ARCADIS Design & Consultancy for natural and built assets

Revitalizing Auto Communities Environmental Response Trust (RACER)

JOSLYN – WESBROOK SOUTH PARCEL SCREENING INVESTIGATION REPORT

Pontiac North Campus

August 24, 2021

JOSLYN WESBROOK SOUTH PARCEL SCREENING INVESTIGATION REPORT

Lexi Crisp

Staff Geologist

Brad Saunders

Principal Engineer

Prepared for:

David Favero

RACER Trust

1505 Woodward Avenue, Suite 200

Detroit, Michigan 48226

Prepared by:

Arcadis of Michigan, LLC

28550 Cabot Drive

Suite 500

Novi

Michigan 48377

Tel 248 994 2240

Fax 248 994 2241

Our Ref.:

30075936

Date:

August 23, 2021

CONTENTS

FIGURES

TABLES

ATTACHMENTS

1 INTRODUCTION, BACKGROUND AND OBJECTIVE

Arcadis of Michigan, LLC (Arcadis) prepared this report on behalf of Revitalizing Auto Communities Environmental Response Trust (RACER). This report describes the planning, implementation, and results of a subsurface screening investigation activities conducted by Arcadis at a vacant 0.455-acre parcel (Parcel ID 14-21-205-001) in the vicinity of the RACER Pontiac North Site in Pontiac, Michigan. The parcel (herein referred to as the Joslyn-Wesbrook South Parcel or "Site") is bounded to the west by Joslyn Avenue, north by Wesbrook Street, south by Lenox Avenue, and east by residential properties. The Site is owned by RACER Properties, LLC, a wholly owned subsidiary of RACER. The location of the Site is shown on **Figure 1**.

RACER's objective is to obtain no further action status for the Site based on completing necessary response activities and recording deed restrictions such as restricting use to nonresidential, prohibiting installation of wells and use of groundwater, and requiring soil vapor management.

On behalf of RACER, Arcadis previously prepared a Technical Memorandum entitled "*Joslyn Avenue Parcels Historical Summary Memorandum and Request for Determination for Parcels Not Being Regulated Under RCRA, including Corrective Action, and Not Being Covered Under Administrative Order on Consent RCRA-05-2011-00019"* in October 2020 which was finalized and submitted to the United States Environmental Protection Agency (USEPA) on January 19, 2021. The memorandum summarized historical activities at the Site and an additional RACER-owned vacant parcel to the north (Joslyn-Wesbrook North Parcel), and requested a determination by USEPA with respect to regulation under RCRA Corrective Action. USEPA issued a March 3, 2021 letter to RACER confirming that the parcels did not appear subject to RCRA Corrective Action requirements and also acknowledging that investigation work on the parcels would be conducted under the AOC and funding for the Pontiac North Site.

Details provided in the Arcadis Technical Memorandum indicated that among other former uses, a gasoline service station formerly occupied the southern portion of the Site from approximately 1950-1967. The memorandum describes the property was investigated under prior former General Motors Corporation ownership. This included a release being reported under Part 213 of the Michigan Natural Resources and Environmental Protection Act in November 1996. The memorandum described that after additional investigation and reporting activities, the release was closed in April 1999. However, comparison of soil and groundwater analytical results reported in previous investigation activities indicate exceedances of current Michigan Department of Environment, Great Lakes, and Energy (EGLE) soil and groundwater cleanup criteria and guidance screening values, which presented a potential environmental concern warranting further investigation. The objective of this investigation was to determine if residual soil and/or groundwater impacts at the Site warrant additional characterization activities and/or potential implementation of corrective measures.

The following paragraphs describe the scope of work, field activities, soil and groundwater analytical results, and conclusions of subsurface investigation activities conducted at the Site, as well as associated recommendations.

2 SCOPE OF WORK

Upon initial completion of historical review activities for the Site, on behalf of RACER Trust Arcadis prepared a Technical Memorandum entitled Joslyn Parcels Scope of Work (SOW) dated October 26, 2020 which was submitted to USEPA. On March 19, 2021, after clarification of the target analytical parameters based on historic sources known to exist on the property and through review of previous investigation reports, USEPA provided an email response indicating that it had no issues with RACER proceeding with completion of the work. Based on potential environmental concerns identified in the Historical Summary Technical Memorandum, which was draft at the time but later finalized, the SOW proposed the installation of combined soil boring and temporary monitoring wells at locations on both the Joslyn-Wesbrook North and South parcels. For the Joslyn South Parcel, this SOW initially included the installation of eight borings and temporary monitoring wells to best identify potential impacts at historic structures, assess groundwater flow direction across the parcel, and assess Site conditions near the property boundaries. Based on field observations as described in Section 3.2 below, the SOW was expanded to the installation of eleven borings and temporary monitoring wells.

The SOW included both public and private utility clearance activities; collection of soil core samples continuously collected for description, screened with a photoionization detector (PID), and documented for saturated conditions; collection of one to two soil samples for laboratory analysis at each boring location – one at the highest PID detection (if detections and/or field observations indicate impact), and/or one at the interval above the first encountered groundwater table; and laboratory analysis of soil samples for volatile organic compounds (VOCs).

The SOW included installation of temporary monitoring wells at each boring location using hollow stem auger drilling techniques and 2-inch diameter Schedule-40 PVC well construction materials equipped with 5-foot, 10-slot PVC screens targeting the top of the water table. To the extent sand seams were found to exist below the water table at the Joslyn South Parcel, screens would be located in the upper portions of such seams given that the potential contaminants associated with former service station operations would be gasoline constituents. The SOW also included development of temporary monitoring wells using pump and surge methods; surveying of each monitoring well location for horizontal coordinates, ground elevation, and top-of-casing to assist in the determination of groundwater flow direction at the Site; and sampling and analysis of groundwater at each temporary monitoring well location for analysis of VOCs.

3 FIELD ACTIVITIES

Utility locating, soil boring advancement, temporary monitoring well installation, and temporary monitoring well development activities took place from April 26 - May 4, 2021. Arcadis subcontracted Terra Probe Environmental, Inc. (Terra Probe) to perform private utility clearance and soil boring / temporary monitoring well installation activities. Temporary monitoring well locations were surveyed and depths to water were measured on May 10, 2021. Groundwater sampling took place from May 11-12, 2021. Based on inconsistencies with initial gauging results, an additional round of depths to water were measured on June 4, 2021. Details of field activities are summarized in Sections 3.1-3.4 below.

3.1 Utility Locating

Prior to completing drilling activities for this event, utility clearance was performed using a minimum of three lines of evidence. Arcadis and Terra Probe called in Michigan public MISSDIG tickets (Numbers B011091327 and B011091292) approximately one week prior to mobilization. Upon mobilization on April 26, 2021, Terra Probe conducted private utility clearance activities at each of the boring locations utilizing Ground Penetrating Radar (GPR) and electromagnetic (EM) techniques. In addition, Terra Probe utilized a hand auger to soft dig to 5 feet below ground surface (bgs) prior to drilling at each of the boring locations from April 27-April 30, 2021.

3.2 Soil Boring, Logging and Sampling Activities

On April 27-April 30, 2021, Terra Probe installed a total of eleven soil borings (JS-SB-01 through JS-SB-11) at the Site at locations depicted on **Figures 2-5**. As previously described, an additional three soil borings were added to the eight soil borings planned in the original SOW in order to further delineate areas where observations of staining were made in combination with high PID detections. Soil borings were advanced to 16 feet bgs at each location using a direct push technology (DPT) rig with hollow stem augers. Soil core samples were collected continuously for description, screening for VOCs, and documentation of saturated conditions. Soil from each of the eleven borings was continuously monitored with the PID. There were no detections of organic vapors above the PID's 0.1 part per million (ppm) detection limit at eight of the eleven boring locations. JS-SB-03 had a maximum PID detection of 0.9 ppm, JS-SB-05 had a maximum detection of 229.3 ppm, and JS-SB-09 had a maximum detection of 15.6 ppm. Soil description details are included in the Soil Boring / Temporary Monitoring Well construction logs in **Attachment 1**.

During the boring installation process, given that there were no PID detections in eight of the eleven borings, one soil sample was collected from the first encountered unsaturated zone in the interval above the first encountered saturated zone from JS-SB-01, JS-SB-02, JS-SB-04, JS-SB-06, JS-SB-07, JS-SB-08, JS-SB-10, and JS-SB-11. Because organic vapors were detected in soil in borings JS-SB-03, JN-SB-05, and JS-SB-09, an additional sample was obtained from each of these locations at the interval with the highest PID detection. Soil samples were placed in sealed containers, packaged and submitted to Merit Laboratories, Inc. in Lansing, MI for analysis of VOCs utilizing USEPA Method 8260B. Soil cuttings were drummed and stored at a secure location at RACER Pontiac North Site pending off-site transportation and disposal.

3.3 Temporary Monitoring Well Installation and Development Activities

After the completion of soil borings, temporary monitoring wells were installed and developed at each of the eleven locations on April 27 – May 4, 2021. Temporary monitoring wells at each location were constructed of 2-inch diameter Schedule-40 PVC well materials and a 5-foot, 10-slot PVC screen set to split the water table. Filter packs were installed approximately 2 feet above the top of the screen followed by a hydrated bentonite chip seal. Monitoring wells were not finished with flush mounted well vaults but left as temporary monitoring wells pending analytical results. Temporary monitoring wells were developed

using pumping and surge methods. Purge water was drummed and stored with soil cuttings pending off-site transportation and disposal.

3.4 Temporary Monitoring Well Surveying Activities

After temporary monitoring well installation and development activities, Arcadis subcontracted Surveying Solutions, Inc. (SSI) to survey horizontal coordinates, ground elevations, and the top-of-casing measuring point elevations of each monitoring well. SSI completed surveying activities on May 10, 2021.

3.5 Groundwater Gauging and Sampling Activities

Two separate groundwater gauging events were conducted. The first was conducted on May 10, 2021 prior to groundwater sampling activities. Due to inconsistencies in measured water levels potentially associated with perched water, a second gauging event was conducted after a period of stabilization on June 4, 2021.. **Table 1** presents a summary of water levels and groundwater elevations from the second gauging event. Groundwater elevations or potentiometric surface, appropriate, from monitoring wells were calculated using gauging results and surveyed top-of-well casing elevations, and used to create a shallow groundwater/potentiometric surface contour map for June 4, 2021. **Figure 2** presents contours at both the Site and the Joslyn North Parcel. Groundwater/potentiometric elevation contours indicate that apparent shallow groundwater flow across the Site is generally to the south-southwest, and then transitions downgradient further south to the south-southeast. To better define underlying soil and groundwater characteristics based on the presence of a high plasticity clay layer with inconsistent clayey-sand and sand seams overlying a consistent 0-4 ft bgs medium to coarse sand layer, two cross sections were created to assess the current geology at the Site: one from North to South **(Figure 3A)**, and one from West to East **(Figure 3B)**.

Groundwater samples were collected from the eleven temporary wells when field parameters stabilized per USEPA Low Flow Sampling guidance (USEPA 2017). Samples were containerized and submitted to Merit Laboratories, Inc. in Lansing, MI for analysis of VOCs utilizing USEPA Method 8260C. During sampling, purge water was monitored for dissolved oxygen (DO), temperature, specific conductivity, turbidity, oxidation-reduction potential (ORP), and pH. Groundwater Sampling Logs from the sampling event are included in **Attachment 2**.

.

4 SOIL AND GROUNDWATER ANALYTICAL RESULTS

4.1 Soil Analytical Results

The Merit Laboratories soil sampling analytical report is included in **Attachment 3.** Soil sampling analytical results are tabulated in **Table 2** and compared to EGLE Cleanup Criteria. Results are compared to Residential and Nonresidential Soil Direct Contact Criteria, Residential and Nonresidential Soil Drinking Water Protection Criteria, Soil Groundwater-Surface Water Interface (GSI) Protection Criteria, and Residential and Nonresidential Soil Volatilization to Indoor Air Pathway (VIAP) Screening Levels from the EGLE Guidance Document for the Vapor Intrusion Pathway (EGLE 2020b).

In summary, there were detections of VOCs in three of the eleven soil borings: JS-SB-05 (5-6 ft bgs and 7-8 ft bgs), JS-SB-09 (9-10 and 10-11 ft bgs), and JS-SB-10 (14-15 ft bgs). **Figure 4** is a soil analytical data map depicting the results of soil sampling at the Site. For the three locations where VOCs were detected in soil, compounds are identified on the soil analytical data map and notated accordingly based on if potentially relevant EGLE Cleanup Criteria exceedances exist. The following is a summary of contaminant exceedances by exposure pathway:

- Groundwater Surface Water Interface Protection
    - JS-SB-05 (5-6): 2-Methynapthalene, Napthalene, 1,2-4-trimethylbenzene, 1,3-5-trimethylbenzene, ethylbenzene, and Xylene (total)
    - JS-SB-05 (7-8): 2-Methynapthalene, Napthalene, 1,2-4-trimethylbenzene, ethylbenzene, and Xylene (total)
    - JS-SB-09 (9-10): Napthalene, 1,2-4-trimethylbenzene, ethylbenzene, and Xylene (total)
    - JS-SB-09 (10-11): Napthalene, 1,2-4-trimethylbenzene, ethylbenzene, and Xylene (total)

- Residential and Nonresidential Drinking Water Protection
    - Residential
        - JS-SB-05 (5-6): 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, Ethylbenzene, N-Butylbenzene, N-Propylbenzene, and Xylene (Total)
        - JS-SB-05 (7-8): 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, Ethylbenzene, Napthalene, N-Butylbenzene, N-Propylbenzene, and Xylene (Total)
        - JS-SB-09 (9-10): 1,2,4-Trimethylbenzene, Ethylbenzene, and N-Propylbenzene
        - JS-SB-09 (10-11): 1,2,4-Trimethylbenzene, Benzene, and Ethylbenzene
        - JS-SB-10 (14-15): 1,2-Dichloroethane
    - Nonresidential
        - JS-SB-05 (5-6): 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, Ethylbenzene, N-Propylbenzene, and Xylene (Total)
        - JS-SB-05 (7-8): 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, Ethylbenzene, N-Butylbenzene, N-Propylbenzene, and Xylene (Total)
        - JS-SB-09 (9-10): 1,2,4-Trimethylbenzene and Ethylbenzene
        - JS-SB-09 (10-11): 1,2,4-Trimethylbenzene, Benzene, and Ethylbenzene
        - JS-SB-10 (14-15): 1,2-Dichloroethane

- Residential and Nonresidential Direct Contact
    - No Residential or Nonresidential exceedances

- Residential and Nonresidential Soil VIAP
    - Residential
        - JS-SB-05 (5-6): 1,2,3-Trimethylbenzene, 1,2,4-Trimethylbenzene, 1,3,5 - Trimethylbenzene, 2-Methylnapthalene, Ethylbenzene, Napthalene, N-Butylbenzene, N-Propylbenzene, and Xylene (total)

        - JS-SB-05 (7-8): 1,2,3-Trimethylbenzene, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, 2-Methylnapthalene, Ethylbenzene, Napthalene, N-Butylbenzene, N-Propylbenzene, and Xylene (total)
        - JS-SB-09 (9-10): 1,2,3-Trimethylbenzene, 1,2,4-Trimethylbenzene, Ethylbenzene, Naphthalene, N-Butylbenzene, N-Propylbenzene, and Xylene (total)
        - JS-SB-09 (10-11): 1,2,3-Trimethylbenzene, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, Benzene, Ethylbenzene, Napthalene, and Xylene (total)
        - JS-SB-10 (14-15): 1,2-Dichloroethane
    - Nonresidential
        - JS-SB-05 (5-6): 1,2,3-Trimethylbenzene, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, Ethylbenzene, Napthalene, and Xylene (total)
        - JS-SB-05 (7-8): 1,2,3-Trimethylbenzene, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, 2-Methylnapthalene, Ethylbenzene, Napthalene, N-Butylbenzene, and Xylene (total)
        - JS-SB-09 (9-10): 1,2,4-Trimethylbenzene and Ethylbenzene
        - JS-SB-09 (10-11): 1,2,4-Trimethylbenzene, Benzene, and Ethylbenzene
        - JS-SB-10 (14-15): 1,2-Dichloroethane

4.2 Groundwater Analytical Results

The Merit Laboratories groundwater sampling analytical report is also included in **Attachment 3.** Groundwater sampling analytical results are tabulated in **Table 3** and also compared to EGLE Cleanup Criteria. Results are compared to Residential and Nonresidential Drinking Water Criteria, Groundwater-Surface Water Interface Criteria, and Residential and Nonresidential Shallow Groundwater VIAP Screening Levels.

In summary, there were detections of VOCs in four of the eleven temporary monitoring wells: JS-SB-05, JS-SB-06, JS-SB-09, and JS-SB-10. No VOCs were detected in the groundwater samples collected from JS-SB-01 through JS-SB-04, JS-SB-07, JS-SB-08 or JS-SB-11. **Figure 5** is a groundwater analytical data map depicting the results of groundwater sampling at the Site. For the four locations where VOCs were detected in groundwater, compounds are identified on the groundwater analytical data map and notated accordingly based on if potentially relevant EGLE Cleanup Criteria exceedances exist. The following is a summary of contaminant exceedances by exposure pathway:

- <u>Groundwater Surface Water Interface</u>
    - JS-SB-05: 2-Methylnapthalene, Benzene, Naphthalene, and Isopropyl benzene
    - JS-SB-06: Napthalene
    - JS-SB-09: 2-Methylnapthalene, Benzene, and Napthalene

- <u>Residential and Nonresidential Drinking Water</u>
    - Residential
        - JS-SB-05: 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, Ethylbenzene, Napthalene, N-Butylbenzene, N-Propylbenzene, and Total Xylenes

        - JS-SB-06: 1,2,4-Trimethylbenzene, Benzene, Ethylbenzene, N-Propylbenzene, and Total Xylenes
        - JS-SB-09: 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, Ethylbenzene, N-Propylbenzene, and Total Xylenes
    - Nonresidential
        - JS-SB-05: 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, Ethylbenzene, and Total Xylenes
        - JS-SB-06: 1,2,4-Trimethylbenzene, Benzene, Ethylbenzene, and Total Xylenes
        - JS-SB-09: 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, Ethylbenzene, and Total Xylenes

- Residential and Nonresidential Shallow Groundwater VIAP
    - Residential
        - JS-SB-05: 1,2,3-Trimethylbenzene, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, 2-Methylnapthalene, Benzene, Ethylbenzene, Isopropyl benzene, Napthalene, N-Butylbenzene, N-Propylbenzene, and Total Xylenes
        - JS-SB-06: 1,2,3-Trimethylbenzene, 1,2,4-Trimethylbenzene, Benzene, Ethylbenzene, Isopropyl benzene, Napthalene, N-Propylbenzene, and Total Xylenes
        - JS-SB-09: 1,2,3-Trimethylbenzene, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, Benzene, Ethylbenzene, Napthalene, N-Propylbenzene, and Total Xylenes
        - JS-SB-10: 1,2-Dichloroethane
    - Nonresidential
        - JS-SB-05: 1,2,3-Trimethylbenzene, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, 2-Methylnapthalene, Benzene, Ethylbenzene, Isopropyl benzene, Napthalene, and Total Xylenes
        - JS-SB-06: 1,2,4-Trimethylbenzene, Benzene, Ethylbenzene, Isopropyl benzene, Napthalene, and Total Xylenes
        - JS-SB-09: 1,2,3-Trimethylbenzene, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, Benzene, Ethylbenzene, Napthalene, and Total Xylenes

5 CONCLUSIONS

Soil boring observations and the results of soil and groundwater analytical testing conducted during this subsurface screening investigation at the Site indicate the following conclusions:

- The geology at the Site is sand underlain by clay with inconsistent sand and clayey-sand seams. The results of groundwater gauging indicate that the groundwater flow direction in the vicinity of the impacts is to the south-southeast.

- As indicated in previous reports, historical gasoline service station activities resulted in gasoline-related subsurface soil and groundwater impacts at the southern portion of the Site.

- Residual soil and groundwater VOC impacts exceed current EGLE Cleanup Criteria for the following exposure pathways: Groundwater Surface Water Interface (GSI) Protection and GSI; Residential and Nonresidential Drinking Water Protection and Drinking Water; Residential and Nonresidential Soil VIAP, and Residential and Nonresidential Shallow Groundwater VIAP. With the exception of three PAH compounds which also included in the target analyte list VOCs via USEPA Method 8260, other PAH compounds were not detected at concentrations exceeding EGLE Cleanup Criteria. The PAH exceedances were in the vicinity of the former gas dispensers, according to historic figures.

- The horizontal extent of soil and groundwater impacts above relevant criteria is not currently adequately delineated on-site or off-site, to allow for evaluation of potential exposure pathways.

6 RECOMMENDATIONS

Based on historical details summarized in the Arcadis Technical Memorandum and the results of subsurface investigation activities described in this report, the following is recommended:

- Apply for site-specific VI criteria for the Site through EGLE.

- Conduct a water well survey and verify that the immediate area is serviced by a public water supply.

- Further investigate the presence and specific location of utilities along the southern Site boundary and south-adjacent Lenox Avenue Right-of Ways and corridor which have been preliminary depicted on **Figure 6**. Simultaneous with performing the private utility clearance for additional soil investigation activities, use Ground Penetrating Radar (GPR) technology to assess the area of the former gasoline station canopy and the borings with detections to see if any anomalies can be identified to determine the former location(s) of underground storage tanks.

- As depicted on **Figure 6**, complete the following additional subsurface investigation activities to further characterize soil and groundwater impacts and to allow for further evaluation of potential exposure pathways against existing EGLE Cleanup Criteria:

    - Delineation of Soil Impacts:
        - At 7 locations surrounding JS-SB-05 and JS-SB-09, advance soil borings into the upper approximate 3 feet of the water table. An Arcadis geologist will log each boring and field screen soil at 1-foot intervals with a PID. Up to 8 additional step-out borings may be installed based on field observations and PID readings.
        - At each soil boring location, a minimum of one soil sample will be collected for analysis. In borings without PID detections or observed impacts, unsaturated samples will be collected for analysis in the interval immediately above the saturated zone as determined from observations and surrounding temporary monitoring wells. In borings with observed impacts, samples will be collected for

analysis at locations with the highest PID detection, and also for vertical delineation in two-foot intervals above this location up to and including the interval where PID detections do not exist and staining is not observed.

- Samples will be submitted for laboratory analysis of VOCs via USEPA Method 8260.

Conversion and Abandonment of Select Temporary Monitoring Wells

- Convert the following eight temporary monitoring wells to permanent monitoring wells with flush-mount covers: JS-SB-03, JS-SB-04, JS-SB-05, JS-SB-06, JS-SB-07, JS-SB-09, JS-SB-10, JS-SB-11.
- Based on the presence of other upgradient clean temporary monitoring wells (JS-SB-03 and JS-SB-07), properly abandon temporary monitoring wells JS-SB-01, JS-SB-02, and JS-SB-08. Well abandonment will be completed in accordance with American Society of Testing Materials (ASTM) Standard D 5299-92. Upon abandonment, a well abandonment log will be prepared to document that the well was properly abandoned, and a summary of the effort will be submitted to USEPA. Well casings will be pulled from the round when possible, and holes will be filled with bentonite chips and resurfaced with topsoil and seed. At locations where well casings are not able to be pulled, the top two feet of the well casing will be removed and the remaining casing filled with bentonite chips.

- Installation of New Groundwater Monitoring Wells
  - At seven (7) locations depicted on **Figure 5**, install new 2-inch permanent flush mount monitoring wells. Six (6) of the locations will require a Right-of-Way Permit from the City of Pontiac for locations on both sides of Lenox Avenue.
  - At each location, complete soil borings to approximately 16 ft bgs. Each soil boring will be logged by an Arcadis geologist in accordance with the Arcadis Soil Logging TGI and field screened with a PID. At each location, up to two soil samples will be collected: one at the highest PID detection (if detections and/or field observations indicate impact), and/or one in the unsaturated zone at the interval above the groundwater table as determined from observations and surrounding temporary monitoring wells. Soil samples will be submitted for laboratory analysis of VOCs via USEPA Method 8260.
  - At each location, permanent monitoring wells will be constructed utilizing 2-inch diameter Schedule-40 PVC well materials. A 5-foot, 10-slot PVC screen targeting the top of the water table will be utilized in each location, finished with a flush-mount protective cover. Monitoring wells will be developed upon installation.
  - Approximately 10-14 days following installation and development of the new monitoring wells, conduct a sitewide groundwater gauging event. Also sample groundwater from the seven new monitoring wells and submit for laboratory analysis of VOCs via USEPA Method 8260.
- Installation of New Soil Vapor Monitoring Ports
  - At five (5) locations adjacent to new monitoring wells along the north and south side of Lenox Avenue, install one shallow soil vapor monitoring point (SVMP) per location targeting approximately two feet above the encountered saturated zone (estimated SVMP depth of 8-10 ft bgs). Each SVMP will be constructed of a ½" OD 6" stainless steel screen attached to ¼" outer diameter nylon lined tubing that

extends to the ground surface. Filter sand material will be installed from the base of the screen to 6” above its top. Dry granular bentonite will be installed 6” above the filter sand. Hydrated bentonite will be installed from the top of the dry bentonite to within 6” of ground surface. Each SVMP will be protected by a 5” steel flush-mount well cover set in a concrete pad at the ground surface.

