site visit. Cross-contamination can also be prevented using disposable sampling equipment, which does not require decontamination. Disposable sampling equipment is intended for retrieval of one sample and cannot be reused to collect from a second sampling point.

## **Personnel Decontamination**

Field personnel will adhere to the following procedure with respect to personal decontamination:

- Perform decontamination when leaving the contaminated area, during breaks, and at the end of the field day.
- If available, wash boots, gloves, and outer PPE in Alconox solution, then rinse with water. If disposable latex booties or Tyvex coverall suits are worn, rinse with water, remove, and discard.
- Wear the required minimum PPE.
- Wash hands/face before handling food or drink.
- Do not eat or drink while in the work zone or while wearing contaminated PPE.
- Do not use equipment decontamination stations for personal decontamination.
- At the end of the work day, shower entire body.

## **Equipment Decontamination**

The field technician will adhere to the following procedure with respect to soil sampling equipment (split-spoons, spatulas, etc.) decontamination:

- Scrape soil from sample device.
- Decontamination of the sampling equipment occurs between each sampling and at the end of every working day.
- Wash sample barrel in water/Alconox solution or equivalent, then rinse with tap water, and final rinse with DI water.
- Place on plastic sheeting and allow to air dry or wipe with clean paper towel.
- Depending upon the severity of the contamination for which the equipment is exposed, disposal of decontamination solution will be site-specific, and may involve disposal/thinspreading onsite, or containerization for future disposal.

## **Monitoring Equipment Decontamination**

The field technician will adhere to the following procedure with respect to the decontamination of monitoring equipment:

- Always progress the sample point order from least contaminated to most contaminated location.
- Decontamination of the monitoring equipment occurs between each sampling location, and at the end of every working day.
- In between each measurement location, wash equipment in water/Alconox solution or equivalent, then rinse with tap water, and final rinse with DI water.
- Place on plastic sheeting and allow to air dry or wipe with clean paper towel.
- Depending upon the severity of the contamination for which the monitoring equipment is exposed, disposal of spent decontamination solutions will be site-specific, and may involve disposal onsite, or containerization for future disposal.

## **Drill/Geoprobe Rig and Drill/Geoprobe Equipment Decontamination**

The drill rig and drilling equipment will be decontaminated between boring locations by washing surfaces that have been in contact with soil and groundwater using a mixture of Alconox soap and water.

## **Standard Operating Procedure for Chain-of-Custody**

Custody procedures will be used to record and document the custodial possession of samples during the project. The sample media requiring custody procedures includes soil, groundwater, air, and vapor samples that are submitted to a laboratory for chemical analyses. The samples are considered in custody, if they are:

- In person's possession;
- In view of the person after being in their possession;
- Sealed in a manner that they cannot be tampered with after having been in physical possession;
- In a secure area restricted to authorized personnel.

A Giles Chain-of-Custody (COC) form (or a laboratory-provided form) will be used to ensure that the proper custody procedures have been followed for the samples collected and submitted to the laboratory.

Upon collection, samples will be cataloged on the Giles COC form using the sample identification designation and/or number. In addition, the date and time of collection, the number of containers for each type of sample, the type of sample preservation, and the type of analyses requested will be recorded on the COC form. A separate COC will accompany each cooler or shipping container containing samples at all times.

The COC form will be sealed in a plastic bag and placed inside the sample container for transportation to the laboratory. Upon relinquishing the sample container to the laboratory (or the laboratory courier), Giles field personal will transfer custody of the samples to laboratory personnel by signing and dating the bottom of the COC form. Giles field personnel will retain one copy of the COC form. The original COC will be sent to the laboratory with the samples.

The completed original copy of the COC will be included with the final laboratory report.

**Standard Operating Procedure  
for  
Sub-Slab Soil Gas Sample Collection**

Complete a utility locate to identify the likely entry points of water, gas, electrical, and sewer lines outside of the building. If necessary, consult with the owner or contract a plumber and electrician to provide a recommendation for safe locations to drill through the slab. Install the sub-slab vapor probes in the concrete slab but not into the subgrade soil. Sub-slab vapor probes installed using the following procedure:

- 1) Drill a 1.5-inch diameter hole to 1.75-inch depth in the concrete slab or the equivalent thickness of the coupling to ensure the probe is flush with the surface of the concrete.
- 2) Clean the hole with a vacuum cleaner and damp towel to remove the cutting debris prior to drilling a 5/8-inch hole in the center of the 1-inch hole.
- 3) Drill the 5/8-inch bit 1-inches below the bottom of the concrete slab to create an open cavity and prevent the probe from plugging.
- 4) Clean the hole with a bottle brush, vacuum cleaner, and damp towel to ensure a good seal between the slab and the coupling.
- 5) Drive a preassembled Vapor Pin into the hole using a deadweight hammer.
- 6) Construct a water dam around the Vapor Pin and monitor the water level for at least 5 minutes to ensure no leaks are present.