  - Collect initial soil vapor samples from each port location within 7 days of installation and submit samples for laboratory analysis of VOCs via USEPA method TO-15.

- Prepare and submit an investigation summary report which includes an evaluation of potential exposure pathways.

- If necessary and based on the results of investigation activities, include evaluation of potential exposure pathways, and perform a remedial evaluation to assess the feasibility of short- and/or long-term remedies.

7 REFERENCES

Arcadis, Inc. (Arcadis) 2020. Joslyn Parcels Scope of Work, RACER Trust, Pontiac Michigan, October 26, 2020.

Arcadis 2021. Joslyn Avenue Parcels Historical Summary Memorandum and Request for Determination for Parcels Not Being Regulated Under RCRA, including Corrective Action, and Not Being Covered Under Administrative Order on Consent RCRA-05-2011-00019, RACER Trust, Pontiac Michigan, January 19, 2021.

EGLE. 2020b. Guidance Document for the Vapor Intrusion Pathway. Appendix D – Volatilization to Indoor Air Pathway (VIAP) Screening Levels. September 4, 2020.

EGLE. 2020c. Clean Up Criteria Requirements Table 1: Groundwater: Residential and Nonresidential, Part 201 Generic Cleanup Criteria and Screening Levels, December 21, 2020.

U.S. Environmental Protection Agency (USEPA; Region I). 1996. Low-Stress (or Low-Flow) Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells – Revision 4. July 30, 1996; Revised September 19, 2017.

FIGURES

Service Layer Credits: Esri, USDA Farm Service Agency

SPO PARKING

FORMER BUILDING 25

SPO

FORMER BUILDING 15

FORMER PLANT 12

BUILDING 14

GM POWERTRAIN

FORMER FIERO PARKING LOT

FORMER FIERO PLANT 17

GM WWTP

FORMER BUILDING 14S (PLANTS 5 AND 23)

POWER HOUSE

JOSLYN-WESBROOK SOUTH PARCEL

USPS REGIONAL DISTRIBUTION CENTER (LEASED PROPERTY)

HARRIS LAKE

STORMWATER DETENTION FACILITY

OAKLAND PARK

PERRY PARK

LEGEND

- USPS DISTRIBUTION CENTER PROPERTY BOUNDARY
- JOSLYN PROPERTY BOUNDARY
- PROPERTY SOLD BY RACER
- GENERAL MOTORS, LLC (GM)
- CURRENT OR FORMER RACER PROPERTY

SPO – SERVICE PARTS OPERATION

USPS – UNITED STATES POSTAL SERVICE

WWTP – WASTEWATER TREATMENT PLANT

NOTE: ALL BOUNDARIES ARE APPROXIMATE

0 350 700

SCALE IN FEET

RACER TRUST
PONTIAC NORTH CAMPUS
PONTIAC, MICHIGAN

SITE LAYOUT MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE 1

CITY: NOVI, MI DIV: ENV DB: TRY PIC: PM: B. SANDERS TM: TR: PROJECT NUMBER: 30006882
COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet
D:\GIS\Project Files\MotorsLiquidationCompany\PontiacNorthCampus\Documents\JoslynProperty\01_Joslyn_South_PropertyLayout_202107.mxd PLOTTED: 7/15/2021 9:12:17 PM BY: TYarbrough

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Lebaron Ave

JN-SB-01
978.32

JN-SB-05
979.11

979

JN-SB-02
978.91

JN-SB-04
977.90

JN-SB-03
978.55 *

978

Wesbrook St

Joslyn Ave

JS-SB-01
980.60 *

JS-SB-02
977.00

JS-SB-08
979.47 *

JS-SB-07
977.27

JS-SB-03
977.26

977

JS-SB-09
976.62

976

975

974

JS-SB-04
980.62 *

JS-SB-10
975.81

JS-SB-05
980.75 *

JS-SB-11
974.13

JS-SB-06
973.19

Lenox Ave

LEGEND

- MONITORING WELL
- 977.26 GROUNDWATER ELEVATION
- GROUNDWATER CONTOUR
- INFERRED GROUNDWATER CONTOUR
- APPROXIMATE GROUNDWATER FLOW DIRECTION
- * ELEVATION NOT USED FOR CONTOURING
- PROPERTY BOUNDARY

NOTES:

1. GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL.

2. WATER LEVELS COLLECTED ON JUNE 4, 2021.

0 40 80

SCALE IN FEET

RACER TRUST
PONTIAC NORTH CAMPUS
PONTIAC, MICHIGAN

JOSLYN GROUNDWATER CONTOUR MAP JUNE 4, 2021

ARCADIS Design & Consultancy for natural and built assets

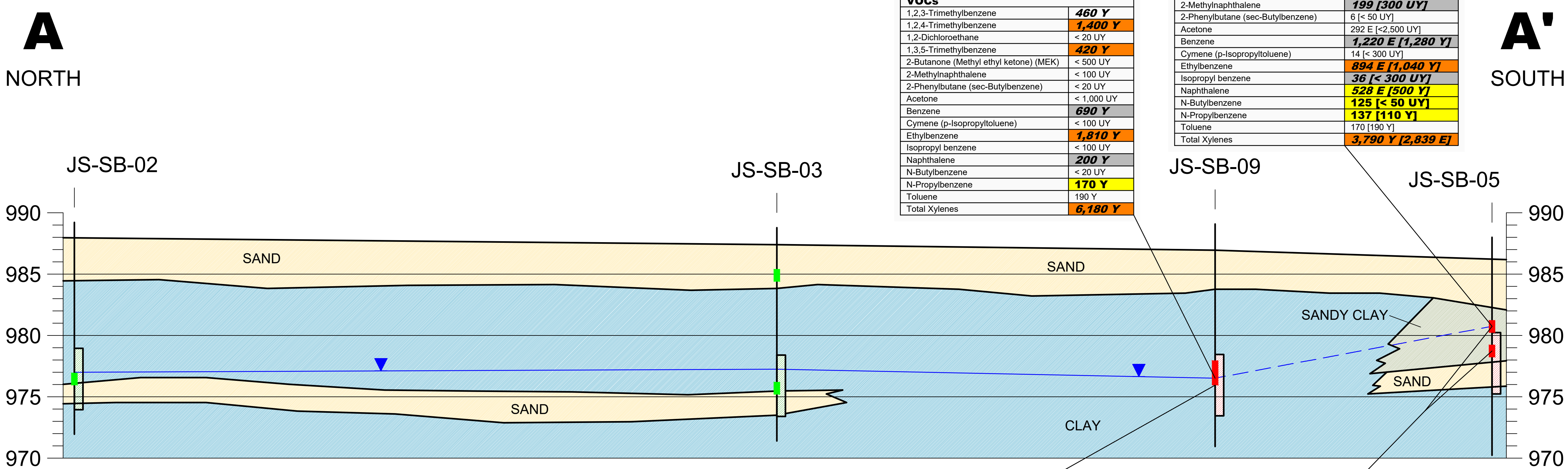
FIGURE 2

CITY: NOVI, MI DIV: ENV DB: TRY PIC: PM: B. Saunders TM: L. Crisp TR: PROJECT NUMBER: 30075936.00005 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet Intl
D:\GIS\Project Files\MotorsLiquidationCompany\PontiacNorthCampus\Documents\JoslynProperty\JoslynAve_GW_2021_0604.mxd PLOTTED: 7/21/2021 5:40:14 PM BY: TYarbrough

CITY:(Reqd) DIV/GROUP:(Reqd) DB:(Reqd) LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
D:\GIS\Project Files\MotorsLiquidationCompany\PontiacNorthCampus\Documents\JoslynProperty\Data\SouthParcelSectionPoints.dwg LAYOUT: SECTIONA-A SAVED: 8/18/2021 12:44 PM ACADVER: 23.0S (LMS TECH) PLOTSTYLETABLE: ARCADIS NOVI.CTB PLOTTED: 8/18/2021 12:45 PM BY: YARBROUGH, TOBI

JS-SB-09 (GROUNDWATER)	
Date Collected	5/12/2021
PAHs	
1-Methylnaphthalene	19
2-Methylnaphthalene	42
Naphthalene	***143***
VOCs	
1,2,3-Trimethylbenzene	***460 Y***
1,2,4-Trimethylbenzene	***1,400 Y***
1,2-Dichloroethane	< 20 UY
1,3,5-Trimethylbenzene	***420 Y***
2-Butanone (Methyl ethyl ketone) (MEK)	< 500 UY
2-Methylnaphthalene	< 100 UY
2-Phenylbutane (sec-Butylbenzene)	< 20 UY
Acetone	< 1,000 UY
Benzene	***690 Y***
Cymene (p-Isopropyltoluene)	< 100 UY
Ethylbenzene	***1,810 Y***
Isopropyl benzene	< 100 UY
Naphthalene	***200 Y***
N-Butylbenzene	< 20 UY
N-Propylbenzene	**170 Y**
Toluene	190 Y
Total Xylenes	***6,180 Y***

JS-SB-05 (GROUNDWATER)	
Date Collected	5/12/2021
PAHs	
1-Methylnaphthalene	46 [46]
2-Methylnaphthalene	**89 [82]**
Naphthalene	***193 [207 E]***
VOCs	
1,2,3-Trimethylbenzene	***370 E [300 Y]***
1,2,4-Trimethylbenzene	***1,021 E [800 Y]***
1,2-Dichloroethane	< 1 U [< 50 UY]
1,3,5-Trimethylbenzene	***340 E [260 Y]***
2-Butanone (Methyl ethyl ketone) (MEK)	57 [<1,300 UY]
2-Methylnaphthalene	***199 [300 UY]***
2-Phenylbutane (sec-Butylbenzene)	6 [< 50 UY]
Acetone	292 E [<2,500 UY]
Benzene	***1,220 E [1,280 Y]***
Cymene (p-Isopropyltoluene)	14 [< 300 UY]
Ethylbenzene	***894 E [1,040 Y]***
Isopropyl benzene	***36 [< 300 UY]***
Naphthalene	***528 E [500 Y]***
N-Butylbenzene	**125 [< 50 UY]**
N-Propylbenzene	**137 [110 Y]**
Toluene	170 [190 Y]
Total Xylenes	***3,790 Y [2,839 E]***



JS-SB-09 (SOIL)		
Date Collected	4/30/2021	4/30/2021
Start Depth (ft. bgs)	9	10
End Depth (ft. bgs)	10	11
PAHS		
1-Methylnaphthalene	500	< 300 U
2-Methylnaphthalene	1,000	500
Naphthalene	1,500	700
VOCs		
1,2,3-Trimethylbenzene	1,700 Y	2,040
1,2,4-Trimethylbenzene	11,400 Y	5,090
1,2-Dichloroethane	< 600 UY	< 60 U
1,3,5-Trimethylbenzene	< 600 UY	680
2-Methylnaphthalene	1,000 Y	900
2-Phenylbutane (sec-Butylbenzene)	< 600 UY	100
Benzene	< 600 UY	450
Ethylbenzene	2,100 Y	4,770
Naphthalene	< 3,000 UY	1,600
N-Butylbenzene	800 Y	510
N-Propylbenzene	1,900 Y	1,490
Xylene (total)	3,000 Y	4,600

JS-SB-05 (SOIL)		
Date Collected	4/28/2021	4/28/2021
Start Depth (ft. bgs)	5	7
End Depth (ft. bgs)	6	8
PAHS		
1-Methylnaphthalene	5,100	7,100
2-Methylnaphthalene	12,600	17,600
Naphthalene	8,800	14,700
VOCs		
1,2,3-Trimethylbenzene	6,900 Y	31,000 Y
1,2,4-Trimethylbenzene	6,700 Y	136,000 Y
1,2-Dichloroethane	< 600 UY	< 3,000 UY
1,3,5-Trimethylbenzene	6,000 Y	48,000 Y
2-Methylnaphthalene	12,000 Y	40,000 Y
2-Phenylbutane (sec-Butylbenzene)	< 600 UY	< 3,000 UY
Benzene	< 600 UY	< 3,000 UY
Ethylbenzene	9,000 Y	48,000 Y
Naphthalene	10,000 Y	40,000 Y
N-Butylbenzene	3,900 Y	15,000 Y
N-Propylbenzene	4,600 Y	19,000 Y
Xylene (total)	18,000 Y	220,000 Y

Chemical Name	Groundwater Surface Water Interface	Residential Drinking Water	Nonresidential Drinking Water	Residential Shallow Groundwater VIAP	Nonresidential Shallow Groundwater VIAP
PAHs					
1-Methylnaphthalene	--	--	--	--	--
2-Methylnaphthalene	19	260	750	**66**	*110*
Naphthalene	11	520	1,500	**4.2**	*12*
VOCs					
1,2,3-Trimethylbenzene	--	--	--	**43**	*150*
1,2,4-Trimethylbenzene	17	63	63	**25**	*120*
1,2-Dichloroethane	360	5.0	5.0	**1.4**	*5.1*
1,3,5-Trimethylbenzene	45	72	72	**18**	*110*
2-Butanone (Methyl ethyl ketone) (MEK)	2,200	13,000	38,000	**2,600**	*12,000*
2-Methylnaphthalene	19	260	750	**66**	*110*
2-Phenylbutane (sec-Butylbenzene)	--	80	230	**270**	*400*
Acetone	1,700	730	2,100	**50,000**	*200,000*
Benzene	200	5.0	5.0	**1.0**	*8.4*
Cymene (p-Isopropyltoluene)	--	--	--	--	--
Ethylbenzene	18	74	74	**2.8**	*28*
Isopropyl benzene	28	800	2,300	**0.60**	*6.7*
Naphthalene	11	520	1,500	**4.2**	*12*
N-Butylbenzene	--	80	230	**44**	*360*
N-Propylbenzene	--	80	230	**43**	*970*
Toluene	270	790	790	**300**	*6,600*
Total Xylenes	49	280	280	**75**	*410*

Chemical Name	Groundwater Surface Water Interface Protection	Residential Drinking Water Protection	Nonresidential Drinking Water Protection	Residential Direct Contact	Nonresidential Direct Contact	Residential Soil VIAP	Nonresidential Soil VIAP
PAHS							
1-Methylnaphthalene	--	--	--	--	--	--	--
2-Methylnaphthalene	4,200	57,000	170,000	**8,100,000**	*26,000,000*	1,700	30,000
Naphthalene	730	35,000	100,000	**16,000,000**	*52,000,000*	67	1,900
VOCs							
1,2,3-Trimethylbenzene	--	--	--	--	--	270	4,800
1,2,4-Trimethylbenzene	570	2,100	2,100	**32,000,000**	*100,000,000*	150	2,600
1,2-Dichloroethane	7,200	100	100	**91,000**	*420,000*	0.82	23
1,3,5-Trimethylbenzene	1,100	1,800	1,800	**32,000,000**	*100,000,000*	100	1,800
2-Methylnaphthalene	4,200	57,000	170,000	**8,100,000**	*26,000,000*	1,700	30,000
2-Phenylbutane (sec-Butylbenzene)	--	1,600	4,600	**2,500,000**	*8,000,000*	3,800	66,000
Benzene	4,000	100	100	**180,000**	*840,000*	1.7	47
Ethylbenzene	360	1,500	1,500	--	*71,000,000*	12	340
Naphthalene	730	35,000	100,000	**16,000,000**	*52,000,000*	67	1,900
N-Butylbenzene	--	1,600	4,600	**2,500,000**	*8,000,000*	550	9,800
N-Propylbenzene	--	1,600	4,600	**2,500,000**	*8,000,000*	1,800	21,000
Xylene (total)	820	5,600	5,600	**410,000,000**	*1,000,000,000*	280	5,000

SOIL ANALYTICAL NOTES:

1. ALL CONCENTRATIONS ARE PRESENTED IN MICROGRAMS PER KILOGRAM (µg/kg).
2. "U" – COMPOUND WAS ANALYZED FOR BUT NOT DETECTED. THE ASSOCIATED VALUE IS THE COMPOUND QUANTITATION LIMIT.
3. "Y" – ELEVATED REPORTING LIMIT DUE TO HIGH TARGET CONCENTRATION
4. VIAP – VOLATILIZATION TO INDOOR AIR PATHWAY
5. CRITERIA LISTED ARE FROM THE MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY (EGLE) CLEAN UP CRITERIA REQUIREMENTS TABLE 1: SOIL: RESIDENTIAL AND NONRESIDENTIAL, PART 201 GENERIC CLEANUP CRITERIA AND SCREENING LEVELS, DECEMBER 21, 2020.
6. RESIDENTIAL AND NONRESIDENTIAL VOLATILIZATION TO INDOOR AIR PATHWAY SCREENING LEVELS ARE FROM THE DEQ GUIDANCE DOCUMENT FOR THE VAPOR INTRUSION PATHWAY, APPENDIX D - TABLES 1 AND 2, SEPTEMBER 4, 2020.

GROUNDWATER ANALYTICAL NOTES:

1. ALL CONCENTRATIONS ARE PRESENTED IN MICROGRAMS PER LITER (µg/L)
2. DUPLICATE ANALYSES ARE PRESENTED IN BRACKETS
3. "E" – CONCENTRATION EXCEEDS CALIBRATION RANGE
4. "S" – SURROGATE RECOVERY OUTSIDE OF CONTROL LIMITS
5. "U" – COMPOUND WAS ANALYZED FOR BUT NOT DETECTED. THE ASSOCIATED VALUE IS THE COMPOUND QUANTITATION LIMIT.
6. "Y" – ELEVATED REPORTING LIMIT DUE TO HIGH TARGET CONCENTRATION
7. VIAP – VOLATILIZATION TO INDOOR AIR PATHWAY
8. CRITERIA LISTED ARE FROM THE MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY (EGLE) CLEAN UP CRITERIA REQUIREMENTS TABLE 1: GROUNDWATER: RESIDENTIAL AND NONRESIDENTIAL, PART 201 GENERIC CLEANUP CRITERIA AND SCREENING LEVELS, DECEMBER 21, 2020.
9. RESIDENTIAL AND NONRESIDENTIAL VOLATILIZATION TO INDOOR AIR PATHWAY SCREENING LEVELS ARE FROM THE DEQ GUIDANCE DOCUMENT FOR THE VAPOR INTRUSION PATHWAY, APPENDIX C - TABLES 1 AND 2, SEPTEMBER 4, 2020.

LEGEND

- SOIL SAMPLE INTERVAL (NO DETECTIONS)
- SOIL SAMPLE INTERVAL (DETECTIONS PRESENT)
- SCREEN INTERVAL (NO GW DETECTIONS)
- SCREEN INTERVAL (GW DETECTIONS)
- WATER TABLE
- SAND
- SANDY CLAY
- CLAY

RACER TRUST
PONTIAC NORTH CAMPUS
PONTIAC, MICHIGAN

GEOLOGICAL-CROSS SECTION A-A'

ARCADIS Design & Consultancy for natural and built assets

FIGURE
3A

B

WEST

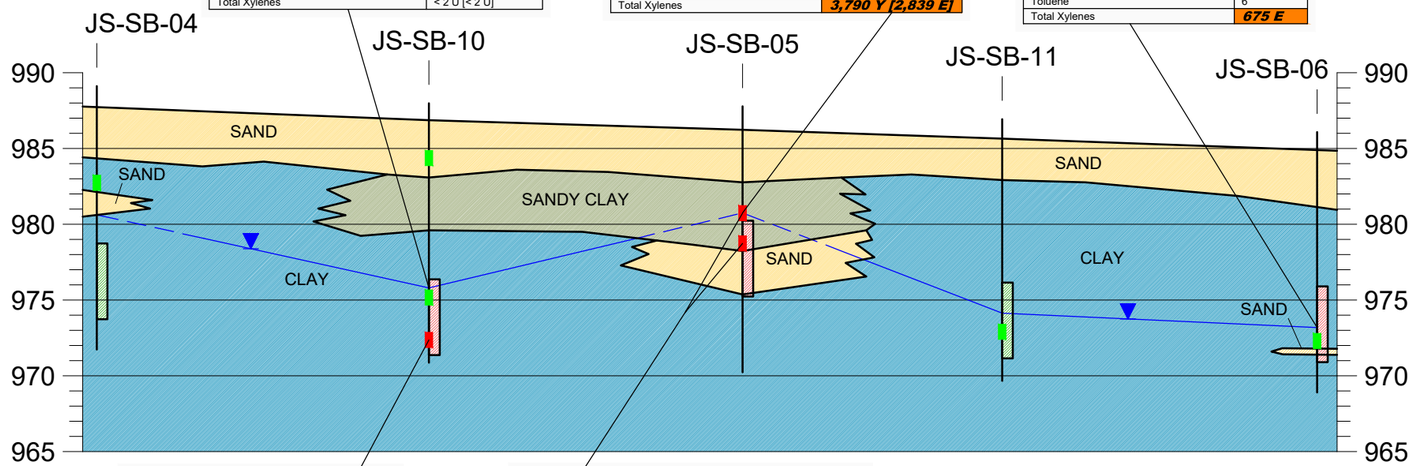
B'

EAST

JS-SB-10 (GROUNDWATER)	
Date Collected	5/12/2021
PAHs	
1-Methylnaphthalene	< 5 U [< 5 US]
2-Methylnaphthalene	< 5 U [< 5 US]
Naphthalene	< 5 U [< 5 US]
VOCs	
1,2,3-Trimethylbenzene	< 1 U [< 1 U]
1,2,4-Trimethylbenzene	< 1 U [< 1 U]
1,2-Dichloroethane	**4 [4]**
1,3,5-Trimethylbenzene	< 1 U [< 1 U]
2-Butanone (Methyl ethyl ketone) (MEK)	< 25 U [< 25 U]
2-Methylnaphthalene	< 5 U [< 5 US]
2-Phenylbutane (sec-Butylbenzene)	< 1 U [< 1 U]
Acetone	< 50 U [< 50 U]
Benzene	< 1 U [< 1 U]
Cymene (p-Isopropyltoluene)	< 5 U [< 5 US]
Ethylbenzene	< 1 U [< 1 U]
Isopropyl benzene	< 5 U [< 5 US]
Naphthalene	< 5 U [< 5 US]
N-Butylbenzene	< 1 U [< 1 U]
N-Propylbenzene	< 1 U [< 1 U]
Toluene	< 1 U [< 1 U]
Total Xylenes	< 2 U [< 2 U]

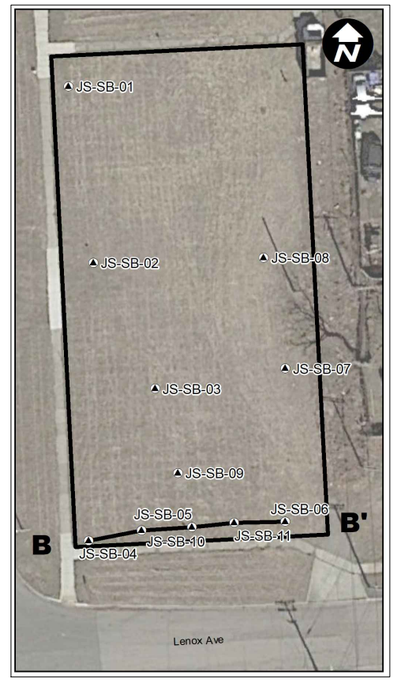
JS-SB-05 (GROUNDWATER)	
Date Collected	5/12/2021
PAHs	
1-Methylnaphthalene	46 [46]
2-Methylnaphthalene	**89 [82]**
Naphthalene	***193 [207 E]***
VOCs	
1,2,3-Trimethylbenzene	***370 E [300 Y]***
1,2,4-Trimethylbenzene	***1,021 E [800 Y]***
1,2-Dichloroethane	< 1 U [< 50 UY]
1,3,5-Trimethylbenzene	***340 E [260 Y]***
2-Butanone (Methyl ethyl ketone) (MEK)	57 [<1,300 UY]
2-Methylnaphthalene	***199 [300 UY]***
2-Phenylbutane (sec-Butylbenzene)	6 [< 50 UY]
Acetone	292 E [<2,500 UY]
Benzene	***1,220 E [1,280 Y]***
Cymene (p-Isopropyltoluene)	14 [< 300 UY]
Ethylbenzene	***894 E [1,040 Y]***
Isopropyl benzene	***36 [< 300 UY]***
Naphthalene	***528 E [500 Y]***
N-Butylbenzene	**125 [< 50 UY]**
N-Propylbenzene	**137 [110 Y]**
Toluene	170 [190 Y]
Total Xylenes	***3,790 Y [2,839 E]***

JS-SB-06 (GROUNDWATER)	
Date Collected	5/11/2021
PAHs	
1-Methylnaphthalene	< 5 U
2-Methylnaphthalene	6
Naphthalene	***20***
VOCs	
1,2,3-Trimethylbenzene	**72**
1,2,4-Trimethylbenzene	***453 E***
1,2-Dichloroethane	< 1 U
1,3,5-Trimethylbenzene	9
2-Butanone (Methyl ethyl ketone) (MEK)	< 25 U
2-Methylnaphthalene	13
2-Phenylbutane (sec-Butylbenzene)	4
Acetone	< 50 U
Benzene	***18***
Cymene (p-Isopropyltoluene)	< 5 U
Ethylbenzene	***446 E***
Isopropyl benzene	***24***
Naphthalene	***58***
N-Butylbenzene	8
N-Propylbenzene	**82**
Toluene	6
Total Xylenes	***675 E***



JS-SB-10 (SOIL)	
Date Collected	4/30/2021
Start Depth (ft. bgs)	14
End Depth (ft. bgs)	15
PAHS	
1-Methylnaphthalene	< 300 U
2-Methylnaphthalene	< 300 U
Naphthalene	< 300 U
VOCs	
1,2,3-Trimethylbenzene	< 60 U
1,2,4-Trimethylbenzene	< 60 U
1,2-Dichloroethane	110
1,3,5-Trimethylbenzene	< 60 U
2-Methylnaphthalene	< 100 U
2-Phenylbutane (sec-Butylbenzene)	< 60 U
Benzene	< 60 U
Ethylbenzene	< 60 U
Naphthalene	< 300 U
N-Butylbenzene	< 60 U
N-Propylbenzene	< 60 U
Xylene (total)	< 100 U

JS-SB-05 (SOIL)		
Date Collected	4/28/2021	4/28/2021
Start Depth (ft. bgs)	5	7
End Depth (ft. bgs)	6	8
PAHS		
1-Methylnaphthalene	5,100	7,100
2-Methylnaphthalene	12,600	17,600
Naphthalene	8,800	14,700
VOCs		
1,2,3-Trimethylbenzene	6,900 Y	31,000 Y
1,2,4-Trimethylbenzene	6,700 Y	135,000 Y
1,2-Dichloroethane	< 600 UY	< 3,000 UY
1,3,5-Trimethylbenzene	6,000 Y	48,000 Y
2-Methylnaphthalene	12,000 Y	40,000 Y
2-Phenylbutane (sec-Butylbenzene)	< 600 UY	< 3,000 UY
Benzene	< 600 UY	< 3,000 UY
Ethylbenzene	9,000 Y	48,000 Y
Naphthalene	10,000 Y	40,000 Y
N-Butylbenzene	3,900 Y	15,000 Y
N-Propylbenzene	4,600 Y	19,000 Y
Xylene (total)	18,000 Y	220,000 Y



Chemical Name	Groundwater Surface Water Interface	Residential Drinking Water	Nonresidential Drinking Water	Residential Shallow Groundwater VIAP	Nonresidential Shallow Groundwater VIAP
PAHs					
1-Methylnaphthalene	--		--	--	
2-Methylnaphthalene	19	260	750	66	*110*
Naphthalene	11	520	1,500	4.2	*52*
VOCs					
1,2,3-Trimethylbenzene	--	--	--	43	*180*
1,2,4-Trimethylbenzene	17	63	63	25	*120*
1,2-Dichloroethane	360	5.0	5.0	1.4	*8.1*
1,3,5-Trimethylbenzene	45	72	72	18	*110*
2-Butanone (Methyl ethyl ketone) (MEK)	2,200	13,000	38,000	2,600	*12,000*
2-Methylnaphthalene	18	260	750	66	*110*
2-Phenylbutane (sec-Butylbenzene)	--	80	230	270	*400*
Acetone	1,700	730	2,100	50,000	*150,000*
Benzene	200	5.0	5.0	1.0	*8.4*
Cymene (p-Isopropyltoluene)	--	--	--	--	--
Ethylbenzene	18	74	74	2.8	*28*
Isopropyl benzene	28	800	2,300	0.60	*6.7*
Naphthalene	11	520	1,500	4.2	*52*
N-Butylbenzene	--	80	230	44	*360*
N-Propylbenzene	--	80	230	43	*870*
Toluene	270	790	790	300	*6,600*
Total Xylenes	49	260	260	75	*410*

Chemical Name	Groundwater Surface Water Interface Protection	Residential Drinking Water Protection	Nonresidential Drinking Water Protection	Residential Direct Contact	Nonresidential Direct Contact	Residential Soil VIAP	Nonresidential Soil VIAP
PAHS							
1-Methylnaphthalene	--	--	--	--	--	--	
2-Methylnaphthalene	4,200	57,000	170,000	**8,100,000**	*26,000,000*	1,700	30,000
Naphthalene	730	35,000	100,000	**16,000,000**	*52,000,000*	67	1,900
VOCs							
1,2,3-Trimethylbenzene	--	--	--	--	--	270	4,800
1,2,4-Trimethylbenzene	570	2,100	2,100	**32,000,000**	*100,000,000*	150	2,600
1,2-Dichloroethane	7,200	100	100	**91,000**	*420,000*	0.82	23
1,3,5-Trimethylbenzene	1,100	1,800	1,800	**32,000,000**	*100,000,000*	100	1,800
2-Methylnaphthalene	4,200	57,000	170,000	**8,100,000**	*26,000,000*	1,700	30,000
2-Phenylbutane (sec-Butylbenzene)	--	1,600	4,600	**2,500,000**	*8,000,000*	3,800	66,000
Benzene	4,000	100	100	**180,000**	*640,000*	1.2	47
Ethylbenzene	360	1,500	1,500	*71,000,000*	*240,000,000*	12	340
Naphthalene	730	35,000	100,000	**16,000,000**	*52,000,000*	67	1,900
N-Butylbenzene	--	1,600	4,600	**2,500,000**	*8,000,000*	550	9,800
N-Propylbenzene	--	1,600	4,600	**2,500,000**	*8,000,000*	1,800	21,000
Xylene (total)	820	5,600	5,600	**410,000,000**	*1,000,000,000*	280	5,000

SOIL ANALYTICAL NOTES:

1. ALL CONCENTRATIONS ARE PRESENTED IN MICROGRAMS PER KILOGRAM (µg/kg).
2. "U" – COMPOUND WAS ANALYZED FOR BUT NOT DETECTED. THE ASSOCIATED VALUE IS THE COMPOUND QUANTITATION LIMIT.
3. "Y" – ELEVATED REPORTING LIMIT DUE TO HIGH TARGET CONCENTRATION
4. VIAP – VOLATILIZATION TO INDOOR AIR PATHWAY
5. CRITERIA LISTED ARE FROM THE MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY (EGLE) CLEAN UP CRITERIA REQUIREMENTS TABLE 1: SOIL: RESIDENTIAL AND NONRESIDENTIAL, PART 201 GENERIC CLEANUP CRITERIA AND SCREENING LEVELS, DECEMBER 21, 2020.
6. RESIDENTIAL AND NONRESIDENTIAL VOLATILIZATION TO INDOOR AIR PATHWAY SCREENING LEVELS ARE FROM THE DEQ GUIDANCE DOCUMENT FOR THE VAPOR INTRUSION PATHWAY, APPENDIX D - TABLES 1 AND 2, SEPTEMBER 4, 2020.

GROUNDWATER ANALYTICAL NOTES:

1. ALL CONCENTRATIONS ARE PRESENTED IN MICROGRAMS PER LITER (µg/L)
2. DUPLICATE ANALYSES ARE PRESENTED IN BRACKETS
3. "E" – CONCENTRATION EXCEEDS CALIBRATION RANGE
4. "S" – SURROGATE RECOVERY OUTSIDE OF CONTROL LIMITS
5. "U" – COMPOUND WAS ANALYZED FOR BUT NOT DETECTED. THE ASSOCIATED VALUE IS THE COMPOUND QUANTITATION LIMIT.
6. "Y" – ELEVATED REPORTING LIMIT DUE TO HIGH TARGET CONCENTRATION
7. VIAP – VOLATILIZATION TO INDOOR AIR PATHWAY
8. CRITERIA LISTED ARE FROM THE MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY (EGLE) CLEAN UP CRITERIA REQUIREMENTS TABLE 1: GROUNDWATER: RESIDENTIAL AND NONRESIDENTIAL, PART 201 GENERIC CLEANUP CRITERIA AND SCREENING LEVELS, DECEMBER 21, 2020.
9. RESIDENTIAL AND NONRESIDENTIAL VOLATILIZATION TO INDOOR AIR PATHWAY SCREENING LEVELS ARE FROM THE DEQ GUIDANCE DOCUMENT FOR THE VAPOR INTRUSION PATHWAY, APPENDIX C - TABLES 1 AND 2, SEPTEMBER 4, 2020.

LEGEND

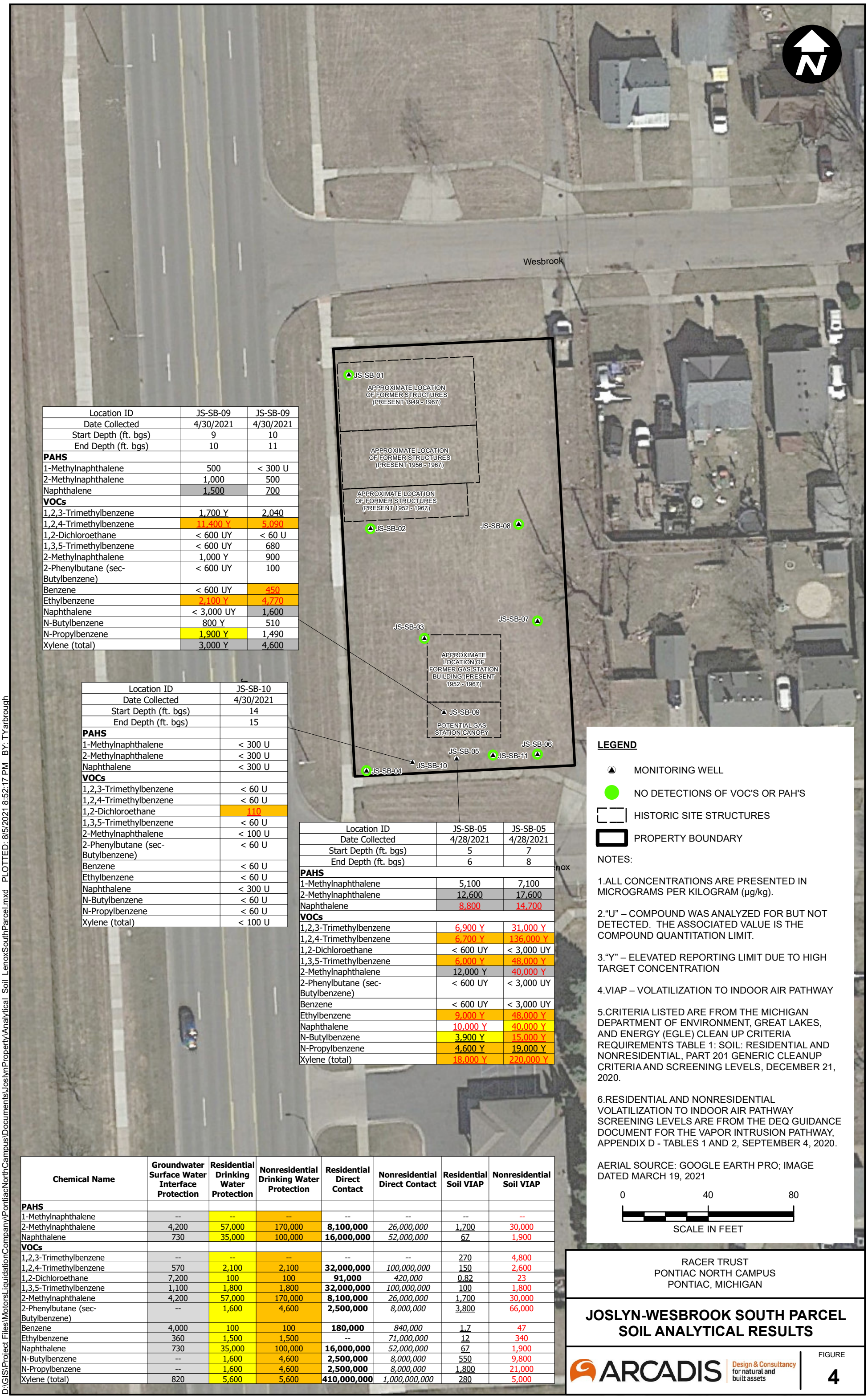
- SOIL SAMPLE INTERVAL (NO DETECTIONS)
- SOIL SAMPLE INTERVAL (DETECTIONS PRESENT)
- SCREEN INTERVAL (NO GW DETECTIONS)
- SCREEN INTERVAL (GW DETECTIONS)
- WATER TABLE
- SAND
- SANDY CLAY
- CLAY

RACER TRUST
PONTIAC NORTH CAMPUS
PONTIAC, MICHIGAN

GEOLOGICAL-CROSS SECTION B-B'

ARCADIS Design & Consultancy for natural and built assets

FIGURE
3B



Location ID	JS-SB-09	JS-SB-09
Date Collected	4/30/2021	4/30/2021
Start Depth (ft. bgs)	9	10
End Depth (ft. bgs)	10	11
PAHS		
1-Methylnaphthalene	500	< 300 U
2-Methylnaphthalene	1,000	500
Naphthalene	1,500	700
VOCs		
1,2,3-Trimethylbenzene	1,700 Y	2,040
1,2,4-Trimethylbenzene	11,400 Y	5,090
1,2-Dichloroethane	< 600 UY	< 60 U
1,3,5-Trimethylbenzene	< 600 UY	680
2-Methylnaphthalene	1,000 Y	900
2-Phenylbutane (sec-Butylbenzene)	< 600 UY	100
Benzene	< 600 UY	450
Ethylbenzene	2,100 Y	4,770
Naphthalene	< 3,000 UY	1,600
N-Butylbenzene	800 Y	510
N-Propylbenzene	1,900 Y	1,490
Xylene (total)	3,000 Y	4,600

Location ID	JS-SB-10
Date Collected	4/30/2021
Start Depth (ft. bgs)	14
End Depth (ft. bgs)	15
PAHS	
1-Methylnaphthalene	< 300 U
2-Methylnaphthalene	< 300 U
Naphthalene	< 300 U
VOCs	
1,2,3-Trimethylbenzene	< 60 U
1,2,4-Trimethylbenzene	< 60 U
1,2-Dichloroethane	110
1,3,5-Trimethylbenzene	< 60 U
2-Methylnaphthalene	< 100 U
2-Phenylbutane (sec-Butylbenzene)	< 60 U
Benzene	< 60 U
Ethylbenzene	< 60 U
Naphthalene	< 300 U
N-Butylbenzene	< 60 U
N-Propylbenzene	< 60 U
Xylene (total)	< 100 U

Location ID	JS-SB-05	JS-SB-05
Date Collected	4/28/2021	4/28/2021
Start Depth (ft. bgs)	5	7
End Depth (ft. bgs)	6	8
PAHS		
1-Methylnaphthalene	5,100	7,100
2-Methylnaphthalene	12,600	17,600
Naphthalene	8,800	14,700
VOCs		
1,2,3-Trimethylbenzene	6,900 Y	31,000 Y
1,2,4-Trimethylbenzene	6,700 Y	136,000 Y
1,2-Dichloroethane	< 600 UY	< 3,000 UY
1,3,5-Trimethylbenzene	6,000 Y	48,000 Y
2-Methylnaphthalene	12,000 Y	40,000 Y
2-Phenylbutane (sec-Butylbenzene)	< 600 UY	< 3,000 UY
Benzene	< 600 UY	< 3,000 UY
Ethylbenzene	9,000 Y	48,000 Y
Naphthalene	10,000 Y	40,000 Y
N-Butylbenzene	3,900 Y	15,000 Y
N-Propylbenzene	4,600 Y	19,000 Y
Xylene (total)	18,000 Y	220,000 Y

LEGEND

- MONITORING WELL
- NO DETECTIONS OF VOC'S OR PAH'S
- HISTORIC SITE STRUCTURES
- PROPERTY BOUNDARY

NOTES:

1.ALL CONCENTRATIONS ARE PRESENTED IN MICROGRAMS PER KILOGRAM (µg/kg).

2."U" – COMPOUND WAS ANALYZED FOR BUT NOT DETECTED. THE ASSOCIATED VALUE IS THE COMPOUND QUANTITATION LIMIT.

3."Y" – ELEVATED REPORTING LIMIT DUE TO HIGH TARGET CONCENTRATION

4.VIAP – VOLATILIZATION TO INDOOR AIR PATHWAY

5.CRITERIA LISTED ARE FROM THE MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY (EGLE) CLEAN UP CRITERIA REQUIREMENTS TABLE 1: SOIL: RESIDENTIAL AND NONRESIDENTIAL, PART 201 GENERIC CLEANUP CRITERIA AND SCREENING LEVELS, DECEMBER 21, 2020.

6.RESIDENTIAL AND NONRESIDENTIAL VOLATILIZATION TO INDOOR AIR PATHWAY SCREENING LEVELS ARE FROM THE DEQ GUIDANCE DOCUMENT FOR THE VAPOR INTRUSION PATHWAY, APPENDIX D - TABLES 1 AND 2, SEPTEMBER 4, 2020.

AERIAL SOURCE: GOOGLE EARTH PRO; IMAGE DATED MARCH 19, 2021

0 40 80

SCALE IN FEET

Chemical Name	Groundwater Surface Water Interface Protection	Residential Drinking Water Protection	Nonresidential Drinking Water Protection	Residential Direct Contact	Nonresidential Direct Contact	Residential Soil VIAP	Nonresidential Soil VIAP
PAHS							
1-Methylnaphthalene	--	--	--	--	--	--	--
2-Methylnaphthalene	4,200	57,000	170,000	**8,100,000**	*26,000,000*	1,700	30,000
Naphthalene	730	35,000	100,000	**16,000,000**	*52,000,000*	67	1,900
VOCs							
1,2,3-Trimethylbenzene	--	--	--	--	--	270	4,800
1,2,4-Trimethylbenzene	570	2,100	2,100	**32,000,000**	*100,000,000*	150	2,600
1,2-Dichloroethane	7,200	100	100	**91,000**	*420,000*	0.82	23
1,3,5-Trimethylbenzene	1,100	1,800	1,800	**32,000,000**	*100,000,000*	100	1,800
2-Methylnaphthalene	4,200	57,000	170,000	**8,100,000**	*26,000,000*	1,700	30,000
2-Phenylbutane (sec-Butylbenzene)	--	1,600	4,600	**2,500,000**	*8,000,000*	3,800	66,000
Benzene	4,000	100	100	**180,000**	*840,000*	1.7	47
Ethylbenzene	360	1,500	1,500	--	*71,000,000*	12	340
Naphthalene	730	35,000	100,000	**16,000,000**	*52,000,000*	67	1,900
N-Butylbenzene	--	1,600	4,600	**2,500,000**	*8,000,000*	550	9,800
N-Propylbenzene	--	1,600	4,600	**2,500,000**	*8,000,000*	1,800	21,000
Xylene (total)	820	5,600	5,600	**410,000,000**	*1,000,000,000*	280	5,000

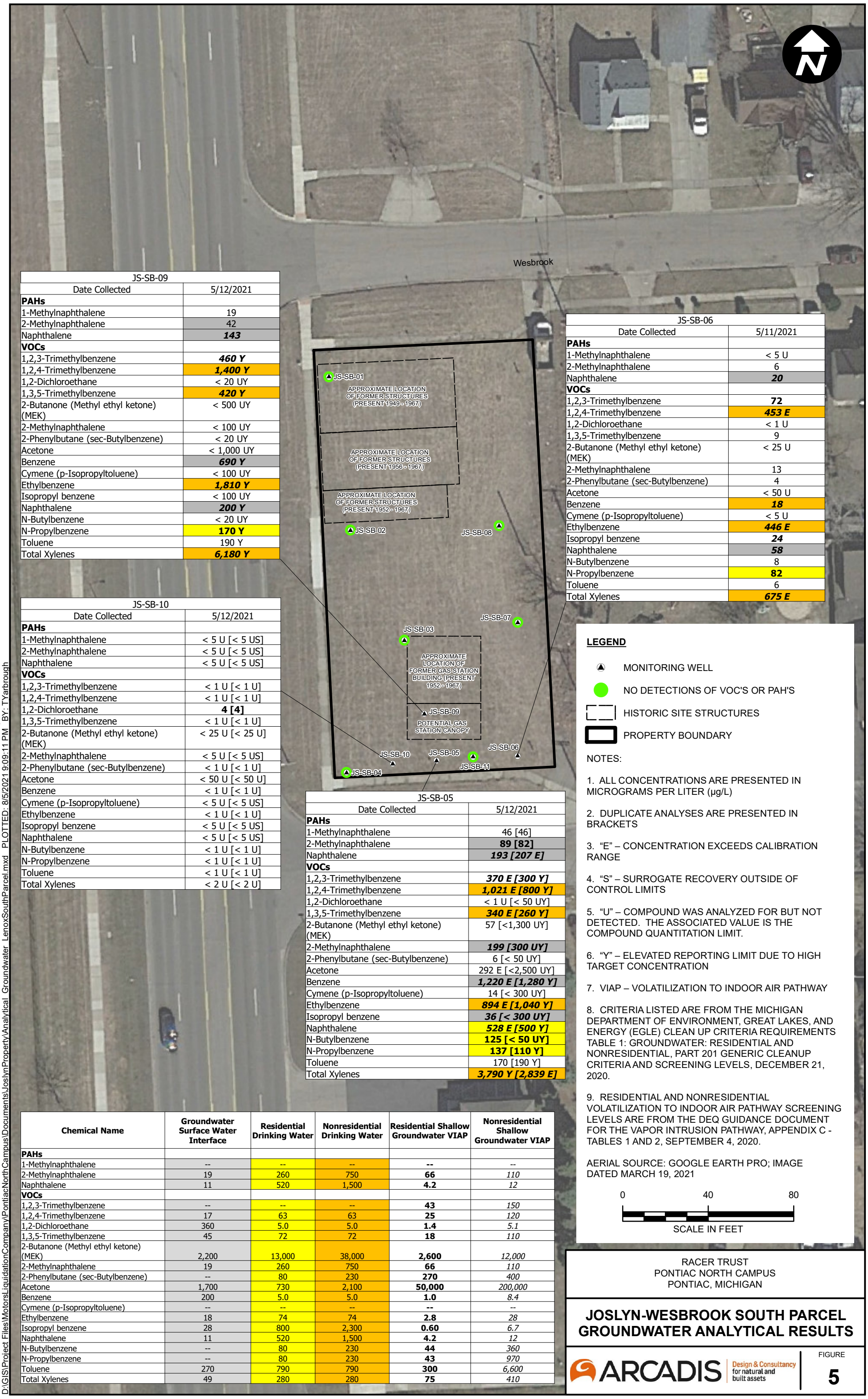
RACER TRUST
PONTIAC NORTH CAMPUS
PONTIAC, MICHIGAN

JOSLYN-WESBROOK SOUTH PARCEL SOIL ANALYTICAL RESULTS

ARCADIS Design & Consultancy for natural and built assets

FIGURE 4

CITY: NOVI, MI DIV: ENV DB: TRY PIC: PM: B. Saunders TM: L. Crisp TR: PROJECT NUMBER: 30075936.00004 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet
D:\GIS\Project Files\MotorsLiquidationCompany\PontiacNorthCampus\Documents\JoslynProperty\Analytical Soil LenoxSouthParcel.mxd PLOTTED: 8/5/2021 8:52:17 PM BY: TYarbrough



JS-SB-09	
Date Collected	5/12/2021
PAHs	
1-Methylnaphthalene	19
2-Methylnaphthalene	42
Naphthalene	***143***
VOCs	
1,2,3-Trimethylbenzene	***460 Y***
1,2,4-Trimethylbenzene	***1,400 Y***
1,2-Dichloroethane	< 20 UY
1,3,5-Trimethylbenzene	***420 Y***
2-Butanone (Methyl ethyl ketone) (MEK)	< 500 UY
2-Methylnaphthalene	< 100 UY
2-Phenylbutane (sec-Butylbenzene)	< 20 UY
Acetone	< 1,000 UY
Benzene	***690 Y***
Cymene (p-Isopropyltoluene)	< 100 UY
Ethylbenzene	***1,810 Y***
Isopropyl benzene	< 100 UY
Naphthalene	***200 Y***
N-Butylbenzene	< 20 UY
N-Propylbenzene	**170 Y**
Toluene	190 Y
Total Xylenes	***6,180 Y***