Following installation of the sub-slab vapor probes, samples will be collected using the following procedure:

- 1) The laboratory will ship a 6-liter canister with a canister specific flow regulator (200 - milliliters per minute) and associated fittings, Teflon tubing, and particulate filter for each sample. The canister and associated sample equipment are intended for one use and should not be switched or used multiple times with other air sample equipment. The 6-liter canister will be shipped from the laboratory with a recorded vacuum of approximately 25 to 30 pounds per square inch (psi).
- 2) Attach a gauge to record the initial vacuum in the canister and compare to the laboratory supplied vacuum recorded at the time of canister shipment. Record the initial pressure reading. The initial vacuum should be between 23 to 26 psi and should not deviate more than 10% from the laboratory supplied vacuum. If the initial vacuum is less than 23 psi or has lost more than 10%, the canister should be rejected and returned to the laboratory.
- 3) Attach the canister specific flow regulator that is supplied by the laboratory and cap the end of the flow regulator with the supplied brass cap. Perform a shut-in test to test the seal between the flow regulator and the canister. To start shut-in test open

the canister valve fully, then turn the valve in the closed direction until there is slight resistance. If the pressure drops, close the valve and retighten the fitting, and complete the shut-in test. If the pressure does not drop, open the valve to start the test. To start sampling open the canister valve fully, then turn the valve in the closed direction until there is slight resistance.

- 4) Construct a sample train consisting of new, one time use Teflon tubing from the vapor probe to a T-fitting. Note that all tubing and fitting between the vapor probe and canister will be of new materials, one time use.
- 5) Purge the Teflon tubing using a syringe or PID
- 6) Open the valve on the canister to collect the air sample. Record the time, date and initial vacuum at the start of the sampling. To start sampling open the canister valve fully, then turn the valve in the closed direction until there is slight resistance. Note that the final canister pressure should be less than atmospheric pressure.
- 7) After the sample period is complete, record the time, date, and final vacuum, close the canister valve; remove the regulator and pressure gauge. Do not over tighten the canister valve. Replace the end cap on the canister. Note that there should be 5 and 10 psi of vacuum remaining in the canister ensure a constant flow rate was used. As specified by the laboratory, the canister vacuum must be below 10 psi, but above 1 psi at the completion of the test. Contact the project manager if the final canister vacuum is outside of this range to determine if the sample should be rejected.
- 8) After the air sample has been collected, the canister should be packaged in the same manner as received and sent to the laboratory within one day of collection. The samples with COC will be shipped 2<sup>nd</sup> day delivery unless otherwise directed by the project manager.



## **Standard Operating Procedure for Indoor Air Sample Collection**

Indoor air samples will be collected in a 6-liter summa-type canister fitted with a regulator to sample the indoor air for an 8 hour period of time. An 8 hour sampling duration would be used in commercial and industrial settings, whereas a 24 hour sampling duration would be used in a residential setting. The canister should be placed in the basement or lowest floor of the building at a location away from windows, sources of other air disturbance, and high moisture areas and chemical storage. The sample procedure is detailed as follows:

### Pre-sample Evaluation

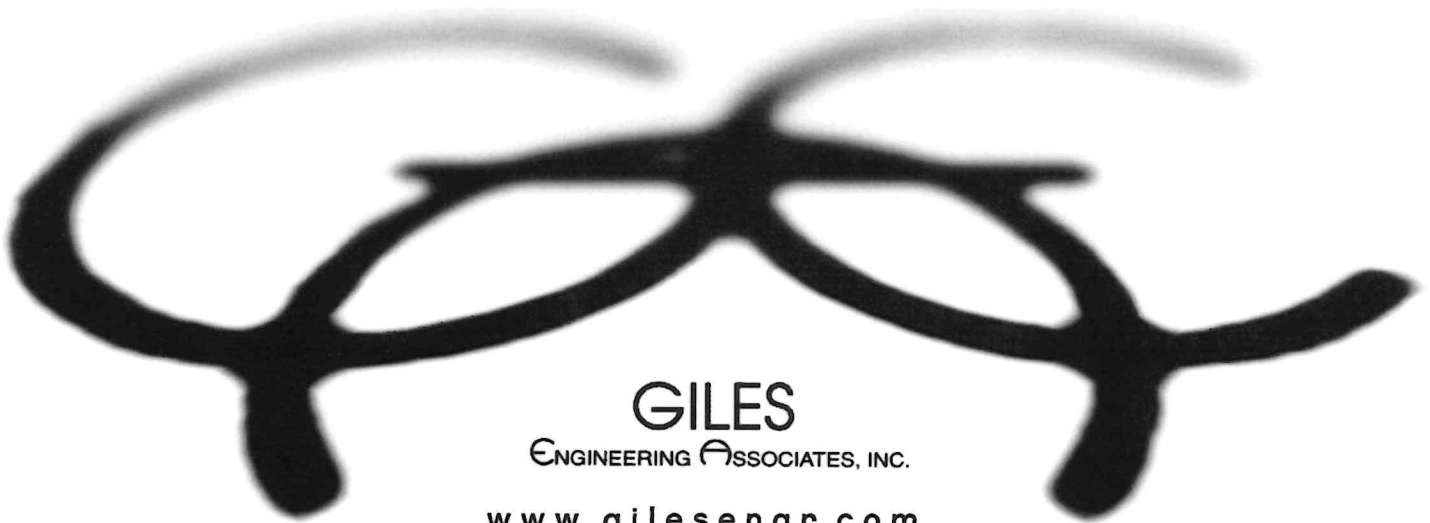
Complete the indoor air building survey and sampling form. Evaluate the site for potential background contaminant sources. If there are possible background contaminant sources, contact the project manager immediately to determine if steps can be taken to avert contamination from background sources (ie. recent cleaning, painting, smoking, chemical storage, cleaning products, etc.) It may be necessary to remove background sources and complete the air sampling at a later date.

### Sample Procedure

- 1) The laboratory will ship a 6-liter canister with a canister specific flow regulator and associated fittings, Teflon tubing, and particulate filter for each sample. The canister and associated sample equipment are intended for one use and should not be switched or used multiple times with other air sample equipment. The 6-liter canister will be shipped from the laboratory with a recorded vacuum of approximately 25 to 30 pounds per square inch (psi).
- 2) Attach a gauge to record the initial vacuum in the canister and compare to the laboratory supplied vacuum recorded at the time of canister shipment. Record the initial pressure reading. The initial vacuum should be between 25 to 30 psi and should not deviate more than 10% from the laboratory supplied vacuum. If the initial vacuum is less than 25 psi or has lost more than 10%, the canister should be rejected and returned to the laboratory.
- 3) Attach the canister specific flow regulator that is supplied by the laboratory and cap the end of the flow regulator with the supplied brass cap. Perform a shut-in test to test the seal between the flow regulator and the canister. To start shut-in test open the canister valve fully, then turn the valve in the closed direction until there is slight resistance. If the pressure drops, close the valve and retighten the fitting, and complete the shut-in test. If the pressure does not drop, open the valve to start the test. To start sampling open the canister valve fully, then turn the valve in the closed direction until there is slight resistance.
- 4) Connect the Teflon tubing to the flow regulator. Tape the intake end of the tubing to a wall near the suspected source area. Intake height should be between approximately 5 to 6 feet above the floor to be representative of breathing level.

- 5) The date, start time of sample collection, among other pertinent information (i.e., project number, sample identification number, and analysis requested) will be recorded on the sample container and on the sampling log. The air sample collection, storage, and transportation will be performed in general accordance with ASTM and WDNR specifications and will follow standard COC protocol.
- 6) After the sample period is complete, record the final vacuum, end time, date, and close the canister valve; remove the regulator and pressure gauge. Do not over tighten the canister valve. Replace the end cap on the canister. Note that there should be between 1 and 5 psi of vacuum remaining in the canister ensure a constant flow rate was used. Contact the project manager if the final canister vacuum is outside of this range to determine if the sample should be rejected.
- 7) After the air sample has been collected, the canister should be packaged in the same manner as received and sent to the laboratory within one day of collection. The samples with COC will be shipped 2<sup>nd</sup> day delivery unless otherwise directed by the project manager.

**Geotechnical, Environmental & Construction Materials Consultants**



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