JS-SB-06	
Date Collected	5/11/2021
PAHs	
1-Methylnaphthalene	< 5 U
2-Methylnaphthalene	6
Naphthalene	***20***
VOCs	
1,2,3-Trimethylbenzene	**72**
1,2,4-Trimethylbenzene	***453 E***
1,2-Dichloroethane	< 1 U
1,3,5-Trimethylbenzene	9
2-Butanone (Methyl ethyl ketone) (MEK)	< 25 U
2-Methylnaphthalene	13
2-Phenylbutane (sec-Butylbenzene)	4
Acetone	< 50 U
Benzene	***18***
Cymene (p-Isopropyltoluene)	< 5 U
Ethylbenzene	***446 E***
Isopropyl benzene	***24***
Naphthalene	***58***
N-Butylbenzene	8
N-Propylbenzene	**82**
Toluene	6
Total Xylenes	***675 E***

JS-SB-10	
Date Collected	5/12/2021
PAHs	
1-Methylnaphthalene	< 5 U [< 5 US]
2-Methylnaphthalene	< 5 U [< 5 US]
Naphthalene	< 5 U [< 5 US]
VOCs	
1,2,3-Trimethylbenzene	< 1 U [< 1 U]
1,2,4-Trimethylbenzene	< 1 U [< 1 U]
1,2-Dichloroethane	**4 [4]**
1,3,5-Trimethylbenzene	< 1 U [< 1 U]
2-Butanone (Methyl ethyl ketone) (MEK)	< 25 U [< 25 U]
2-Methylnaphthalene	< 5 U [< 5 US]
2-Phenylbutane (sec-Butylbenzene)	< 1 U [< 1 U]
Acetone	< 50 U [< 50 U]
Benzene	< 1 U [< 1 U]
Cymene (p-Isopropyltoluene)	< 5 U [< 5 US]
Ethylbenzene	< 1 U [< 1 U]
Isopropyl benzene	< 5 U [< 5 US]
Naphthalene	< 5 U [< 5 US]
N-Butylbenzene	< 1 U [< 1 U]
N-Propylbenzene	< 1 U [< 1 U]
Toluene	< 1 U [< 1 U]
Total Xylenes	< 2 U [< 2 U]

JS-SB-05	
Date Collected	5/12/2021
PAHs	
1-Methylnaphthalene	46 [46]
2-Methylnaphthalene	**89 [82]**
Naphthalene	***193 [207 E]***
VOCs	
1,2,3-Trimethylbenzene	***370 E [300 Y]***
1,2,4-Trimethylbenzene	***1,021 E [800 Y]***
1,2-Dichloroethane	< 1 U [< 50 UY]
1,3,5-Trimethylbenzene	***340 E [260 Y]***
2-Butanone (Methyl ethyl ketone) (MEK)	57 [<1,300 UY]
2-Methylnaphthalene	***199 [300 UY]***
2-Phenylbutane (sec-Butylbenzene)	6 [< 50 UY]
Acetone	292 E [<2,500 UY]
Benzene	***1,220 E [1,280 Y]***
Cymene (p-Isopropyltoluene)	14 [< 300 UY]
Ethylbenzene	***894 E [1,040 Y]***
Isopropyl benzene	***36 [< 300 UY]***
Naphthalene	***528 E [500 Y]***
N-Butylbenzene	**125 [< 50 UY]**
N-Propylbenzene	**137 [110 Y]**
Toluene	170 [190 Y]
Total Xylenes	***3,790 Y [2,839 E]***

LEGEND

- MONITORING WELL
- NO DETECTIONS OF VOC'S OR PAH'S
- HISTORIC SITE STRUCTURES
- PROPERTY BOUNDARY

NOTES:

1. ALL CONCENTRATIONS ARE PRESENTED IN MICROGRAMS PER LITER (µg/L)

2. DUPLICATE ANALYSES ARE PRESENTED IN BRACKETS

3. "E" – CONCENTRATION EXCEEDS CALIBRATION RANGE

4. "S" – SURROGATE RECOVERY OUTSIDE OF CONTROL LIMITS

5. "U" – COMPOUND WAS ANALYZED FOR BUT NOT DETECTED. THE ASSOCIATED VALUE IS THE COMPOUND QUANTITATION LIMIT.

6. "Y" – ELEVATED REPORTING LIMIT DUE TO HIGH TARGET CONCENTRATION

7. VIAP – VOLATILIZATION TO INDOOR AIR PATHWAY

8. CRITERIA LISTED ARE FROM THE MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY (EGLE) CLEAN UP CRITERIA REQUIREMENTS TABLE 1: GROUNDWATER: RESIDENTIAL AND NONRESIDENTIAL, PART 201 GENERIC CLEANUP CRITERIA AND SCREENING LEVELS, DECEMBER 21, 2020.

9. RESIDENTIAL AND NONRESIDENTIAL VOLATILIZATION TO INDOOR AIR PATHWAY SCREENING LEVELS ARE FROM THE DEQ GUIDANCE DOCUMENT FOR THE VAPOR INTRUSION PATHWAY, APPENDIX C - TABLES 1 AND 2, SEPTEMBER 4, 2020.

AERIAL SOURCE: GOOGLE EARTH PRO; IMAGE DATED MARCH 19, 2021

0 40 80

SCALE IN FEET

Chemical Name	Groundwater Surface Water Interface	Residential Drinking Water	Nonresidential Drinking Water	Residential Shallow Groundwater VIAP	Nonresidential Shallow Groundwater VIAP
PAHs					
1-Methylnaphthalene	--	--	--	**--**	--
2-Methylnaphthalene	19	260	750	**66**	*110*
Naphthalene	11	520	1,500	**4.2**	*12*
VOCs					
1,2,3-Trimethylbenzene	--	--	--	**43**	*150*
1,2,4-Trimethylbenzene	17	63	63	**25**	*120*
1,2-Dichloroethane	360	5.0	5.0	**1.4**	*5.1*
1,3,5-Trimethylbenzene	45	72	72	**18**	*110*
2-Butanone (Methyl ethyl ketone) (MEK)	2,200	13,000	38,000	**2,600**	*12,000*
2-Methylnaphthalene	19	260	750	**66**	*110*
2-Phenylbutane (sec-Butylbenzene)	--	80	230	**270**	*400*
Acetone	1,700	730	2,100	**50,000**	*200,000*
Benzene	200	5.0	5.0	**1.0**	*8.4*
Cymene (p-Isopropyltoluene)	--	--	--	**--**	--
Ethylbenzene	18	74	74	**2.8**	*28*
Isopropyl benzene	28	800	2,300	**0.60**	*6.7*
Naphthalene	11	520	1,500	**4.2**	*12*
N-Butylbenzene	--	80	230	**44**	*360*
N-Propylbenzene	--	80	230	**43**	*970*
Toluene	270	790	790	**300**	*6,600*
Total Xylenes	49	280	280	**75**	*410*

RACER TRUST
PONTIAC NORTH CAMPUS
PONTIAC, MICHIGAN

JOSLYN-WESBROOK SOUTH PARCEL GROUNDWATER ANALYTICAL RESULTS

ARCADIS Design & Consultancy for natural and built assets

FIGURE
5

CITY: NOVI, MI DIV: ENV DB: TRY PIC: PM: B. Saunders TM: L. Crisp TR: PROJECT NUMBER: 30075936.00005 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet
D:\GIS\Project Files\MotorsLiquidationCompany\PontiacNorthCampus\Documents\JoslynProperty\Analytical Groundwater LenoxSouthParcel.mxd PLOTTED: 8/5/2021 9:09:11 PM BY: TYarbrough

Service Layer Credits: Google Earth Pro Aerial Dated March 19, 2021

Wesbrook St

Joslyn Ave

Lenox Ave

JS-SB-01
JS-SB-02
JS-SB-03
JS-SB-04
JS-SB-05
JS-SB-06
JS-SB-07
JS-SB-08
JS-SB-09
JS-SB-10
JS-SB-11

LEGEND

- MANHOLE
- UNIDENTIFIED MANHOLE - EST. SANITARY
- CATCH BASIN
- TEMPORARY MONITORING WELL
- CONVERT TO PERMANENT MW
- PROPOSED TEMP MW ABANDON
- PROPOSED BORING
- PROPOSED MW
- PROPOSED SVMP
- POTENTIAL STEP-OUT BORING (NEED/LOCATION TBD IN FIELD BASED ON RESULTS OF PROPOSED BORINGS AND GPR RESULTS)
- WATER
- GAS
- TELECOMMUNICATIONS
- STORM SEWER
- SANITARY SEWER
- 35 FT VAPOR INTRUSION BUFFER ZONE
- PROPERTY BOUNDARY

0 40 80
SCALE IN FEET

CITY: NOVI, MI DIV: ENV DB: TRY PIC: PM: TM: TR: PROJECT NUMBER: COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet Intl
D:\GIS\Project Files\MotorsLiquidationCompany\PontiacNorthCampus\Documents\JoslynPropertyLenoxProperty_Recommendations_South.mxd PLOTTED: 8/24/2021 3:55:32 PM BY: TYarbrough

RACER TRUST
PONTIAC NORTH CAMPUS
PONTIAC, MICHIGAN

JOSLYN-WESBROOK SOUTH PARCEL DELINEATION INVESTIGATION RECOMMENDATIONS

ARCADIS Design & Consultancy for natural and built assets

FIGURE
6

TABLES

Table 1
Groundwater Elevation Summary
Joslyn-Wesbrook South Parcel Investigation
RACER Trust Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Well ID	Ground Elevation	Well Elevation [1]	Total Depth (ft)	Date	Depth to Water (ft)[2]	Groundwater Elevation
Joslyn-Wesbrook South Parcel Temporary Monitoring Wells						
JS-SB-01	987.70	989.24	10.50	6/4/2021	8.64	980.60
JS-SB-02	987.96	989.22	15.15	6/4/2021	12.22	977.00
JS-SB-03	987.40	988.57	15.28	6/4/2021	11.31	977.26
JS-SB-04	987.73	989.12	15.27	6/4/2021	8.50	980.62
JS-SB-05	986.23	987.78	12.19	6/4/2021	7.03	980.75
JS-SB-06	984.90	986.08	14.98	6/4/2021	12.89	973.19
JS-SB-07	985.75	988.00	17.23	6/4/2021	10.73	977.27
JS-SB-08	986.03	989.25	15.32	6/4/2021	9.78	979.47
JS-SB-09	986.95	988.86	15.12	6/4/2021	12.24	976.62
JS-SB-10	986.87	987.99	17.51	6/4/2021	12.18	975.81
JS-SB-11	985.66	986.94	15.35	6/4/2021	12.81	974.13

Abbreviations:
ft Feet

Footnotes:
[1] Top of Temporary Well Casing/Stickup Elevation is in feet National Vertical Geodetic Datum (1988).
[2] Depth to water measurements collected from top of temporary well casing/stickup.

Table 2
Soil Analytical Results
Joslyn-Wesbrook South Parcel Investigation
RACER Trust Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Chemical Name	Units	Groundwater Surface Water Interface Protection	Residential Drinking Water Protection	Nonresidential Drinking Water Protection	Residential Soil Direct Contact	Nonresidential Soil Direct Contact	Residential Soil VIAP	Nonresidential Soil VIAP	Location ID	JS-SB-01	JS-SB-02	JS-SB-03	JS-SB-03	JS-SB-04	JS-SB-05	JS-SB-05	JS-SB-06
									Date Collected	4/29/2021	4/27/2021	4/28/2021	4/28/2021	4/28/2021	4/28/2021	4/28/2021	4/28/2021
									Start Depth (ft. bgs)	7.5	11	2	11.2	4.6	5	7	12.1
									End Depth (ft. bgs)	8.5	12	3	12.2	5.6	6	8	13.1
MISC																	
Total solids	%	--	--	--	--	--	--	--		89	90	87	89	87	90	89	90
PAHS																	
1-Methylnaphthalene	ug/kg	--	--	--	--	--	--	--		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	5,100	7,100	< 300 U
2-Methylnaphthalene	ug/kg	4,200	57,000	170,000	**8,100,000**	*26,000,000*	1,700	30,000		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	12,600	17,600	< 300 U
Acenaphthene	ug/kg	8,700	300,000	880,000	**41,000,000**	*130,000,000*	200,000	3,600,000		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U
Acenaphthylene	ug/kg	--	5,900	17,000	**1,600,000**	*5,200,000*	--	--		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U
Anthracene	ug/kg	--	41,000	41,000	**230,000,000**	*730,000,000*	13,000,000	220,000,000		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U
Benzo(a)anthracene	ug/kg	--	--	--	**20,000**	*80,000*	160,000	11,000,000		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U
Benzo(a)pyrene	ug/kg	--	--	--	**2,000**	*8,000*	--	--		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U
Benzo(b)fluoranthene	ug/kg	--	--	--	**20,000**	*80,000*	--	--		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U
Benzo(g,h,i)perylene	ug/kg	--	--	--	**2,500,000**	*7,000,000*	--	--		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U
Benzo(k)fluoranthene	ug/kg	--	--	--	**200,000**	*800,000*	--	--		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U
Chrysene	ug/kg	--	--	--	**2,000,000**	*8,000,000*	--	--		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U
Dibenz(a,h)anthracene	ug/kg	--	--	--	**2,000**	*8,000*	--	--		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U
Fluoranthene	ug/kg	5,500	730,000	730,000	**46,000,000**	*130,000,000*	--	--		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U
Fluorene	ug/kg	5,300	390,000	890,000	**27,000,000**	*87,000,000*	470,000	8,300,000		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U
Indeno(1,2,3-cd)pyrene	ug/kg	--	--	--	**20,000**	--	--	--		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U
Naphthalene	ug/kg	730	35,000	100,000	**16,000,000**	*52,000,000*	67	1,900		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	8,800	14,700	< 300 U
Phenanthrene	ug/kg	2,100	56,000	160,000	**1,600,000**	*5,200,000*	1,700	29,000		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U
Pyrene	ug/kg	--	480,000	480,000	**29,000,000**	*84,000,000*	25,000,000	440,000,000		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U
VOCs																	
1,1,1,2-Tetrachloroethane	ug/kg	--	1,500	6,400	**480,000**	*2,200,000*	3.2	91		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 1,000 UY	< 6,000 UY	< 100 U
1,1,1-Trichloroethane	ug/kg	1,800	4,000	4,000	**500,000,000**	*1,000,000,000*	450	7,500		< 60 U	< 60 U	< 70 U	< 60 U	< 60 U	< 600 UY	< 3,000 UY	< 60 U
1,1,2,2-Tetrachloroethane	ug/kg	1,600	170	700	**53,000**	*240,000*	2.7	77		< 60 U	< 60 U	< 70 U	< 60 U	< 60 U	< 600 UY	< 3,000 UY	< 60 U
1,1,2-Trichloroethane	ug/kg	6,600	100	100	**180,000**	*840,000*	0.37	6.6		< 60 U	< 60 U	< 70 U	< 60 U	< 60 U	< 600 UY	< 3,000 UY	< 60 U
1,1-Dichloroethane	ug/kg	15,000	18,000	50,000	**27,000,000**	*87,000,000*	2.6	74		< 60 U	< 60 U	< 70 U	< 60 U	< 60 U	< 600 UY	< 3,000 UY	< 60 U
1,1-Dichloroethene	ug/kg	2,600	140	140	**200,000**	*660,000*	12	220		< 60 U	< 60 U	< 70 U	< 60 U	< 60 U	< 600 UY	< 3,000 UY	< 60 U
1,2,3-Trichlorobenzene	ug/kg	--	--	--	--	--	830	15,000		< 410 U	< 410 U	< 430 U	< 410 U	< 420 U	< 3,800 UY	< 20,000 UY	< 400 U
1,2,3-Trichloropropane	ug/kg	--	840	2,400	**1,300,000**	*4,200,000*	3	46		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 1,000 UY	< 6,000 UY	< 100 U
1,2,4-Trichlorobenzene	ug/kg	5,900	4,200	4,200	**990,000**	*5,800,000*	53	930		< 410 U	< 410 U	< 430 U	< 410 U	< 420 U	< 3,800 UY	< 20,000 UY	< 400 U
1,2,4-Trimethylbenzene	ug/kg	570	2,100	2,100	**32,000,000**	*100,000,000*	150	2,600		< 60 U	< 60 U	< 70 U	< 60 U	< 60 U	6,700 Y	136,000 Y	< 60 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/kg	--	10	10	**4,400**	*20,000*	--	--		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 3,000 UY	< 20,000 UY	< 300 U
1,2-Dibromoethane (Ethylene dibromide)	ug/kg	110	20	20	**92**	*430*	0.074	2.1		< 20 UM	< 20 UM	< 30 UM	< 20 UM	< 30 UM	< 200 UYM	< 1,000 UYM	< 20 UM
1,2-Dichlorobenzene	ug/kg	280	14,000	14,000	**19,000,000**	*63,000,000*	1,500	26,000		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 1,000 UY	< 6,000 UY	< 100 U
1,2-Dichloroethane	ug/kg	7,200	100	100	**91,000**	*420,000*	0.82	23		< 60 U	< 60 U	< 70 U	< 60 U	< 60 U	< 600 UY	< 3,000 UY	< 60 U
1,2-Dichloropropane	ug/kg	4,600	100	100	**140,000**	*660,000*	2.1	37		< 60 U	< 60 U	< 70 U	< 60 U	< 60 U	< 600 UY	< 3,000 UY	< 60 U
1,3,5-Trimethylbenzene	ug/kg	1,100	1,800	1,800	**32,000,000**	*100,000,000*	100	1,800		< 60 U	< 60 U	< 70 U	< 60 U	< 60 U	6,000 Y	48,000 Y	< 60 U
1,3-Dichlorobenzene	ug/kg	680	170	480	**200,000**	*660,000*	10	180		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 1,000 UY	< 6,000 UY	< 100 U
1,4-Dichlorobenzene	ug/kg	360	1,700	1,700	**400,000**	*1,900,000*	23	660		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 1,000 UY	< 6,000 UY	< 100 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/kg	44,000	260,000	760,000	**120,000,000**	*700,000,000*	31,000	370,000		< 930 U	< 920 U	< 980 U	< 920 U	< 960 U	< 8,700 UY	< 46,000 UY	< 900 U
2-Hexanone	ug/kg	--	20,000	58,000	**32,000,000**	*100,000,000*	210	3,800		< 3,000 U	< 3,000 U	< 3,000 U	< 3,000 U	< 3,000 U	< 30,000 UY	< 200,000 UY	< 3,000 U
2-Methylnaphthalene	ug/kg	4,200	57,000	170,000	**8,100,000**	*26,000,000*	1,700	30,000		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	12,000 Y	40,000 Y	< 100 U
2-Phenylbutane (sec-Butylbenzene)	ug/kg	--	1,600	4,600	**2,500,000**	*8,000,000*	3,800	66,000		< 60 U	< 60 U	< 70 U	< 60 U	< 60 U	< 600 UY	< 3,000 UY	< 60 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/kg	--	--	--	**56,000,000**	--	3,300	40,000		< 3,000 U	< 3,000 U	< 3,000 U	< 3,000 U	< 3,000 U	< 30,000 UY	< 200,000 UY	< 3,000 U
Acetone	ug/kg	34,000	15,000	42,000	**23,000,000**	*73,000,000*	260,000	3,100,000		< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 10,000 UY	< 60,000 UY	< 1,000 U
Acrylonitrile	ug/kg	100	100	220	**16,000**	*74,000*	1.2	34		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 1,000 UY	< 6,000 UY	< 100 U
Benzene	ug/kg	4,000	100	100	**180,000**	*840,000*	1.7	47		< 60 U	< 60 U	< 70 U	< 60 U	< 60 U	< 600 UY	< 3,000 UY	< 60 U
Bromobenzene	ug/kg	--	550	1,500	**540,000**	*1,700,000*	160	2,800		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 1,000 UY	< 6,000 UY	< 100 U
Bromodichloromethane	ug/kg	--	1,600	1,600	**110,000**	*490,000*	0.61	16		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 1,000 UY	< 6,000 UY	< 100 U
Bromoform	ug/kg	--	1,600	1,600	**820,000**	*3,800,000*	45	1,300		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 1,000 UY	< 6,000 UY	< 100 U
Bromomethane (Methyl bromide)	ug/kg	700	200	580	**320,000**	*1,000,000*	0.90	16		< 200 U	< 200 U	< 300 U	< 200 U	< 300 U	< 2,000 UY	< 10,000 UY	< 200 U
Carbon disulfide	ug/kg	--	16,000	46,000	**7,200,000**	*43,000,000*	52	920		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 3,000 UY	< 20,000 UY	< 300 U
Carbon tetrachloride	ug/kg	900	100	100	**96,000**	*440,000*	0.31	8.7		< 60 U	< 60 U	< 70 U	< 60 U	< 60 U	< 600 UY	< 3,000 UY	< 60 U
Chlorobenzene	ug/kg	500	2,000	2,000	**4,300,000**	*14,000,000*	82	1,400		< 60 U	< 60 U	< 70 U	< 60 U	< 60 U	< 600 UY	< 3,000 UY	< 60 U
Chlorobromomethane	ug/kg	--	--	--	--	--	--	--		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 1,000 UY	< 6,000 UY	< 100 U
Chloroethane	ug/kg	22,000	8,600	34,000	**2,600,000**	*12,000,000*	330	5,800		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 3,000 UY	< 20,000 UY	< 300 U
Chloroform (Trichloromethane)	ug/kg	7,000	1,600	1,600	**1,200,000**	*5,500,000*	0.26	7.4		< 60 U	< 60 U	< 70 U	< 60 U	< 60 U	< 600 UY	< 3,000 UY	< 60 U
Chloromethane (Methyl chloride)	ug/kg	--	5,200	22,000	**1,600,000**	*7,400,000*	6.9	120		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 3,000 UY	< 20,000 UY	< 300 U
cis-1,2-Dichloroethene	ug/kg	12,000	1,400	1,400	**2,500,000**	*8,000,000*	2.1	37		< 60 U	< 60 U	< 70 U	< 60 U	< 60 U	< 600 UY	< 3,000 UY	< 60 U
cis-1,3-Dichloropropene	ug/kg	--	--	--	--	--	--	--		< 60 U	< 60 U	< 70 U	< 60 U	< 60 U	< 600 UY	< 3,000 UY	< 60 U
Cymene (p-Isopropyltoluene)	ug/kg	--	--	--	--	--	--	--		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 1,000 UY	< 6,000 UY	< 100 U
Dibromochloromethane	ug/kg	--	1,600	1,600	**110,000**	*500,000*	0.40	27		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 1,000 UY	< 6,000 UY	< 100 U
Dibromomethane	ug/kg	--	1,600	4,600	**2,500,000**	*8,000,000*	3.5	62		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 3,000 UY	< 20,000 UY	< 300 U
Dichlorodifluoromethane (CFC-12)	ug/kg	--	95,000	270,000	**52,000,000**	*170,000,000*	12	220		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 3,000 UY	< 20,000 UY	< 300 U
Ethyl ether	ug/kg	--	200	200	**110,000,000**	*360,000,000*	350	6,200		< 200 U	< 200 U	< 300 U	< 200 U	< 300 U	< 2,000 UY	< 10,000 UY	< 200 U
Ethylbenzene	ug/kg	360	1,500	1,500	--	*71,000,000*	12	340		< 60 U	< 60 U	< 70 U	< 60 U	< 60 U	9,000 Y	48,000 Y	< 60 U
Hexachloroethane	ug/kg	1,800	430	1,200	**230,000**	*730,000*	3.2	92		< 400 U	< 400 U	< 400 U	< 400 U	< 400 U	< 3,000 UY	< 20,000 UY	< 400 U

Table 2
Soil Analytical Results
Joslyn-Wesbrook South Parcel Investigation
RACER Trust Pontiac North Campus

Chemical Name	Units	Groundwater Surface Water Interface Protection	Residential Drinking Water Protection	Nonresidential Drinking Water Protection	Residential Soil Direct Contact	Nonresidential Soil Direct Contact	Residential Soil VIAP	Nonresidential Soil VIAP	Location ID	JS-SB-01	JS-SB-02	JS-SB-03	JS-SB-03	JS-SB-04	JS-SB-05	JS-SB-05	JS-SB-06
									Date Collected	4/29/2021	4/27/2021	4/28/2021	4/28/2021	4/28/2021	4/28/2021	4/28/2021	4/28/2021
									Start Depth (ft. bgs)	7.5	11	2	11.2	4.6	5	7	12.1
									End Depth (ft. bgs)	8.5	12	3	12.2	5.6	6	8	13.1
Iodomethane	ug/kg	--	--	--	--	--	--	--		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 1,000 UY	< 6,000 UY	< 100 U
Isopropyl benzene	ug/kg	3,200	91,000	260,000	**25,000,000**	*80,000,000*	3.8	110		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 3,000 UY	< 20,000 UY	< 300 U
m&p-Xylene	ug/kg	--	--	--	--	--	--	--		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	18,000 Y	220,000 Y	< 100 U
Methyl tert butyl ether (MTBE)	ug/kg	140,000	800	800	**1,500,000**	*7,100,000*	74	2,100		< 200 U	< 200 U	< 300 U	< 200 U	< 300 U	< 2,000 UY	< 10,000 UY	< 200 U
Methylene chloride	ug/kg	30,000	100	100	**1,300,000**	*5,800,000*	130	2,300		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 1,000 UY	< 6,000 UY	< 100 U
Naphthalene	ug/kg	730	35,000	100,000	**16,000,000**	*52,000,000*	67	1,900		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	10,000 Y	40,000 Y	< 300 U
N-Butylbenzene	ug/kg	--	1,600	4,600	**2,500,000**	*8,000,000*	550	9,800		< 60 U	< 60 U	< 70 U	< 60 U	< 60 U	3,900 Y	15,000 Y	< 60 U
N-Propylbenzene	ug/kg	--	1,600	4,600	**2,500,000**	*8,000,000*	1,800	21,000		< 60 U	< 60 U	< 70 U	< 60 U	< 60 U	4,600 Y	19,000 Y	< 60 U
o-Xylene	ug/kg	--	--	--	--	--	--	--		< 60 U	< 60 U	< 70 U	< 60 U	< 60 U	< 600 UY	< 3,000 UY	< 60 U
Styrene	ug/kg	2,100	2,700	2,700	**400,000**	*1,900,000*	150	4,300		< 60 U	< 60 U	< 70 U	< 60 U	< 60 U	< 600 UY	< 3,000 UY	< 60 U
tert-Butylbenzene	ug/kg	--	1,600	4,600	**2,500,000**	*8,000,000*	0.64	11		< 60 U	< 60 U	< 70 U	< 60 U	< 60 U	< 600 UY	< 3,000 UY	< 60 U
Tetrachloroethene	ug/kg	1,200	100	100	**200,000**	*930,000*	6.2	74		< 60 U	< 60 U	< 70 U	< 60 U	< 60 U	< 600 UY	< 3,000 UY	< 60 U
Tetrahydrofuran	ug/kg	220,000	1,900	5,400	**2,900,000**	*9,500,000*	13,000	220,000		< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 10,000 UY	< 60,000 UY	< 1,000 U
Toluene	ug/kg	5,400	16,000	16,000	**50,000,000**	*160,000,000*	3,700	64,000		< 60 U	< 60 U	< 70 U	< 60 U	< 60 U	< 600 UY	< 3,000 UY	< 60 U
trans-1,2-Dichloroethene	ug/kg	30,000	2,000	2,000	**3,800,000**	*12,000,000*	12	210		< 60 U	< 60 U	< 70 U	< 60 U	< 60 U	< 600 UY	< 3,000 UY	< 60 U
trans-1,3-Dichloropropene	ug/kg	--	--	--	--	--	--	--		< 60 U	< 60 U	< 70 U	< 60 U	< 60 U	< 600 UY	< 3,000 UY	< 60 U
trans-1,4-Dichloro-2-butene	ug/kg	--	--	--	--	--	--	--		< 60 U	< 60 U	< 70 U	< 60 U	< 60 U	< 600 UY	< 3,000 UY	< 60 U
Trichloroethene	ug/kg	4,000	100	100	**110,000**	*660,000*	0.33	4.0		< 60 U	< 60 U	< 70 U	< 60 U	< 60 U	< 600 UY	< 3,000 UY	< 60 U
Trichlorofluoromethane (CFC-11)	ug/kg	--	52,000	150,000	**79,000,000**	*260,000,000*	19	340		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 1,000 UY	< 6,000 UY	< 100 U
Vinyl chloride	ug/kg	260	40	40	--	*34,000*	0.082	8.2		< 60 U	< 60 U	< 70 U	< 60 U	< 60 U	< 600 UY	< 3,000 UY	< 60 U
Xylene (total)	ug/kg	820	5,600	5,600	**410,000,000**	*1,000,000,000*	280	5,000		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	18,000 Y	220,000 Y	< 100 U

Table 2
Soil Analytical Results
Joslyn-Wesbrook South Parcel Investigation
RACER Trust Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Chemical Name	Units	Groundwater Surface Water Interface Protection	Residential Drinking Water Protection	Nonresidential Drinking Water Protection	Residential Soil Direct Contact	Nonresidential Soil Direct Contact	Residential Soil VIAP	Nonresidential Soil VIAP	Location ID	JS-SB-07	JS-SB-07 (Dup-01)	JS-SB-08	JS-SB-08 (Dup-02)	JS-SB-09	JS-SB-09	JS-SB-10	JS-SB-11
									Date Collected	4/29/2021	4/29/2021	4/29/2021	4/29/2021	4/30/2021	4/30/2021	4/30/2021	4/30/2021
									Start Depth (ft. bgs)	12.4	12.4	4.2	4.2	9	10	14	12.4
									End Depth (ft. bgs)	13.4	13.4	5.2	5.2	10	11	15	13.4
MISC																	
Total solids	%	--	--	--	--	--	--	--		88	89	84	85	88	88	91	90
PAHS																	
1-Methylnaphthalene	ug/kg	--	--	--	--	--	--	--		< 300 U	< 300 U	< 300 U	< 300 U	500	< 300 U	< 300 U	< 300 U
2-Methylnaphthalene	ug/kg	4,200	57,000	170,000	**8,100,000**	*26,000,000*	1,700	30,000		< 300 U	< 300 U	< 300 U	< 300 U	1,000	500	< 300 U	< 300 U
Acenaphthene	ug/kg	8,700	300,000	880,000	**41,000,000**	*130,000,000*	200,000	3,600,000		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U
Acenaphthylene	ug/kg	--	5,900	17,000	**1,600,000**	*5,200,000*	--	--		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U
Anthracene	ug/kg	--	41,000	41,000	**230,000,000**	*730,000,000*	13,000,000	220,000,000		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U
Benzo(a)anthracene	ug/kg	--	--	--	**20,000**	*80,000*	160,000	11,000,000		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U
Benzo(a)pyrene	ug/kg	--	--	--	**2,000**	*8,000*	--	--		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U
Benzo(b)fluoranthene	ug/kg	--	--	--	**20,000**	*80,000*	--	--		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U
Benzo(g,h,i)perylene	ug/kg	--	--	--	**2,500,000**	*7,000,000*	--	--		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U
Benzo(k)fluoranthene	ug/kg	--	--	--	**200,000**	*800,000*	--	--		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U
Chrysene	ug/kg	--	--	--	**2,000,000**	*8,000,000*	--	--		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U
Dibenz(a,h)anthracene	ug/kg	--	--	--	**2,000**	*8,000*	--	--		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U
Fluoranthene	ug/kg	5,500	730,000	730,000	**46,000,000**	*130,000,000*	--	--		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U
Fluorene	ug/kg	5,300	390,000	890,000	**27,000,000**	*87,000,000*	470,000	8,300,000		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U
Indeno(1,2,3-cd)pyrene	ug/kg	--	--	--	**20,000**	--	--	--		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U
Naphthalene	ug/kg	730	35,000	100,000	**16,000,000**	*52,000,000*	67	1,900		< 300 U	< 300 U	< 300 U	< 300 U	1,500	700	< 300 U	< 300 U
Phenanthrene	ug/kg	2,100	56,000	160,000	**1,600,000**	*5,200,000*	1,700	29,000		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U
Pyrene	ug/kg	--	480,000	480,000	**29,000,000**	*84,000,000*	25,000,000	440,000,000		< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U
VOCs																	
1,1,1,2-Tetrachloroethane	ug/kg	--	1,500	6,400	**480,000**	*2,200,000*	3.2	91		< 100 U	< 100 U	< 100 U	< 100 U	< 1,000 UY	< 100 U	< 100 U	< 100 U
1,1,1-Trichloroethane	ug/kg	1,800	4,000	4,000	**500,000,000**	*1,000,000,000*	450	7,500		< 60 U	< 60 U	< 70 U	< 70 U	< 600 UY	< 60 U	< 60 U	< 60 U
1,1,2,2-Tetrachloroethane	ug/kg	1,600	170	700	**53,000**	*240,000*	2.7	77		< 60 U	< 60 U	< 70 U	< 70 U	< 600 UY	< 60 U	< 60 U	< 60 U
1,1,2-Trichloroethane	ug/kg	6,600	100	100	**180,000**	*840,000*	0.37	6.6		< 60 U	< 60 U	< 70 U	< 70 U	< 600 UY	< 60 U	< 60 U	< 60 U
1,1-Dichloroethane	ug/kg	15,000	18,000	50,000	**27,000,000**	*87,000,000*	2.6	74		< 60 U	< 60 U	< 70 U	< 70 U	< 600 UY	< 60 U	< 60 U	< 60 U
1,1-Dichloroethene	ug/kg	2,600	140	140	**200,000**	*660,000*	12	220		< 60 U	< 60 U	< 70 U	< 70 U	< 600 UY	< 60 U	< 60 U	< 60 U
1,2,3-Trichlorobenzene	ug/kg	--	--	--	--	--	830	15,000		< 420 U	< 420 U	< 480 U	< 440 U	< 4,200 UY	< 390 U	< 390 U	< 390 U
1,2,3-Trichloropropane	ug/kg	--	840	2,400	**1,300,000**	*4,200,000*	3	46		< 100 U	< 100 U	< 100 U	< 100 U	< 1,000 UY	< 100 U	< 100 U	< 100 U
1,2,3-Trimethylbenzene	ug/kg	--	--	--	--	--	270	4,800		< 60 U	< 60 U	< 70 U	< 70 U	1,700 Y	2,040	< 60 U	< 60 U
1,2,4-Trichlorobenzene	ug/kg	5,900	4,200	4,200	**990,000**	*5,800,000*	53	930		< 420 U	< 420 U	< 480 U	< 440 U	< 4,200 UY	< 390 U	< 390 U	< 390 U
1,2,4-Trimethylbenzene	ug/kg	570	2,100	2,100	**32,000,000**	*100,000,000*	150	2,600		< 60 U	< 60 U	< 70 U	< 70 U	11,400 Y	5,090	< 60 U	< 60 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/kg	--	10	10	**4,400**	*20,000*	--	--		< 300 U	< 300 U	< 400 U	< 300 U	< 300 U	< 300 U	< 300 U	< 300 U
1,2-Dibromoethane (Ethylene dibromide)	ug/kg	110	20	20	**92**	*430*	0.074	2.1		< 30 UM	< 30 UM	< 30 UM	< 30 UM	< 300 UYM	< 20 UM	< 20 UM	< 20 UM
1,2-Dichlorobenzene	ug/kg	280	14,000	14,000	**19,000,000**	*63,000,000*	1,500	26,000		< 100 U	< 100 U	< 100 U	< 100 U	< 1,000 UY	< 100 U	< 100 U	< 100 U
1,2-Dichloroethane	ug/kg	7,200	100	100	**91,000**	*420,000*	0.82	23		< 60 U	< 60 U	< 70 U	< 70 U	< 600 UY	< 60 U	110	< 60 U
1,2-Dichloropropane	ug/kg	4,600	100	100	**140,000**	*660,000*	2.1	37		< 60 U	< 60 U	< 70 U	< 70 U	< 600 UY	< 60 U	< 60 U	< 60 U
1,3,5-Trimethylbenzene	ug/kg	1,100	1,800	1,800	**32,000,000**	*100,000,000*	100	1,800		< 60 U	< 60 U	< 70 U	< 70 U	< 600 UY	680	< 60 U	< 60 U
1,3-Dichlorobenzene	ug/kg	680	170	480	**200,000**	*660,000*	10	180		< 100 U	< 100 U	< 100 U	< 100 U	< 1,000 UY	< 100 U	< 100 U	< 100 U
1,4-Dichlorobenzene	ug/kg	360	1,700	1,700	**400,000**	*1,900,000*	23	660		< 100 U	< 100 U	< 100 U	< 100 U	< 1,000 UY	< 100 U	< 100 U	< 100 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/kg	44,000	260,000	760,000	**120,000,000**	*700,000,000*	31,000	370,000		< 950 U	< 950 U	< 1,100 U	< 1,000 U	< 9,500 UY	< 890 U	< 880 U	< 890 U
2-Hexanone	ug/kg	--	20,000	58,000	**32,000,000**	*100,000,000*	210	3,800		< 3,000 U	< 3,000 U	< 4,000 U	< 3,000 U	< 30,000 UY	< 3,000 U	< 3,000 U	< 3,000 U
2-Methylnaphthalene	ug/kg	4,200	57,000	170,000	**8,100,000**	*26,000,000*	1,700	30,000		< 100 U	< 100 U	< 100 U	< 100 U	1,000 Y	900	< 100 U	< 100 U
2-Phenylbutane (sec-Butylbenzene)	ug/kg	--	1,600	4,600	**2,500,000**	*8,000,000*	3,800	66,000		< 60 U	< 60 U	< 70 U	< 70 U	< 600 UY	100	< 60 U	< 60 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/kg	--	--	--	**56,000,000**	--	3,300	40,000		< 3,000 U	< 3,000 U	< 4,000 U	< 3,000 U	< 30,000 UY	< 3,000 U	< 3,000 U	< 3,000 U
Acetone	ug/kg	34,000	15,000	42,000	**23,000,000**	*73,000,000*	260,000	3,100,000		< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 10,000 UY	< 1,000 U	< 1,000 U	< 1,000 U
Acrylonitrile	ug/kg	100	100	220	**16,000**	*74,000*	1.2	34		< 100 U	< 100 U	< 100 U	< 100 U	< 1,000 UY	< 100 U	< 100 U	< 100 U
Benzene	ug/kg	4,000	100	100	**180,000**	*840,000*	1.7	47		< 60 U	< 60 U	< 70 U	< 70 U	< 600 UY	450	< 60 U	< 60 U
Bromobenzene	ug/kg	--	550	1,500	**540,000**	*1,700,000*	160	2,800		< 100 U	< 100 U	< 100 U	< 100 U	< 1,000 UY	< 100 U	< 100 U	< 100 U
Bromodichloromethane	ug/kg	--	1,600	1,600	**110,000**	*490,000*	0.61	16		< 100 U	< 100 U	< 100 U	< 100 U	< 1,000 UY	< 100 U	< 100 U	< 100 U
Bromoform	ug/kg	--	1,600	1,600	**820,000**	*3,800,000*	45	1,300		< 100 U	< 100 U	< 100 U	< 100 U	< 1,000 UY	< 100 U	< 100 U	< 100 U
Bromomethane (Methyl bromide)	ug/kg	700	200	580	**320,000**	*1,000,000*	0.90	16		< 300 U	< 300 U	< 300 U	< 300 U	< 3,000 UY	< 200 U	< 200 U	< 200 U
Carbon disulfide	ug/kg	--	16,000	46,000	**7,200,000**	*43,000,000*	52	920		< 300 U	< 300 U	< 400 U	< 300 U	< 3,000 UY	< 300 U	< 300 U	< 300 U
Carbon tetrachloride	ug/kg	900	100	100	**96,000**	*440,000*	0.31	8.7		< 60 U	< 60 U	< 70 U	< 70 U	< 600 UY	< 60 U	< 60 U	< 60 U
Chlorobenzene	ug/kg	500	2,000	2,000	**4,300,000**	*14,000,000*	82	1,400		< 60 U	< 60 U	< 70 U	< 70 U	< 600 UY	< 60 U	< 60 U	< 60 U
Chlorobromomethane	ug/kg	--	--	--	--	--	--	--		< 100 U	< 100 U	< 100 U	< 100 U	< 1,000 UY	< 100 U	< 100 U	< 100 U
Chloroethane	ug/kg	22,000	8,600	34,000	**2,600,000**	*12,000,000*	330	5,800		< 300 U	< 300 U	< 400 U	< 300 U	< 3,000 UY	< 300 U	< 300 U	< 300 U
Chloroform (Trichloromethane)	ug/kg	7,000	1,600	1,600	**1,200,000**	*5,500,000*	0.26	7.4		< 60 U	< 60 U	< 70 U	< 70 U	< 600 UY	< 60 U	< 60 U	< 60 U
Chloromethane (Methyl chloride)	ug/kg	--	5,200	22,000	**1,600,000**	*7,400,000*	6.9	120		< 300 U	< 300 U	< 400 U	< 300 U	< 3,000 UY	< 300 U	< 300 U	< 300 U
cis-1,2-Dichloroethene	ug/kg	12,000	1,400	1,400	**2,500,000**	*8,000,000*	2.1	37		< 60 U	< 60 U	< 70 U	< 70 U	< 600 UY	< 60 U	< 60 U	< 60 U
cis-1,3-Dichloropropene	ug/kg	--	--	--	--	--	--	--		< 60 U	< 60 U	< 70 U	< 70 U	< 600 UY	< 60 U	< 60 U	< 60 U
Cymene (p-Isopropyltoluene)	ug/kg	--	--	--	--	--	--	--		< 100 U	< 100 U	< 100 U	< 100 U	< 1,000 UY	< 100 U	< 100 U	< 100 U
Dibromochloromethane	ug/kg	--	1,600	1,600	**110,000**	*500,000*	0.40	27		< 100 U	< 100 U	< 100 U	< 100 U	< 1,000 UY	< 100 U	< 100 U	< 100 U
Dibromomethane	ug/kg	--	1,600	4,600	**2,500,000**	*8,000,000*	3.5	62		< 300 U	< 300 U	< 400 U	< 300 U	< 3,000 UY	< 300 U	< 300 U	< 300 U
Dichlorodifluoromethane (CFC-12)	ug/kg	--	95,000	270,000	**52,000,000**	*170,000,000*	12	220		< 300 U	< 300 U	< 400 U	< 300 U	< 3,000 UY	< 300 U	< 300 U	< 300 U
Ethyl ether	ug/kg	--	200	200	**110,000,000**	*360,000,000*	350	6,200		< 300 U	< 300 U	< 300 U	< 300 U	< 3,000 UY	< 200 U	< 200 U	< 200 U
Ethylbenzene	ug/kg	360	1,500	1,500	--	*71,000,000*	12	340		< 60 U	< 60 U	< 70 U	< 70 U	2,100 Y	4,770	< 60 U	< 60 U
Hexachloroethane	ug/kg	1,800	430	1,200	**230,000**	*730,000*	3.2	92		< 400 U	< 400 U	< 400 U	< 400 U	< 4,000 UY	< 400 U	< 400 U	< 400 U

Table 2
Soil Analytical Results
Joslyn-Wesbrook South Parcel Investigation
RACER Trust Pontiac North Campus

Chemical Name	Units	Groundwater Surface Water Interface Protection	Residential Drinking Water Protection	Nonresidential Drinking Water Protection	Residential Soil Direct Contact	Nonresidential Soil Direct Contact	Residential Soil VIAP	Nonresidential Soil VIAP	Location ID	JS-SB-07	JS-SB-07 (Dup-01)	JS-SB-08	JS-SB-08 (Dup-02)	JS-SB-09	JS-SB-09	JS-SB-10	JS-SB-11
									Date Collected	4/29/2021	4/29/2021	4/29/2021	4/29/2021	4/30/2021	4/30/2021	4/30/2021	4/30/2021
									Start Depth (ft. bgs)	12.4	12.4	4.2	4.2	9	10	14	12.4
									End Depth (ft. bgs)	13.4	13.4	5.2	5.2	10	11	15	13.4
Iodomethane	ug/kg	--	--	--	--	--	--	--		< 100 U	< 100 U	< 100 U	< 100 U	< 1,000 UY	< 100 U	< 100 U	< 100 U
Isopropyl benzene	ug/kg	3,200	91,000	260,000	**25,000,000**	*80,000,000*	3.8	110		< 300 U	< 300 U	< 400 U	< 300 U	< 3,000 UY	< 300 U	< 300 U	< 300 U
m&p-Xylene	ug/kg	--	--	--	--	--	--	--		< 100 U	< 100 U	< 100 U	< 100 U	3,000 Y	4,500	< 100 U	< 100 U
Methyl tert butyl ether (MTBE)	ug/kg	140,000	800	800	**1,500,000**	*7,100,000*	74	2,100		< 300 U	< 300 U	< 300 U	< 300 U	< 3,000 UY	< 200 U	< 200 U	< 200 U
Methylene chloride	ug/kg	30,000	100	100	**1,300,000**	*5,800,000*	130	2,300		< 100 U	< 100 U	< 100 U	< 100 U	< 1,000 UY	< 100 U	< 100 U	< 100 U
Naphthalene	ug/kg	730	35,000	100,000	**16,000,000**	*52,000,000*	67	1,900		< 300 U	< 300 U	< 400 U	< 300 U	< 3,000 UY	1,600	< 300 U	< 300 U
N-Butylbenzene	ug/kg	--	1,600	4,600	**2,500,000**	*8,000,000*	550	9,800		< 60 U	< 60 U	< 70 U	< 70 U	800 Y	510	< 60 U	< 60 U
N-Propylbenzene	ug/kg	--	1,600	4,600	**2,500,000**	*8,000,000*	1,800	21,000		< 60 U	< 60 U	< 70 U	< 70 U	1,900 Y	1,490	< 60 U	< 60 U
o-Xylene	ug/kg	--	--	--	--	--	--	--		< 60 U	< 60 U	< 70 U	< 70 U	< 600 UY	100	< 60 U	< 60 U
Styrene	ug/kg	2,100	2,700	2,700	**400,000**	*1,900,000*	150	4,300		< 60 U	< 60 U	< 70 U	< 70 U	< 600 UY	< 60 U	< 60 U	< 60 U
tert-Butylbenzene	ug/kg	--	1,600	4,600	**2,500,000**	*8,000,000*	0.64	11		< 60 U	< 60 U	< 70 U	< 70 U	< 600 UY	< 60 U	< 60 U	< 60 U
Tetrachloroethene	ug/kg	1,200	100	100	**200,000**	*930,000*	6.2	74		< 60 U	< 60 U	< 70 U	< 70 U	< 600 UY	< 60 U	< 60 U	< 60 U
Tetrahydrofuran	ug/kg	220,000	1,900	5,400	**2,900,000**	*9,500,000*	13,000	220,000		< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 10,000 UY	< 1,000 U	< 1,000 U	< 1,000 U
Toluene	ug/kg	5,400	16,000	16,000	**50,000,000**	*160,000,000*	3,700	64,000		< 60 U	< 60 U	< 70 U	< 70 U	< 600 UY	< 60 U	< 60 U	< 60 U
trans-1,2-Dichloroethene	ug/kg	30,000	2,000	2,000	**3,800,000**	*12,000,000*	12	210		< 60 U	< 60 U	< 70 U	< 70 U	< 600 UY	< 60 U	< 60 U	< 60 U
trans-1,3-Dichloropropene	ug/kg	--	--	--	--	--	--	--		< 60 U	< 60 U	< 70 U	< 70 U	< 600 UY	< 60 U	< 60 U	< 60 U
trans-1,4-Dichloro-2-butene	ug/kg	--	--	--	--	--	--	--		< 60 U	< 60 U	< 70 U	< 70 U	< 600 UY	< 60 U	< 60 U	< 60 U
Trichloroethene	ug/kg	4,000	100	100	**110,000**	*660,000*	0.33	4.0		< 60 U	< 60 U	< 70 U	< 70 U	< 600 UY	< 60 U	< 60 U	< 60 U
Trichlorofluoromethane (CFC-11)	ug/kg	--	52,000	150,000	**79,000,000**	*260,000,000*	19	340		< 100 U	< 100 U	< 100 U	< 100 U	< 1,000 UY	< 100 U	< 100 U	< 100 U
Vinyl chloride	ug/kg	260	40	40	--	*34,000*	0.082	8.2		< 60 U	< 60 U	< 70 U	< 70 U	< 600 UY	< 60 U	< 60 U	< 60 U
Xylene (total)	ug/kg	820	5,600	5,600	**410,000,000**	*1,000,000,000*	280	5,000		< 100 U	< 100 U	< 100 U	< 100 U	3,000 Y	4,600	< 100 U	< 100 U

Table 2
Soil Analytical Results
Joslyn-Wesbrook South Parcel Investigation
RACER Trust Pontiac North Campus

Notes:

1) Criteria listed are from the Michigan Department of Environment, Great Lakes, and Energy (EGLE) Clean Up Criteria Requirements Table 1: Soil: Residential and Nonresidential, Part 201 Generic Cleanup Criteria and Screening Levels, December 21, 2020.

2) Residential and Nonresidential Volatilization to Indoor Air Pathway Screening Levels are from the DEQ Guidance Document for the Vapor Intrusion Pathway, Appendix D - Tables 1 and 2, September 4, 2020.

3) Grey shaded values denotes exceedance and/or equal to Michigan Groundwater Surface Water Interface criteria
4) Yellow highlighted values denotes exceedance and/or equal to Michigan Residential Drinking Water criteria
5) Orange highlighted values denotes exceedance and/or equal to Nonresidential Drinking Water criteria
6) Values in bold denotes exceedance and/or equal to Residential Direct Contact criteria
7) Values in italics denotes exceedance and/or equal to Nonresidential Direct Contact criteria
8) Underlined values denotes exceedance and/or equal to Residential Soil Volatilization criteria.
9) Values in red type denotes exceedance and/or equal to Nonresidential Soil Volatilization to Indoor Air Pathway criteria

Abbreviations:

ug/kg	Micrograms per kilogram
ft.	feet
bgs	below ground surface
M	Result reported to MDL not RDL
U	Compound was analyzed for but not detected. The associated value is the compound quantitation limit.
Y	Elevated reporting limit due to high target concentration
VIAP	Volatilization to Indoor Air Pathway

Table 3
Groundwater Analytical Results
Joslyn-Wesbrook South Parcel Investigation
RACER Trust Pontiac North Campus

Chemical Name	Units	Groundwater Surface Water Interface	Residential Drinking Water	Nonresidential Drinking Water	Residential Shallow Groundwater VIAP	Nonresidential Shallow Groundwater VIAP	Location ID	JS-SB-01	JS-SB-02	JS-SB-03	JS-SB-04	JS-SB-05	JS-SB-05 (Dup-04)	JS-SB-06	JS-SB-07	JS-SB-08	JS-SB-09	JS-SB-10	JS-SB-10 (Dup-03)	JS-SB-11
							Date Collected	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/12/2021	5/12/2021	5/11/2021	5/11/2021	5/11/2021	5/12/2021	5/12/2021	5/12/2021	5/12/2021
PAHS																				
1-Methylnaphthalene	ug/L	--	--	--	--	--		< 5 U	< 5 U	< 5 U	< 5 U	46	46	< 5 U	< 5 U	< 5 U	19	< 5 US	< 5 U	< 5 U
2-Methylnaphthalene	ug/L	19	260	750	**66**	*110*		< 5 U	< 5 U	< 5 U	< 5 U	**89**	**82**	6	< 5 U	< 5 U	42	< 5 US	< 5 U	< 5 U
Acenaphthene	ug/L	38	1,300	3,800	**3,900**	*3,900*		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 US	< 5 U	< 5 U
Acenaphthylene	ug/L	--	52	150	**65**	*710*		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 US	< 5 U	< 5 U
Anthracene	ug/L	--	43	43	**43**	*43*		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 US	< 5 U	< 5 U
Benzo(a)anthracene	ug/L	--	2.1	8.5	**9.4**	*9.4*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 US	< 1 U	< 1 U
Benzo(a)pyrene	ug/L	--	5.0	5.0	--	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 US	< 1 U	< 1 U
Benzo(b)fluoranthene	ug/L	--	1.5	1.5	--	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 US	< 1 U	< 1 U
Benzo(g,h,i)perylene	ug/L	--	1.0	1.0	--	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 US	< 1 U	< 1 U
Benzo(k)fluoranthene	ug/L	--	1.0	1.0	--	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 US	< 1 U	< 1 U
Chrysene	ug/L	--	1.6	1.6	--	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 US	< 1 U	< 1 U
Dibenz(a,h)anthracene	ug/L	--	2.0	2.0	--	--		< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 US	< 2 U	< 2 U
Fluoranthene	ug/L	1.6	210	210	--	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 US	< 1 U	< 1 U
Fluorene	ug/L	12	880	2,000	**1,700**	*1,700*		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 US	< 5 U	< 5 U
Indeno(1,2,3-cd)pyrene	ug/L	--	2.0	2.0	--	--		< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 US	< 2 U	< 2 U
Naphthalene	ug/L	11	520	1,500	**4.2**	*12*		< 5 U	< 5 U	< 5 U	< 5 U	***193***	***207 E***	***20***	< 5 U	< 5 U	***143***	< 5 US	< 5 U	< 5 U
Phenanthrene	ug/L	2.0	52	150	**9.5**	*15*		< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 US	< 2 U	< 2 U
Pyrene	ug/L	--	140	140	**140**	*140*		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 US	< 5 U	< 5 U
VOCs																				
1,1,1,2-Tetrachloroethane	ug/L	--	77	320	**3.1**	*14*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 1 U	< 1 U	< 1 U	< 20 UY	< 1 U	< 1 U	< 1 U
1,1,1-Trichloroethane	ug/L	89	200	200	**180**	*5,900*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 1 U	< 1 U	< 1 U	< 20 UY	< 1 U	< 1 U	< 1 U
1,1,2,2-Tetrachloroethane	ug/L	78	9	35.0	**2.4**	*6.7*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 1 U	< 1 U	< 1 U	< 20 UY	< 1 U	< 1 U	< 1 U
1,1,2-Trichloroethane	ug/L	330	5.0	5.0	**0.47**	*0.95*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 1 U	< 1 U	< 1 U	< 20 UY	< 1 U	< 1 U	< 1 U
1,1-Dichloroethane	ug/L	740	880	2,500	**4.7**	*40*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 1 U	< 1 U	< 1 U	< 20 UY	< 1 U	< 1 U	< 1 U
1,1-Dichloroethene	ug/L	130	7.0	7.0	**18**	*250*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 1 U	< 1 U	< 1 U	< 20 UY	< 1 U	< 1 U	< 1 U
1,2,3-Trichlorobenzene	ug/L	--	--	--	**58**	*130*		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 300 UY	< 5 U	< 5 U	< 5 U	< 100 UY	< 5 U	< 5 U	< 5 U
1,2,3-Trichloropropane	ug/L	--	42	120	**1.9**	*3.3*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 1 U	< 1 U	< 1 U	< 20 UY	< 1 U	< 1 U	< 1 U
1,2,3-Trimethylbenzene	ug/L	--	--	--	**43**	*150*		< 1 U	< 1 U	< 1 U	< 1 U	***370 E***	***300 Y***	**72**	< 1 U	< 1 U	***460 Y***	< 1 U	< 1 U	< 1 U
1,2,4-Trichlorobenzene	ug/L	99	70	70	**3.8**	*8.5*		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 300 UY	< 5 U	< 5 U	< 5 U	< 100 UY	< 5 U	< 5 U	< 5 U
1,2,4-Trimethylbenzene	ug/L	17	63	63	**25**	*120*		< 1 U	< 1 U	< 1 U	< 1 U	***1,021 E***	***800 Y***	***453 E***	< 1 U	< 1 U	***1,400 Y***	< 1 U	< 1 U	< 1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	--	0.2	0.2	--	--		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 300 UY	< 5 U	< 5 U	< 5 U	< 100 UY	< 5 U	< 5 U	< 5 U
1,2-Dibromoethane (Ethylene dibromide)	ug/L	5.7	0.05	0.05	--	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 1 U	< 1 U	< 1 U	< 20 UY	< 1 U	< 1 U	< 1 U
1,2-Dichlorobenzene	ug/L	13	600	600	**370**	*950*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 1 U	< 1 U	< 1 U	< 20 UY	< 1 U	< 1 U	< 1 U
1,2-Dichloroethane	ug/L	360	5.0	5.0	**1.4**	*5.1*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 1 U	< 1 U	< 1 U	< 20 UY	**4**	**4**	< 1 U
1,2-Dichloropropane	ug/L	230	5.0	5.0	**2.6**	*8.9*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 1 U	< 1 U	< 1 U	< 20 UY	< 1 U	< 1 U	< 1 U
1,3,5-Trimethylbenzene	ug/L	45	72	72	**18**	*110*		< 1 U	< 1 U	< 1 U	< 1 U	***340 E***	***260 Y***	9	< 1 U	< 1 U	***420 Y***	< 1 U	< 1 U	< 1 U
1,3-Dichlorobenzene	ug/L	28	7	19.0	**2.6**	*7.9*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 1 U	< 1 U	< 1 U	< 20 UY	< 1 U	< 1 U	< 1 U
1,4-Dichlorobenzene	ug/L	17	75	75	**5.9**	*28*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 1 U	< 1 U	< 1 U	< 20 UY	< 1 U	< 1 U	< 1 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L	2,200	13,000	38,000	**2,600**	*12,000*		< 25 U	< 25 U	< 25 U	< 25 U	57	< 1,300 UY	< 25 U	< 25 U	< 25 U	< 500 UY	< 25 U	< 25 U	< 25 U
2-Hexanone	ug/L	--	1,000	2,900	**660**	*1,100*		< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 2,500 UY	< 50 U	< 50 U	< 50 U	< 1,000 UY	< 50 U	< 50 U	< 50 U
2-Methylnaphthalene	ug/L	19	260	750	**66**	*110*		< 5 U	< 5 U	< 5 U	< 5 U	***199***	< 300 UY	13	< 5 U	< 5 U	< 100 UY	< 5 U	< 5 U	< 5 U
2-Phenylbutane (sec-Butylbenzene)	ug/L	--	80	230	**270**	*400*		< 1 U	< 1 U	< 1 U	< 1 U	6	< 50 UY	4	< 1 U	< 1 U	< 20 UY	< 1 U	< 1 U	< 1 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L	--	1,800	5,200	**200**	*1,400*		< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 2,500 UY	< 50 U	< 50 U	< 50 U	< 1,000 UY	< 50 U	< 50 U	< 50 U
Acetone	ug/L	1,700	730	2,100	**50,000**	*200,000*		< 50 U	< 50 U	< 50 U	< 50 U	292 E	< 2,500 UY	< 50 U	< 50 U	< 50 U	< 1,000 UY	< 50 U	< 50 U	< 50 U
Acrylonitrile	ug/L	2.0	3	11.0	**4.6**	*12*		< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 100 UY	< 2 U	< 2 U	< 2 U	< 40 UY	< 2 U	< 2 U	< 2 U
Benzene	ug/L	200	5.0	5.0	**1.0**	*8.4*		< 1 U	< 1 U	< 1 U	< 1 U	***1,220 E***	***1,280 Y***	***18***	< 1 U	< 1 U	***690 Y***	< 1 U	< 1 U	< 1 U
Bromobenzene	ug/L	--	18	50	**62**	*170*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 1 U	< 1 U	< 1 U	< 20 UY	< 1 U	< 1 U	< 1 U
Bromodichloromethane	ug/L	--	80	80	**1.2**	*4.9*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 1 U	< 1 U	< 1 U	< 20 UY	< 1 U	< 1 U	< 1 U
Bromoform	ug/L	--	80	80	**89**	*260*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 1 U	< 1 U	< 1 U	< 20 UY	< 1 U	< 1 U	< 1 U
Bromomethane (Methyl bromide)	ug/L	5.0	10	29	**2.1**	*13*		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 300 UY	< 5 U	< 5 U	< 5 U	< 100 UY	< 5 U	< 5 U	< 5 U
Carbon disulfide	ug/L	--	800	2,300	**92**	*840*		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 300 UY	< 5 U	< 5 U	< 5 U	< 100 UY	< 5 U	< 5 U	< 5 U
Carbon tetrachloride	ug/L	38	5.0	5.0	**0.41**	*9.5*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 1 U	< 1 U	< 1 U	< 20 UY	< 1 U	< 1 U	< 1 U
Chlorobenzene	ug/L	25	100	100	**33**	*110*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 1 U	< 1 U	< 1 U	< 20 UY	< 1 U	< 1 U	< 1 U
Chlorobromomethane	ug/L	--	--	--	--	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 1 U	< 1 U	< 1 U	< 20 UY	< 1 U	< 1 U	< 1 U
Chloroethane	ug/L	1,100	430	1,700	**620**	*5,200*		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 300 UY	< 5 U	< 5 U	< 5 U	< 100 UY	< 5 U	< 5 U	< 5 U
Chloroform (Trichloromethane)	ug/L	350	80	80	**0.49**	*3.1*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 1 U	< 1 U	< 1 U	< 20 UY	< 1 U	< 1 U	< 1 U
Chloromethane (Methyl chloride)	ug/L	--	260	1,100	**15**	*110*		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 300 UY	< 5 U	< 5 U	< 5 U	< 100 UY	< 5 U	< 5 U	< 5 U
cis-1,2-Dichloroethene	ug/L	620	70	70	**3.4**	*14*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 1 U	< 1 U	< 1 U	< 20 UY	< 1 U	< 1 U	< 1 U
cis-1,3-Dichloropropene	ug/L	--	--	--	--	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 1 U	< 1 U	< 1 U	< 20 UY	< 1 U	< 1 U	< 1 U
Cymene (p-Isopropyltoluene)	ug/L	--	--	--	--	--		< 5 U	< 5 U	< 5 U	< 5 U	14	< 300 UY	< 5 U	< 5 U	< 5 U	< 100 UY	< 5 U	< 5 U	< 5 U
Dibromochloromethane	ug/L	--	80	80	**0.78**	*6.7*		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 300 UY	< 5 U	< 5 U	< 5 U	< 100 UY	< 5 U	< 5 U	< 5 U
Dibromomethane	ug/L	--	80	230	**8.8**	*18*		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 300 UY	< 5 U	< 5 U	< 5 U	< 100 UY	< 5 U	< 5 U	< 5 U
Dichlorodifluoromethane (CFC-12)	ug/L	--	1,700	4,800	**13**	*410*		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 300 UY	< 5 U	< 5 U	< 5 U	< 100 UY	< 5 U	< 5 U	< 5 U
Ethyl ether	ug/L	--	10	10	**1,200**	*3,100*		< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 500 UY	< 10 U	< 10 U	< 10 U	< 200 UY	< 10 U	< 10 U	< 10 U
Ethylbenzene	ug/L	18	74	74	**2.8**	*28*		< 1 U	< 1 U	< 1 U	< 1 U	***894 E***	***1,040 Y***	***446 E***	< 1 U	< 1 U	***1,810 Y***	< 1 U	< 1 U	< 1 U
Hexachloroethane	ug/L	6.7	7	21.0	**1.5**	*8.8*		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 300 UY	< 5 U	< 5 U	< 5 U	< 100 UY	< 5 U	< 5 U	< 5 U

Table 3
Groundwater Analytical Results
Joslyn-Wesbrook South Parcel Investigation
RACER Trust Pontiac North Campus

Chemical Name	Units	Groundwater Surface Water Interface	Residential Drinking Water	Nonresidential Drinking Water	Residential Shallow Groundwater VIAP	Nonresidential Shallow Groundwater VIAP	Location ID	JS-SB-01	JS-SB-02	JS-SB-03	JS-SB-04	JS-SB-05	JS-SB-05 (Dup-04)	JS-SB-06	JS-SB-07	JS-SB-08	JS-SB-09	JS-SB-10	JS-SB-10 (Dup-03)	JS-SB-11
							Date Collected	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/12/2021	5/12/2021	5/11/2021	5/11/2021	5/11/2021	5/12/2021	5/12/2021	5/12/2021	5/12/2021
Iodomethane	ug/L	--	--	--	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 1 U	< 1 U	< 1 U	< 20 UY	< 1 U	< 1 U	< 1 U
Isopropyl benzene	ug/L	28	800	2,300	**0.60**	*6.7*		< 5 U	< 5 U	< 5 U	< 5 U	***36***	< 300 UY	***24***	< 5 U	< 5 U	< 100 UY	< 5 U	< 5 U	< 5 U
m&p-Xylene	ug/L	--	--	--	**--**	--		< 2 U	< 2 U	< 2 U	< 2 U	2736 E	3700 Y	671 E	< 2 U	< 2 U	6,020 Y	< 2 U	< 2 U	< 2 U
Methyl tert butyl ether (MTBE)	ug/L	7,100	40	40	**250**	*810*		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 300 UY	< 5 U	< 5 U	< 5 U	< 100 UY	< 5 U	< 5 U	< 5 U
Methylene chloride	ug/L	1,500	5.0	5.0	**79**	*1,100*		< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 300 UY	< 5 U	< 5 U	< 5 U	< 100 UY	< 5 U	< 5 U	< 5 U
Naphthalene	ug/L	11	520	1,500	**4.2**	*12*		< 5 U	< 5 U	< 5 U	< 5 U	***528 E***	***500 Y***	***58***	< 5 U	< 5 U	***200 Y***	< 5 U	< 5 U	< 5 U
N-Butylbenzene	ug/L	--	80	230	**44**	*360*		< 1 U	< 1 U	< 1 U	< 1 U	**125**	< 50 UY	8	< 1 U	< 1 U	< 20 UY	< 1 U	< 1 U	< 1 U
N-Propylbenzene	ug/L	--	80	230	**43**	*970*		< 1 U	< 1 U	< 1 U	< 1 U	**137**	**110 Y**	**82**	< 1 U	< 1 U	**170 Y**	< 1 U	< 1 U	< 1 U
o-Xylene	ug/L	--	--	--	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	103	90 Y	4	< 1 U	< 1 U	160 Y	< 1 U	< 1 U	< 1 U
Styrene	ug/L	80	100	100	**33**	*170*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 1 U	< 1 U	< 1 U	< 20 UY	< 1 U	< 1 U	< 1 U
tert-Butylbenzene	ug/L	--	80	230	**0.077**	*0.71*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 1 U	< 1 U	< 1 U	< 20 UY	< 1 U	< 1 U	< 1 U
Tetrachloroethene	ug/L	60	5.0	5.0	**1.5**	*35*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 1 U	< 1 U	< 1 U	< 20 UY	< 1 U	< 1 U	< 1 U
Tetrahydrofuran	ug/L	11,000	95	270	**45,000**	*72,000*		< 90 U	< 90 U	< 90 U	< 90 U	< 90 U	< 4,500 UY	< 90 U	< 90 U	< 90 U	< 1,800 UY	< 90 U	< 90 U	< 90 U
Toluene	ug/L	270	790	790	**300**	*6,600*		< 1 U	< 1 U	< 1 U	< 1 U	170	190 Y	6	< 1 U	< 1 U	190 Y	< 1 U	< 1 U	< 1 U
trans-1,2-Dichloroethene	ug/L	1,500	100	100	**16**	*110*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 1 U	< 1 U	< 1 U	< 20 UY	< 1 U	< 1 U	< 1 U
trans-1,3-Dichloropropene	ug/L	--	--	--	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 1 U	< 1 U	< 1 U	< 20 UY	< 1 U	< 1 U	< 1 U
trans-1,4-Dichloro-2-butene	ug/L	--	--	--	**--**	--		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 1 U	< 1 U	< 1 U	< 20 UY	< 1 U	< 1 U	< 1 U
Trichloroethene	ug/L	200	5.0	5.0	**0.073**	*1.6*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 1 U	< 1 U	< 1 U	< 20 UY	< 1 U	< 1 U	< 1 U
Trichlorofluoromethane (CFC-11)	ug/L	--	2,600	7,300	**22**	*560*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 1 U	< 1 U	< 1 U	< 20 UY	< 1 U	< 1 U	< 1 U
Vinyl chloride	ug/L	13	2.0	2.0	**0.12**	*10*		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 50 UY	< 1 U	< 1 U	< 1 U	< 20 UY	< 1 U	< 1 U	< 1 U
Total Xylenes	ug/L	49	280	280	**75**	*410*		< 2 U	< 2 U	< 2 U	< 2 U	***3,790 Y***	***2,839 E***	***675 E***	< 2 U	< 2 U	***6,180 Y***	< 2 U	< 2 U	< 2 U

Table 3
Groundwater Analytical Results
Joslyn-Wesbrook South Parcel Investigation
RACER Trust Pontiac North Campus

Notes:

1) Criteria listed are from the Michigan Department of Environment, Great Lakes, and Energy (EGLE) Clean Up Criteria Requirements Table 1: Groundwater: Residential and Nonresidential, Part 201 Generic Cleanup Criteria and Screening Levels, December 21, 2020.

2) Residential and Nonresidential Volatilization to Indoor Air Pathway Screening Levels are from the DEQ Guidance Document for the Vapor Intrusion Pathway, Appendix C - Tables 1 and 2, September 4, 2020.

3) Grey shaded values denotes exceedance and/or equal to Michigan Groundwater Surface Water Interface criteria
4) Yellow highlighted values denotes exceedance and/or equal to Michigan Residential Drinking Water criteria
5) Orange highlighted values denotes exceedance and/or equal to Nonresidential Drinking Water criteria
6) Values in bold denotes exceedance and/or equal to Residential Shallow Groundwater Volatilization to Indoor Air Pathway criteria.
7) Italicized values denotes exceedance and/or equal to Nonresidential Shallow Groundwater Volatilization to Indoor Air Pathway criteria.

Abbreviations:

ug/kg	Micrograms per kilogram
bgs	below ground surface
M	Result reported to MDL not RDL
U	Compound was analyzed for but not detected. The associated value is the compound quantitation limit.
Y	Elevated reporting limit due to high target concentration
VIAP	Volatilization to Indoor Air Pathway

ATTACHMENTS

ATTACHMENT 1

Soil Boring and Well Construction Logs

Date Start: 4/29/2021
Date Finish: 4/29/2021
Drilling Company: Terra Probe Environmental
Driller's Name: J Schaffer
Drilling Method: Hand Auger/Direct Push
Sampling Method: Continuous
Rig Type: Direct Push
Water Level Start (ft. bgs.): NA
Water Level Finish (ft. btoc.): 8.53

Northing: 13415648.0763
Easting: 425121.1489
Casing Elevation: 989.24
Borehole Depth (ft. bgs.): 16.0
Surface Elevation: 987.7
Descriptions By: S. Turner

Well/Boring ID: JS-SB-01
Client: RACER
Location: RACER PNC
Weather Conditions: 48 F, Cold, Rainy

DEPTH (feet bgl.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Water Level (ft. bgs.)	Well/Boring Construction
0 / 0	1	0.0-5.0'	5.0	0.0 0.0 0.0 0.0			(0.0-3.5') SAND, medium to coarse, subangular to subrounded; little granules to small pebbles, subangular to subrounded; poorly sorted; moist; brown (10YR 5/3).		Sand Pack (0.0 to 2.0' bgs)
5 / -5	2	5.0-8.0'	2.2	NA NA NA			(3.5-8.0') CLAY, low plasticity; trace coarse sand to granules, subangular to subrounded; medium stiff; moist; brown (10YR 4/3).		2' PVC Well Casing (0.0 to 8.0' bgs) Bentonite (2.0 to 7.0' bgs)
							(8.0-8.5') CEMENT		
10 / -10	3	8.0-12.0'	3.8	0.0 0.0 0.0 0.0			(8.5-16.0') CLAY, low plasticity; trace granules, subangular to subrounded; medium stiff; moist; dark gray (10YR 4/1). NOTE: SAND, coarse, subangular to subrounded; some granules to small pebbles, subangular to subrounded; poorly sorted; wet; brown (10YR 4/3) from 8.5 to 8.8' bgs.		Sand Pack (7.0 to 16.0' bgs) 2' PVC 10 Slot Screen (8.0 to 10.0' bgs)
15 / -15	4	12.0-16.0'	NA	0.0 0.0 0.0 0.0					
20 / -20							End of boring at 16.0' bgs.		
25 / -25									

ARCADIS Design & Consultancy for natural and built assets

Remarks: bgs = below ground surface

Water Level Start: No groundwater encountered during drilling
Water Level End: Water level taken after a period of stabilization prior to development

Date Start: 4/27/2021	**Northing:** 13415658.1889	**Well/Boring ID:** JS-SB-02
Date Finish: 4/27/2021	**Easting:** 425049.3807	**Client:** RACER
Drilling Company: Terra Probe Environmental	**Casing Elevation:** 989.22	
Driller's Name: J Schaffer	**Borehole Depth (ft. bgs.):** 16.0	**Location:** RACER PNC
Drilling Method: Hand Auger/Direct Push	**Surface Elevation:** 987.96	
Sampling Method: Continuous	**Descriptions By:** S. Turner	
Rig Type: Direct Push		**Weather Conditions:** 80 F, Partly Cloudy
Water Level Start (ft. bgs.): NA		
Water Level Finish (ft. btoc.): 12.77		

DEPTH (feet bgl.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Water Level (ft. bgs.)	Well/Boring Construction
0 / 0	1	0.0-8.0'	8	0.0 0.0 0.0 0.0 0.0			(0.0-3.5') SAND, medium to coarse, subangular to subrounded, little granules to small pebbles, subangular to subrounded, poorly sorted; dry to moist; brown (10YR 4/3).		Sand Pack (0.0 to 2.0' bgs) Bentonite (2.0 to 7.0' bgs) 2' PVC Well Casing (0.0 to 9.0' bgs)
5 / -5	2			0.0 0.0 0.0			(3.5-12.0') CLAY, medium plasticity; trace granules subangular to subrounded; soft to medium stiff; moist; brown (10YR 5/3).		
10 / -10	3	8.0-12.0'	3.0	0.0 0.0 0.0 0.0	X				Sand Pack (7.0 to 16.0' bgs) 2' PVC 10 Slot Screen (9.0 to 14.0' bgs)
15 / -15	4	12.0-16.0'	4.0	0.0 0.0 0.0 0.0			(12.0-13.5') SAND, medium to coarse, subangular to subrounded; little gramules to small pebbles, subangular to subroiunded; poorly sorted; wet; brown (10YR 5/3). (13.5-16.0') CLAY, medium plasticity, no dilatancy; trace silt; medium stiff; moist; gray (10YR 5/1).		
20 / -20							End of boring at 16.0' bgs.		
25 / -25									

ARCADIS Design & Consultancy for natural and built assets

Remarks: bgs = below ground surface

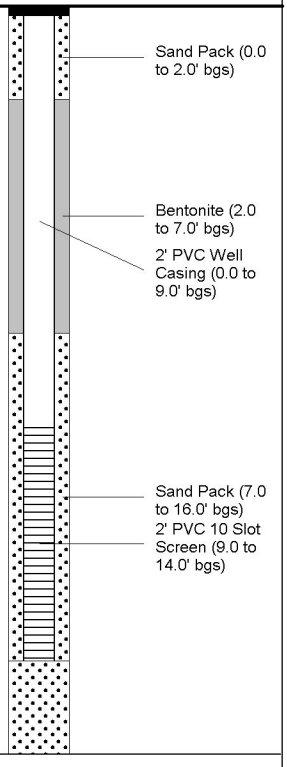
Water Level Start: No groundwater encountered during drilling
Water Level End: Water level taken after a period of stabilization prior to development

Date Start: 4/28/2021
Date Finish: 4/28/2021
Drilling Company: Terra Probe Environmental
Driller's Name: J Schaffer
Drilling Method: Hand Auger/Direct Push
Sampling Method: Continuous
Rig Type: Direct Push
Water Level Start (ft. bgs.): NA
Water Level Finish (ft. btoc.): 13.03

Northing: 13415683.3892
Easting: 424997.9798
Casing Elevation: 988.57
Borehole Depth (ft. bgs.): 16.0
Surface Elevation: 987.4
Descriptions By: S. Turner

Well/Boring ID: JS-SB-03
Client: RACER
Location: RACER PNC
Weather Conditions: 60 F, Clear

DEPTH (feet bgl.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Water Level (ft. bgs.)	Well/Boring Construction
0 / 0									
	1	0.0-5.0'	5.0	0.0 0.0 0.9 0.0 0.0			(0.0-3.5') SAND, medium to coarse, subagular to subrounded; little granules to small pebbles, subangular to subrounded; poorly sorted; moist; brown (10YR 4/3).		
5 / -5	2	5.0-8.0'	NA	0.0 0.0 0.0			(3.5-12.2') CLAY, medium plasticity; trace medium sand to granules, subangular to subrounded; soft; moist; brown (10YR 5/3).		
10 / -10	3	8.0-12.0'	NA	0.0 0.0 0.0 0.0					
	4	12.0-16.0'	NA	0.0 0.0 0.0 0.0			(12.2-13.7') SAND, medium to coarse, subangular to subrounded; llittle granules to small pebbles, subangular to subrounded; poorly sorted; wet; brown (10YR 5/3). (13.7-16.0') CLAY, medium plasticity, no dilatancy; trace silt; medium stiff; moist; gray (10YR 5/1).		
15 / -15							End of boring at 16.0' bgs.		
20 / -20									
25 / -25									



ARCADIS Design & Consultancy for natural and built assets

Remarks: bgs = below ground surface

Water Level Start: No groundwater encountered during drilling
Water Level End: Water level taken after a period of stabilization prior to development

Date Start: 4/28/2021
Date Finish: 4/28/2021
Drilling Company: Terra Probe Environmental
Driller's Name: J Schaffer
Drilling Method: Hand Auger/Direct Push
Sampling Method: Continuous
Rig Type: Direct Push
Water Level Start (ft. bgs.): NA
Water Level Finish (ft. btoc.): 13.98

Northing: 13415656.3362
Easting: 424936.0926
Casing Elevation: 989.12
Borehole Depth (ft. bgs.): 16.0
Surface Elevation: 987.73
Descriptions By: S. Turner

Well/Boring ID: JS-SB-04
Client: RACER
Location: RACER PNC
Weather Conditions: 50 F, Drizzly

DEPTH (feet bgl.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Water Level (ft. bgs.)	Well/Boring Construction
0 / 0	1	0.0-5.0'	5.0	0.0, 0.0, 0.0, 0.0, 0.0			(0.0-3.7') SAND, medium to coarse, subangular to subrounded; little granules to small pebbles, subangular to subrounded; poorly sorted; moist; brown (10YR 4/3).		Sand Pack (0.0 to 2.0' bgs)
5 / -5	2	5.0-8.0'	2.7	0.0, 0.0, 0.0, 0.0, 0.0	X		(3.7-5.6') CLAY, medium plasticity; trace medium sand to granules, subangular to subrounded; medium stiffness; moist; brown (10YR 5/3).		Bentonite (2.0 to 7.0' bgs)
							(5.6-6.9') SAND, fine to medium, subangular to subrounded; little granules, subangular to subrounded; little clay, medium plasticity; poorly sorted; soft; wet; brown (10YR 5/3).		2' PVC Well Casing (0.0 to 9.0' bgs)
10 / -10	3	8.0-12.0'	3.8	0.0, 0.0, 0.0, 0.0, 0.0			(6.9-16.0') CLAY, medium plasticity; trace granules, subangular to subrounded; medium stiffness; moist; brown (10YR 5/3). NOTE: Color change to gray (10YR 5/1) at 9.0' bgs.		Sand Pack (2.5 to 16.0' bgs)
15 / -15	4	12.0-16.0'	4.0	0.0, 0.0, 0.0, 0.0, 0.0					2' PVC 10 Slot Screen (9.0 to 14.0' bgs)
20 / -20							End of boring at 16.0' bgs.		
25 / -25									

ARCADIS Design & Consultancy for natural and built assets

Remarks: bgs = below ground surface

Water Level Start: No groundwater encountered during drilling
Water Level End: Water level taken after a period of stabilization prior to development

Date Start: 4/28/2021
Date Finish: 4/28/2021
Drilling Company: Terra Probe Environmental
Driller's Name: J Schaffer
Drilling Method: Hand Auger/Direct Push
Sampling Method: Continuous
Rig Type: Direct Push
Water Level Start (ft. bgs.): NA
Water Level Finish (ft. btoc.): 6.29

Northing: 13415698.5066
Easting: 424941.6792
Casing Elevation: 987.78
Borehole Depth (ft. bgs.): 16.0
Surface Elevation: 986.23
Descriptions By: S. Turner

Well/Boring ID: JS-SB-05
Client: RACER
Location: RACER PNC
Weather Conditions: 80 F, Sunny

DEPTH (feet bgl.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Water Level (ft. bgs.)	Well/Boring Construction
0 / 0									
	1	0.0-5.0'	5.0	0.0 0.0 0.0 8.6			(0.0-3.7') SAND, medium to coarse, subangular to subrounded; little granules to small pebbles, subangular to subrounded; poorly sorted; moist; brown (10YR 4/3).		Sand Pack (0.0 to 1.0' bgs) Bentonite (1.0 to 4.5' bgs) 2' PVC Well Casing (0.0 to 6.0' bgs)
5 / -5	2	5.0-8.0'	NA	69.9 13.3 14.4	X X		(3.7-8.0') CLAY, medium plasticity, and SAND, fine to medium, subangular to subrounded; medium stiffness; well sorted; moist to wet; very dark gray (10YR 3/1).		
10 / -10	3	8.0-12.0'	NA	229.3 159.6 42.2 14.6			(8.0-10.5') SAND, medium to coarse, subangular to subrounded; trace granules, subangular to subrounded; poorly sorted; wet; black (10YR 2/1). NOTE: Strong odor. (10.5-16.0') CLAY, low plasticity, no dilatancy; trace silt, stiff; moist to dry; dark gray (10YR 4/1).		Sand Pack (4.5 to 16.0' bgs) 2' PVC 10 Slot Screen (6.0 to 11.0' bgs)
15 / -15	4	12.0-16.0'	NA	2.2 1.3 0.9 0.1					
20 / -20							End of boring at 16.0' bgs.		
25 / -25									

ARCADIS Design & Consultancy for natural and built assets

Remarks: bgs = below ground surface

Water Level Start: No groundwater encountered during drilling
Water Level End: Water level taken after a period of stabilization prior to development

Date Start: 4/28/2021
Date Finish: 4/28/2021
Drilling Company: Terra Probe Environmental
Driller's Name: J Schaffer
Drilling Method: Hand Auger/Direct Push
Sampling Method: Continuous
Rig Type: Direct Push
Water Level Start (ft. bgs.): NA
Water Level Finish (ft. btoc.): 12.35

Northing: 13415736.3377
Easting: 424943.8117
Casing Elevation: 986.08
Borehole Depth (ft. bgs.): 16.0
Surface Elevation: 984.9
Descriptions By: S. Turner

Well/Boring ID: JS-SB-06
Client: RACER
Location: RACER PNC
Weather Conditions: 80 F, Sunny

DEPTH (feet bgl.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Water Level (ft. bgs.)	Well/Boring Construction
0 / 0									
	1	0.0-5.0'	6.0	0.0 0.0 0.0 0.0 0.0			(0.0-3.5') SAND, medium to coarse, subangular to subrounded; little granules to small pebbles, subangular to subrounded; poorly sorted; moist; brown (10YR 4/3).		Sand Pack (0.0 to 2.0' bgs)
5 / -5	2	5.0-8.0'	2.25	0.0 0.0 0.0			(3.5-13.1') CLAY, medium plasticity, no dilatancy; trace silt; trace granules, subangular to subrounded; medium stiffness; moist; brown (10YR 4/3).		Bentonite (2.0 to 7.0' bgs) 2' PVC Well Casing (0.0 to 9.0' bgs)
10 / -10	3	8.0-12.0'	4.0	0.0 0.0 0.0 0.0					Sand Pack (7.0 to 16.0' bgs) 2' PVC 10 Slot Screen (9.0 to 14.0' bgs)
	4	12.0-16.0'	4.0	0.0 0.0 0.0 0.0	X		(13.1-13.6') SAND, medium to coarse, subangular to subrounded; trace granules, subangular to subrounded; trace clay, non plastic; poorly sorted; wet; brown (10YR 4/3). (13.6-16.0') CLAY, low plasticity, no dilatancy; trace silt, stiff; moist to dry; dark gray (10YR 4/1).		
15 / -15									
							End of boring at 16.0' bgs.		
20 / -20									
25 / -25									

ARCADIS Design & Consultancy for natural and built assets

Remarks: bgs = below ground surface

Water Level Start: No groundwater encountered during drilling
Water Level End: Water level taken after a period of stabilization prior to development

Date Start: 4/29/2021
Date Finish: 4/29/2021
Drilling Company: Terra Probe Environmental
Driller's Name: J Schaffer
Drilling Method: Hand Auger/Direct Push
Sampling Method: Continuous
Rig Type: Direct Push
Water Level Start (ft. bgs.): NA
Water Level Finish (ft. btoc.): 9.34

Northing: 13415736.4437
Easting: 425006.2046
Casing Elevation: 988
Borehole Depth (ft. bgs.): 16.0
Surface Elevation: 985.75
Descriptions By: S. Turner

Well/Boring ID: JS-SB-07
Client: RACER
Location: RACER PNC
Weather Conditions: 48 F, Rainy

DEPTH (feet bgl.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Water Level (ft. bgs.)	Well/Boring Construction
0 / 0									
	1	0.0-5.0'	5.0	0.0 0.0 0.0 0.0			(0.0-4.2') SAND, medium to coarse, subangular to subrounded; little granules to small pebbles, subangular to subrounded; poorly sorted; moist; brown (10YR 4/3).		Sand Pack (0.0 to 2.0' bgs)
5 / -5	2	5.0-8.0'	2.4	0.0 0.0 0.0			(4.2-13.4') CLAY, medium plasticity, no dilatancy; trace silt; trace medium sand to granules, subangular to subrounded; medium stiffness; moist; brown (10YR 4/3).		2' PVC Well Casing (0.0 to 9.5' bgs) Bentonite (2.0 to 7.5' bgs)
10 / -10	3	8.0-12.0'	3.0	0.0 0.0 0.0 0.0					Sand Pack (7.0 to 16.0' bgs) 2' PVC 10 Slot Screen (9.5 to 14.5' bgs)
	4	12.0-16.0'	3.7	0.0 0.0 0.0 0.0	X		(13.4-13.9') SAND, medium to coarse, subangular to subrounded; little clay, non plastic; trace granules, subangular to subrounded; poorly sorted; wet; brown (10YR 4/3). (13.9-16.0') CLAY, low plasticity, no dilatancy; trace silt, trace granules, subangular to subrounded; stiff; moist to dry; dark gray (10YR 4/1).		
15 / -15									
							End of boring at 16.0' bgs.		
20 / -20									
25 / -25									

ARCADIS Design & Consultancy for natural and built assets

Remarks: bgs = below ground surface

Water Level Start: No groundwater encountered during drilling
Water Level End: Water level taken after a period of stabilization prior to development

Date Start: 4/29/2021
Date Finish: 4/29/2021
Drilling Company: Terra Probe Environmental
Driller's Name: J Schaffer
Drilling Method: Hand Auger/Direct Push
Sampling Method: Continuous
Rig Type: Direct Push
Water Level Start (ft. bgs.): NA
Water Level Finish (ft. btoc.): 13.65

Northing: 13415727.603
Easting: 425051.4331
Casing Elevation: 989.25
Borehole Depth (ft. bgs.): 16.0
Surface Elevation: 986.03
Descriptions By: S. Turner

Well/Boring ID: JS-SB-08
Client: RACER
Location: RACER PNC
Weather Conditions: 48 F, Cloudy

DEPTH (feet bgl.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Water Level (ft. bgs.)	Well/Boring Construction
0 / 0	1	0.0-5.0'	5.0	0.0, 0.0, 0.0, 0.0, 0.0			(0.0-3.8') SAND, medium to coarse, subangular to subrounded; little granules to small pebbles, subangular to subrounded; poorly sorted; moist; brown (10YR 4/3).		Sand Pack (0.0 to 2.0' bgs)
5 / -5	2	5.0-8.0'	2.7	0.0, 0.0, 0.0, 0.0	X		(3.8-5.7') CLAY, low plasticity, and SAND, fine to medium, subangular to subrounded; trace granules to small pebbles, subangular to subrounded; medium stiffness; moist; brown (10YR 4/3).		Bentonite (2.0 to 7.0' bgs)
							(5.7-16.0') CLAY, low plasticity, trace granules, subangular to subrounded; stiff; moist; borwn (10YR 4/3).		2' PVC Well Casing (0.0 to 9.0' bgs)
10 / -10	3	8.0-12.0'	3.8	0.0, 0.0, 0.0, 0.0, 0.0			NOTE: SAND, medium to coarse, subangular to subrounded; poorly sorted; wet; brown (10YR 4/3) from 5.2 to 5.4 and 5.6 to 5.7' bgs.		Sand Pack (7.0 to 16.0' bgs)
15 / -15	4	12.0-16.0'	1.9	0.0, 0.0, 0.0, 0.0, 0.0					2' PVC 10 Slot Screen (9.0 to 14.0' bgs)
20 / -20							End of boring at 16.0' bgs.		
25 / -25									

ARCADIS Design & Consultancy for natural and built assets

Remarks: bgs = below ground surface

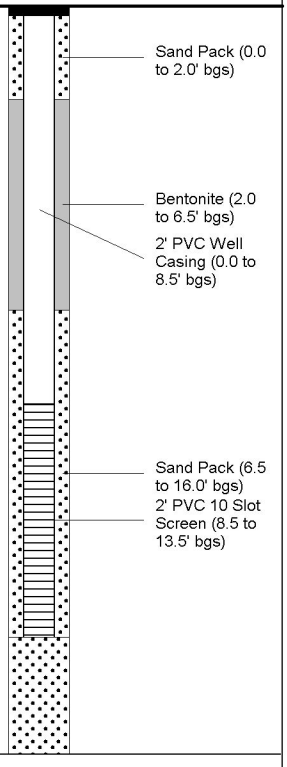
Water Level Start: No groundwater encountered during drilling
Water Level End: Water level taken after a period of stabilization prior to development

Date Start: 4/30/2021
Date Finish: 4/30/2021
Drilling Company: Terra Probe Environmental
Driller's Name: J Schaffer
Drilling Method: Hand Auger/Direct Push
Sampling Method: Continuous
Rig Type: Direct Push
Water Level Start (ft. bgs.): NA
Water Level Finish (ft. btoc.): 13.03

Northing: 13415692.7046
Easting: 424963.4998
Casing Elevation: 988.86
Borehole Depth (ft. bgs.): 16.0
Surface Elevation: 986.95
Descriptions By: S. Turner

Well/Boring ID: JS-SB-09
Client: RACER
Location: RACER PNC
Weather Conditions: 43 F, Rainy

DEPTH (feet bgl.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Water Level (ft. bgs.)	Well/Boring Construction
0 / 0	1	0.0-5.0'	5.0	0.0 0.0 0.0 0.0			(0.0-3.1') SAND, medium to coarse, subangular to subrounded; little granules to small pebbles, subangular to subrounded; poorly sorted; moist; brown (10YR 5/3).		Sand Pack (0.0 to 2.0' bgs)
5 / -5	2	5.0-8.0'	2.2	0.0 0.0 0.0			(3.1-16.0') CLAY, low to medium plasticity, trace granules to small pebbles, subangular to subrounded; medium stiff to stiff; moist; brown (10YR 5/3).		Bentonite (2.0 to 6.5' bgs) 2' PVC Well Casing (0.0 to 8.5' bgs)
10 / -10	3	8.0-12.0'	3.9	0.7 15.6 2.5 8.7	X X				Sand Pack (6.5 to 16.0' bgs) 2' PVC 10 Slot Screen (8.5 to 13.5' bgs)
15 / -15	4	12.0-16.0'	3.5	4.4 7.9 2.5 0.0			NOTE: SAND, medium to coarse, subangular to subrounded; little granules to small pebbles, subangular to subrounded; poorly sorted; wet; brown (10YR 5/3) from 12.5 to 12.8' bgs.		
20 / -20							End of boring at 16.0' bgs.		
25 / -25									



ARCADIS Design & Consultancy for natural and built assets

Remarks: bgs = below ground surface

Water Level Start: No groundwater encountered during drilling
Water Level End: Water level taken after a period of stabilization prior to development

Date Start: 4/30/2021
Date Finish: 4/30/2021
Drilling Company: Terra Probe Environmental
Driller's Name: J Schaffer
Drilling Method: Hand Auger/Direct Push
Sampling Method: Continuous
Rig Type: Direct Push
Water Level Start (ft. bgs.): NA
Water Level Finish (ft. btoc.): 12.27

Northing: 13415677.868
Easting: 424940.2088
Casing Elevation: 987.99
Borehole Depth (ft. bgs.): 16.0
Surface Elevation: 986.87
Descriptions By: S. Turner

Well/Boring ID: JS-SB-10
Client: RACER
Location: RACER PNC
Weather Conditions: 45 F, Cloudy

DEPTH (feet bgl.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Water Level (ft. bgs.)	Well/Boring Construction
0 / 0									
	1	0.0-5.0'	5.0	0.0 0.0 0.0 0.0			(0.0-3.8') SAND, medium to coarse, subangular to subrounded; little granules to small pebbles, subangular to subrounded; poorly sorted; moist; brown (10YR 5/3).		Sand Pack (0.0 to 2.0' bgs)
5 / -5	2	5.0-8.0'	2.2	0.0 0.0 0.0			(3.8-7.5') SAND, fine to coarse, and CLAY, high plasticity, no to slow dilatancy; trace granules to small pebbles, subangular to subrounded; soft; poorly sorted; moist; brown (10YR 4/3).		Bentonite (2.0 to 8.5' bgs) 2' PVC Well Casing (0.0 to 10.5' bgs)
10 / -10	3	8.0-12.0'	4.0	0.0 0.0 0.0 0.0			(7.5-16.0') CLAY, low to medium plasticity; trace granules, subangular to subrounded; medium stiff; gray (10YR 5/1).		
15 / -15	4	12.0-16.0'	3.3	0.0 0.0 0.0 0.0	X		NOTE: SAND, medium , subangular to subrounded; well sorted; wet; brown (10YR 5/3) from 15.1 to 15.2' bgs.		Sand Pack (8.5 to 16.0' bgs) 2' PVC 10 Slot Screen (10.5 to 15.5' bgs)
							End of boring at 16.0' bgs.		
20 / -20									
25 / -25									

ARCADIS Design & Consultancy for natural and built assets

Remarks: bgs = below ground surface

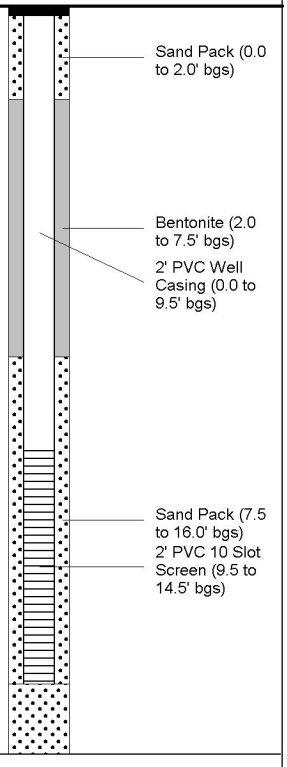
Water Level Start: No groundwater encountered during drilling
Water Level End: Water level taken after a period of stabilization prior to development

Date Start: 4/30/2021
Date Finish: 4/30/2021
Drilling Company: Terra Probe Environmental
Driller's Name: J Schaffer
Drilling Method: Hand Auger/Direct Push
Sampling Method: Continuous
Rig Type: Direct Push
Water Level Start (ft. bgs.): NA
Water Level Finish (ft. btoc.): 9.97

Northing: 13415715.5593
Easting: 424943.4236
Casing Elevation: 986.94
Borehole Depth (ft. bgs.): 16.0
Surface Elevation: 985.66
Descriptions By: S. Turner

Well/Boring ID: JS-SB-11
Client: RACER
Location: RACER PNC
Weather Conditions: 50 F, Partly Sunny, Windy

DEPTH (feet bgl.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Water Level (ft. bgs.)	Well/Boring Construction
0 / 0									
	1	0.0-5.0'	5.0	0.0 0.0 0.0 0.0 0.0			(0.0-2.9') SAND, medium to coarse, subangular to subrounded; little granules to small pebbles, subangular to subrounded; poorly sorted; moist; brown (10YR 5/3).		
5 / -5	2	5.0-8.0'	NA	0.0 0.0 0.0			(2.9-16.0') CLAY, high plasticity; trace granules to small pebbles, subangular to subrounded; soft, moist, brown (10 YR 4/3)		
10 / -10	3	8.0-12.0'	NA	0.0 0.0 0.0 0.0					
	4	12.0-16.0'	NA	0.0 0.0 0.0 0.0	X		NOTE: SAND, medium to coarse, subangular to subrounded; trace granules, subangular to subrounded; trace clay, non-plastic; poorly sorted; wet; brown (10YR 4/3) from 13.4 to 13.6' bgs. NOTE: Color change to gray (10YR 5/1) at 14.2' bgs.		
15 / -15							End of boring at 16.0' bgs.		
20 / -20									
25 / -25									



ARCADIS Design & Consultancy for natural and built assets

Remarks: bgs = below ground surface

Water Level Start: No groundwater encountered during drilling
Water Level End: Water level taken after a period of stabilization prior to development

ATTACHMENT 2

Groundwater Sampling Logs

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30075936	**Well ID**	JS-SB-01			**Date**	05/11/2021
Project Name/Location	Racer pnc			**Weather(°F)**	37F °F, Sunny, winds at mph.		
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	--	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	9.07	**Total Depth (ft-bmp)**	10.5	**Water Column(ft)**	1.43	**Gallons in Well**	0.23
MP Elevation	989.24	**Pump Intake (ft-bmp)**	9.5	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Sample Time	08:40	**Volumes Purged**	4.02	**Sample ID**	JS-SB-01_GW-051121	**Sampled by**	Seth Turner
Purge Start	08:04	**Gallons Purged**	0.92	**Replicate/ Code No.**		**Sample Type**	Grab
Purge End	8:45						

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
08:05	0	0	100	9.07	--	10.94	1.46	582	5.25	9	268	--	--
08:10	5	5	100	9.07	--	10.92	1.35	128	8.29	8.7	251.3	--	--
08:15	5	10	100	9.07	--	10.8	1.39	34.6	10.3	8.3	270.1	--	--
08:20	5	15	100	9.07	--	10.54	1.35	0.02	11.24	7.4	291.1	--	--
08:25	5	20	100	9.07	--	10.48	1.4	0.02	11.16	7.1	298.6	--	--
08:30	5	25	100	9.07	--	10.41	1.38	0.02	11.36	6.8	303.3	--	--
08:35	5	30	100	9.07	--	10.4	1.37	0.02	11.38	6.8	303.7	--	--
08:40	5	35	100	9.07	--	10.4	1.39	0.02	11.36	6.8	304.1	Clear	None

Constituent Sampled	Container	Number	Preservative
VOCs	40 mL Glass	3	HCL
PAHs SW-846 8100	1L Amber	1	None

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: Pontiac

Condition of Well: Good condition

Well Completion: Stick-up

Well Locked at Arrival: yes

Well Locked at Departure: yes

Key Number To Well: 2035

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30075936	**Well ID**	JS-SB-02			**Date**	05/11/2021
Project Name/Location	Racer pnc			**Weather(°F)**	37F °F, Sunny, winds at mph.		
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	--	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	11.72	**Total Depth (ft-bmp)**	15.15	**Water Column(ft)**	3.43	**Gallons in Well**	0.56
MP Elevation	989.22	**Pump Intake (ft-bmp)**	14	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Sample Time	09:30	**Volumes Purged**	1.42	**Sample ID**	JS-SB-02_GW-051121	**Sampled by**	Seth Turner
Purge Start	08:55	**Gallons Purged**	0.79	**Replicate/ Code No.**		**Sample Type**	Grab
Purge End	9:30						

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
08:55	0	0	100	11.72	--	7.71	0.78	147	4.5	9.6	327.3	--	--
09:00	5	5	100	11.72	--	7.25	0.78	0.02	5.53	9.7	344	--	--
09:05	5	10	100	11.72	--	7.19	0.77	0.02	6.59	9.9	345.6	--	--
09:10	5	15	100	11.72	--	7.27	0.76	0.02	8.67	10.2	343.4	--	--
09:15	5	20	100	11.72	--	7.27	0.76	0.02	8.75	10.2	346.6	--	--
09:20	5	25	100	11.72	--	7.27	0.77	0.02	8.76	10.2	346.8	--	--
09:25	5	30	100	11.72	--	7.27	0.79	0.02	8.74	10.2	346.7	Clear	None

Constituent Sampled	Container	Number	Preservative
VOCs	40 mL Glass	3	HCL
PAHs SW-846 8100	1L Amber	1	None

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: Pontiac

Condition of Well: Good condition

Well Completion: Stick-up

Well Locked at Arrival: yes

Well Locked at Departure: yes

Key Number To Well: 2035

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30075936	**Well ID**	JS-SB-03			**Date**	05/11/2021
Project Name/Location	Racer pnc			**Weather(°F)**	37F °F, Sunny, winds at mph.		
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	--	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	10.33	**Total Depth (ft-bmp)**	15.29	**Water Column(ft)**	4.96	**Gallons in Well**	0.81
MP Elevation	988.57	**Pump Intake (ft-bmp)**	14	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Sample Time	10:30	**Volumes Purged**	0.82	**Sample ID**	JS-SB-03_GW-051121	**Sampled by**	Seth Turner
Purge Start	09:55	**Gallons Purged**	0.66	**Replicate/ Code No.**		**Sample Type**	Grab
Purge End	10:35						

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
09:55	0	0	100	10.33	--	7.54	0.693	52.3	5.29	9.5	339.9	--	--
10:00	5	5	100	10.33	--	7.32	0.72	0.02	4.35	10	352.6	--	--
10:05	5	10	100	10.33	--	7.31	0.74	0.02	4.16	10.2	355.3	--	--
10:10	5	15	100	10.33	--	7.32	0.76	0.02	4.06	9.8	356.9	--	--
10:15	5	20	100	10.33	--	7.31	0.76	0.02	3.91	10.2	357.7	--	--
10:20	5	25	100	10.33	--	7.31	0.74	0.02	3.92	10.4	358.6	Clear	None

Constituent Sampled	Container	Number	Preservative
VOCs	40 mL Glass	3	HCL
PAHs SW-846 8100	1L Amber	1	None

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: Pontiac

Condition of Well: Good condition

Well Completion: Stick-up

Well Locked at Arrival: yes

Well Locked at Departure: yes

Key Number To Well: 2035

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30075936	**Well ID**	JS-SB-04			**Date**	05/11/2021
Project Name/Location	Racer pnc			**Weather(°F)**	37F °F, Sunny, winds at mph.		
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	--	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	9.44	**Total Depth (ft-bmp)**	15.27	**Water Column(ft)**	5.83	**Gallons in Well**	0.95
MP Elevation	989.12	**Pump Intake (ft-bmp)**	14	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Sample Time	11:55	**Volumes Purged**	0.97	**Sample ID**	JS-SB-04_GW-051121	**Sampled by**	Seth Turner
Purge Start	11:20	**Gallons Purged**	0.92	**Replicate/ Code No.**		**Sample Type**	Grab
Purge End	12:00						

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
11:20	0	0	100	9.44	--	7.25	2.66	0.02	4.21	10.1	386.4	--	--
11:25	5	5	100	9.44	--	7.24	2.65	0.02	4.03	10	386.5	--	--
11:30	5	10	100	9.44	--	7.22	2.64	0.02	4.01	10.1	386.7	--	--
11:35	5	15	100	9.44	--	7.21	2.57	0.02	4.31	10.6	384.2	--	--
11:40	5	20	100	9.44	--	7.26	2.46	0.02	4.66	10.8	378.5	--	--
11:45	5	25	100	9.44	--	7.33	2.29	0.02	4.99	10.2	374.4	--	--
11:50	5	30	100	9.44	--	7.32	2.27	0.02	5.07	10.1	372.3	--	--
11:55	5	35	100	9.44	--	7.32	2.27	0.02	5.03	10.1	372.3	Clear	None

Constituent Sampled	Container	Number	Preservative
VOCs	40 mL Glass	3	HCL
PAHs SW-846 8100	1L Amber	1	None

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: Pontiac

Condition of Well: Good condition

Well Completion: Stick-up

Well Locked at Arrival: yes

Well Locked at Departure: yes

Key Number To Well: 2035

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30075936	**Well ID**	JS-SB-05			**Date**	05/12/2021
Project Name/Location	Racer pnc			**Weather(°F)**	43F °F, Sunny, winds at mph.		
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	--	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	6.53	**Total Depth (ft-bmp)**	12.19	**Water Column(ft)**	5.66	**Gallons in Well**	0.92
MP Elevation	987.78	**Pump Intake (ft-bmp)**	11	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Sample Time	10:55	**Volumes Purged**	0.86	**Sample ID**	JS-SB-05_GW-051221	**Sampled by**	Seth Turner
Purge Start	10:20	**Gallons Purged**	0.79	**Replicate/ Code No.**	DUP-04_GW-051221	**Sample Type**	Grab
Purge End	11:20						

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
10:20	0	0	100	6.53	--	7.01	1.12	36.8	0.91	11	-18.8	--	--
10:25	5	5	100	6.53	--	7.02	1.12	10.3	0.64	10.9	-28.8	--	--
10:30	5	10	100	6.53	--	7.02	1.12	0.02	0.69	10.9	-34.9	--	--
10:35	5	15	100	6.53	--	7.01	-37.7	0.02	0.45	10.9	-39.7	--	--
10:40	5	20	100	6.53	--	7.01	1.12	0.02	0.51	10.9	-43.7	--	--
10:45	5	25	100	6.53	--	7.01	1.11	0.02	0.52	10.9	-43.9	--	--
10:50	5	30	100	6.53	--	7.01	1.12	0.02	0.5	10.9	-44.2	Clear	None

Constituent Sampled	Container	Number	Preservative
VOCs	40 mL Glass	12	HCL
PAHs SW-846 8100	1L Amber	4	None

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: Pontiac

Condition of Well: Good condition

Well Completion: Stick-up

Well Locked at Arrival: yes

Well Locked at Departure: yes

Key Number To Well: 2035

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30075936	**Well ID**	JS-SB-06			**Date**	05/11/2021
Project Name/Location	Racer pnc			**Weather(°F)**	37F °F, Sunny, winds at mph.		
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	--	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	12.74	**Total Depth (ft-bmp)**	14.98	**Water Column(ft)**	2.24	**Gallons in Well**	0.36
MP Elevation	986.08	**Pump Intake (ft-bmp)**	14	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Sample Time	13:00	**Volumes Purged**	0.73	**Sample ID**	JS-SB-06_GW-051121	**Sampled by**	Seth Turner
Purge Start	12:15	**Gallons Purged**	0.26	**Replicate/ Code No.**		**Sample Type**	Grab
Purge End	13:05						

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
12:15	0	0	100	12.74	--	7.29	1.06	113.6	0.71	11.3	157.3	--	--
12:20	5	5	100	14.5	--	7.22	1.02	28.7	0.27	11.1	109.1	--	--
12:25	5	10	100	14.78	--	7.14	1	10.6	0.15	11	-25.9	Clear	Mild

Constituent Sampled	Container	Number	Preservative
VOCs	40 mL Glass	3	HCL
PAHs SW-846 8100	1L Amber	1	None

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: Pontiac

Condition of Well: Good condition

Well Completion: Stick-up

Well Locked at Arrival: yes

Well Locked at Departure: yes

Key Number To Well: 2035

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30075936	**Well ID**	JS-SB-07			**Date**	05/11/2021
Project Name/Location	Racer pnc			**Weather(°F)**	37F °F, Sunny, winds at mph.		
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	--	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	9.69	**Total Depth (ft-bmp)**	17.23	**Water Column(ft)**	7.54	**Gallons in Well**	1.23
MP Elevation	988.00	**Pump Intake (ft-bmp)**	16	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Sample Time	13:45	**Volumes Purged**	0.64	**Sample ID**	JS-SB-07_GW-051121	**Sampled by**	Seth Turner
Purge Start	13:10	**Gallons Purged**	0.79	**Replicate/ Code No.**		**Sample Type**	Grab
Purge End	13:50						

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
13:10	0	0	100	9.69	--	7.15	0.83	10.3	2.3	9.9	260.9	--	--
13:15	5	5	100	9.69	--	7.14	0.82	0.02	2.07	10.9	260.4	--	--
13:20	5	10	100	9.69	--	7.11	1.64	0.02	1.65	10.4	246.6	--	--
13:25	5	15	100	9.69	--	7.1	0.82	0.02	1.39	10.2	228.5	--	--
13:30	5	20	100	9.69	--	7.1	0.83	0.02	1.4	10.1	229.1	--	--
13:35	5	25	100	9.69	--	7.1	0.84	0.02	1.5	10.1	229.6	--	--
13:40	5	30	100	9.69	--	7.1	0.84	0.02	1.5	10.1	229.6	Clear	None

Constituent Sampled	Container	Number	Preservative
VOCs	40 mL Glass	3	HCL
PAHs SW-846 8100	1L Amber	1	None

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: Pontiac

Condition of Well: Good condition

Well Completion: Stick-up

Well Locked at Arrival: yes

Well Locked at Departure: yes

Key Number To Well: 2035

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30075936	**Well ID**	JS-SB-08			**Date**	05/11/2021
Project Name/Location	Racer pnc			**Weather(°F)**	37F °F, Sunny, winds at mph.		
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	--	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	9.6	**Total Depth (ft-bmp)**	15.32	**Water Column(ft)**	5.72	**Gallons in Well**	0.93
MP Elevation	989.25	**Pump Intake (ft-bmp)**	14	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Sample Time	14:40	**Volumes Purged**	0.85	**Sample ID**	JS-SB-08_GW-051121	**Sampled by**	Seth Turner
Purge Start	14:05	**Gallons Purged**	0.79	**Replicate/ Code No.**		**Sample Type**	Grab
Purge End	14:55						

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
14:05	0	0	100	9.6	--	7.49	0.86	5.62	8.51	9.8	300.7	--	--
14:10	5	5	100	9.6	--	7.44	0.85	0.02	7.93	9.8	303.4	--	--
14:15	5	10	100	9.6	--	7.41	0.84	0.02	7.61	9.7	305.5	--	--
14:20	5	15	100	9.6	--	7.39	0.83	0.02	7.38	9.8	307.1	--	--
14:25	5	20	100	9.6	--	7.37	0.82	0.02	7.27	9.8	308.5	--	--
14:30	5	25	100	9.6	--	7.36	0.81	0.02	7.27	9.7	309.9	--	--
14:35	5	30	100	9.6	--	7.35	0.81	0.02	7.41	9.7	311.8	Clear	None

Constituent Sampled	Container	Number	Preservative
VOCs	40 mL Glass	3	HCL
PAHs SW-846 8100	1L Amber	1	None

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: Pontiac

Condition of Well: Good condition

Well Completion: Stick-up

Well Locked at Arrival: yes

Well Locked at Departure: yes

Key Number To Well: 2035

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30075936	**Well ID**	JS-SB-09			**Date**	05/12/2021
Project Name/Location	Racer pnc			**Weather(°F)**	43F °F, Sunny, winds at mph.		
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	--	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	11.83	**Total Depth (ft-bmp)**	15.12	**Water Column(ft)**	3.29	**Gallons in Well**	0.53
MP Elevation	988.86	**Pump Intake (ft-bmp)**	14	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Sample Time	09:00	**Volumes Purged**	1.50	**Sample ID**	JS-SB-09_GW-051221	**Sampled by**	Seth Turner
Purge Start	08:25	**Gallons Purged**	0.79	**Replicate/ Code No.**		**Sample Type**	Grab
Purge End	09:10						

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
08:25	0	0	100	11.83	--	7.07	1.04	13.6	1.95	9.8	255.8	--	--
08:30	5	5	100	11.83	--	7.04	1.04	0.02	1.92	9.7	247.4	--	--
08:35	5	10	100	11.83	--	7.03	1.04	0.02	1.89	9.8	240.8	--	--
08:40	5	15	100	11.83	--	6.96	1.05	0.02	1.51	9.8	163.9	--	--
08:45	5	20	100	11.83	--	6.96	1.05	0.02	1.5	9.8	164	--	--
08:50	5	25	100	11.83	--	6.96	1.05	0.02	1.51	9.8	164.1	--	--
08:55	5	30	100	11.83	--	6.96	1.05	0.02	1.5	9.8	163.9	Clear	None

Constituent Sampled	Container	Number	Preservative
VOCs	40 mL Glass	3	HCL
PAHs SW-846 8100	1L Amber	1	None

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: Pontiac

Condition of Well: Good condition

Well Completion: Stick-up

Well Locked at Arrival: yes

Well Locked at Departure: yes

Key Number To Well: 2035

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30075936	**Well ID**	JS-SB-10			**Date**	05/12/2021
Project Name/Location	Racer pnc			**Weather(°F)**	43F °F, Sunny, winds at mph.		
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	--	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	12.24	**Total Depth (ft-bmp)**	17.51	**Water Column(ft)**	5.27	**Gallons in Well**	0.86
MP Elevation	987.99	**Pump Intake (ft-bmp)**	16	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Sample Time	09:50	**Volumes Purged**	1.08	**Sample ID**	JS-SB-10_GW-051221	**Sampled by**	Seth Turner
Purge Start	09:15	**Gallons Purged**	0.92	**Replicate/ Code No.**	DUP-03_GW-051221	**Sample Type**	Grab
Purge End	9:55						

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
09:15	0	0	100	12.24	--	7.05	2.24	600	1.61	10.9	137.9	--	--
09:20	5	5	100	12.24	--	7.05	2.23	454	1.21	10.9	119.6	--	--
09:25	5	10	100	12.24	--	7.05	2.23	223	1.06	10.9	102.1	--	--
09:30	5	15	100	12.24	--	7.04	2.23	56.9	0.93	10.9	89	--	--
09:35	5	20	100	12.24	--	7.03	2.22	5.61	0.82	10.9	75.6	--	--
09:40	5	25	100	12.24	--	7.03	2.22	0.02	0.67	10.9	45.3	--	--
09:45	5	30	100	12.24	--	7.03	2.21	0.02	0.68	10.9	44.9	--	--
09:50	5	35	100	12.24	--	7.03	2.23	0.02	0.67	10.9	43.6	Clear	None

Constituent Sampled	Container	Number	Preservative
VOCs	40 mL Glass	6	HCL
PAHs SW-846 8100	1L Amber	2	None

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: Pontiac

Condition of Well: Good condition

Well Completion: Stick-up

Well Locked at Arrival: yes

Well Locked at Departure: yes

Key Number To Well: 2035

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = milliv

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30075936	**Well ID**	JS-SB-11			**Date**	05/12/2021
Project Name/Location	Racer pnc			**Weather(°F)**	43F °F, Sunny, winds at mph.		
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	--	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	12.37	**Total Depth (ft-bmp)**	15.35	**Water Column(ft)**	2.98	**Gallons in Well**	0.48
MP Elevation	986.94	**Pump Intake (ft-bmp)**	14	**Purge Method**	Low-Flow	**Purge Equipment**	Peristaltic
Sample Time	12:10	**Volumes Purged**	0.50	**Sample ID**	JS-SB-11_GW-051221	**Sampled by**	Seth Turner
Purge Start	11:45	**Gallons Purged**	0.24	**Replicate/ Code No.**		**Sample Type**	Grab
Purge End	12:20						

Time	Minutes Elapsed	Total Elapsed Minutes	Rate mL/min	Depth to Water (ft)	Gallons Purged	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)	Appearance	
												Color	Odor
11:46	0	0	100	12.37	--	7.32	0.75	12.6	9.19	11.9	162.7	--	--
11:50	4	4	100	14.98	--	7.4	0.74	0.02	8.73	10.4	163.8	--	--
11:55	5	9	100	15.35	--	7.4	0.74	0.02	8.73	10.4	163.8	Clear	None

Constituent Sampled	Container	Number	Preservative
VOCs	40 mL Glass	3	HCL
PAHs SW-846 8100	1L Amber	1	None

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: Pontiac

Condition of Well: Good condition

Well Completion: Stick-up

Well Locked at Arrival: yes

Well Locked at Departure: yes

Key Number To Well: 2035

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter

mV = milliv

ATTACHMENT 3

Laboratory Analytical Reports

Report ID: S23782.08(01)
Generated on 05/12/2021

Report to

Attention: Brad Saunders
Arcadis
28550 Cabot Drive
Suite 500
Novi, MI 48377

Phone: 810-225-1904 C:517-974-4441 FAX:
Email: brad.saunders@arcadis.com

Addtional Contacts: Alexis Crisp

Report produced by

Merit Laboratories, Inc.
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Contacts for report questions:
John Laverty (johnlaverty@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S23782.08-S23782.26
Project: 30075936 / Racer PNC
Collected Date(s): 04/27/2021 - 04/30/2021
Submitted Date/Time: 05/04/2021 09:20
Sampled by: Seth Turner
P.O. #: 30075936

Table of Contents

Maya Murshak
Technical Director

General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).
40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.
QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.
Full accreditation certificates are available upon request. Starred (*) analytes are not NELAP accredited.
Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.

Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)
PFAS requirement: Section 9.3.8 of U.S. EPA Method 537.1 states "If the method analyte(s) found in the Field Sample is present in the FRB at a concentration greater than 1/3 the MRL, then all samples collected with that FRB are invalid and must be recollected and reanalyzed."
Samples submitted without an accompanying FRB may not be acceptable for compliance purposes.

Report Narrative

Southern Parcel samples reported.

Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Alaska CSLAP	#17-001
Pennsylvania DEP	#68-05884

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods
LN	Linear
BR	Branched

Method Summary

Method	Version
SM2540B	Standard Method 2540 B 2011
SW3546	SW 846 Method 3546 Revision 0 February 2007
SW5035A	SW 846 Method 5035A Revision 1 July 2002
SW5035A/8260C	SW 846 Method 8260C Revision 3 August 2006 / 5035A Revision 1 July 2002
SW8270D	SW 846 Method 8270D Revision 4 February 2007

Sample Summary (19 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S23782.08	JS-SB-01_SO-042921(7.5-8.5)	Soil	04/29/21 14:05
S23782.09	JS-SB-02_SO-042721(11-12)	Soil	04/27/21 14:30
S23782.10	JS-SB-03_SO-042821(2-3)	Soil	04/28/21 09:20
S23782.11	JS-SB-03_SO-042821(11.2-12.2)	Soil	04/28/21 09:30
S23782.12	JS-SB-04_SO-042821(4.6-5.6)	Soil	04/28/21 11:30
S23782.13	JS-SB-05_SO-042821(5-6)	Soil	04/28/21 14:00
S23782.14	JS-SB-05_SO-042821(7-8)	Soil	04/28/21 14:05
S23782.15	JS-SB-06_SO-042821(12.1-13.1)	Soil	04/28/21 14:50
S23782.16	JS-SB-07_SO-042921(12.4-13.4)	Soil	04/29/21 09:10
S23782.17	JS-SB-07_SO-042921(12.4-13.4) MS	Soil	04/29/21 09:10
S23782.18	JS-SB-07_SO-042921(12.4-13.4) MSD	Soil	04/29/21 09:10
S23782.19	DUP-01_SO-042921	Soil	04/29/21 00:01
S23782.20	JS-SB-08_SO-042921(4.2-5.2)	Soil	04/29/21 10:30
S23782.21	DUP-02_SO-042921	Soil	04/29/21 00:01
S23782.22	JS-SB-09_SO-043021(9-10)	Soil	04/30/21 09:05
S23782.23	JS-SB-09_SO-043021(10-11)	Soil	04/30/21 09:00
S23782.24	JS-SB-10_SO-043021(14-15)	Soil	04/30/21 10:30
S23782.25	JS-SB-11_SO-043021(12.4-13.4)	Soil	04/30/21 11:40
S23782.26	Trip Blank	Methanol	04/30/21 00:01

Lab Sample ID: S23782.08
Sample Tag: JS-SB-01_SO-042921(7.5-8.5)
Collected Date/Time: 04/29/2021 14:05
Matrix: Soil
COC Reference: 137336

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	6.0	IR
1	40ml Glass	MeOH	Yes	6.0	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	05/04/21 15:13	PTW	
Sample wt. (g) / Methanol (ml)*	10.097/10	SW5035A	05/05/21 10:19	HAS	

Inorganics

Method: SM2540B, Run Date: 05/04/21 17:40, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	89	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 05/04/21 18:35, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	300		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8	
Anthracene	Not detected	300		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2	
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9	
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2	
Chrysene	Not detected	300		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3	
Fluoranthene	Not detected	300		ug/kg	10	206-44-0	
Fluorene	Not detected	300		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5	
Naphthalene	Not detected	300		ug/kg	10	91-20-3	
Phenanthrene	Not detected	300		ug/kg	10	85-01-8	
Pyrene	Not detected	300		ug/kg	10	129-00-0	
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6	
1-Methylnaphthalene	Not detected	300		ug/kg	10	90-12-0	

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/07/21 19:09, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	200		ug/kg	61.8	60-29-7	
Acetone	Not detected	1,000		ug/kg	61.8	67-64-1	
Methyl iodide	Not detected	100		ug/kg	61.8	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	61.8	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	200		ug/kg	61.8	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	61.8	107-13-1	
2-Butanone (MEK)	Not detected	930		ug/kg	61.8	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	61.8	75-71-8	

Lab Sample ID: S23782.08 (continued)
Sample Tag: JS-SB-01_SO-042921(7.5-8.5)

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/07/21 19:09, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chloromethane	Not detected	300		ug/kg	61.8	74-87-3	
Vinyl chloride	Not detected	60		ug/kg	61.8	75-01-4	
Bromomethane	Not detected	200		ug/kg	61.8	74-83-9	
Chloroethane	Not detected	300		ug/kg	61.8	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	61.8	75-69-4	
1,1-Dichloroethene	Not detected	60		ug/kg	61.8	75-35-4	
Methylene chloride	Not detected	100		ug/kg	61.8	75-09-2	
trans-1,2-Dichloroethene	Not detected	60		ug/kg	61.8	156-60-5	
1,1-Dichloroethane	Not detected	60		ug/kg	61.8	75-34-3	
cis-1,2-Dichloroethene	Not detected	60		ug/kg	61.8	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	61.8	109-99-9	
Chloroform	Not detected	60		ug/kg	61.8	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	61.8	74-97-5	
1,1,1-Trichloroethane	Not detected	60		ug/kg	61.8	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	61.8	108-10-1	
2-Hexanone	Not detected	3,000		ug/kg	61.8	591-78-6	
Carbon tetrachloride	Not detected	60		ug/kg	61.8	56-23-5	
Benzene	Not detected	60		ug/kg	61.8	71-43-2	
1,2-Dichloroethane	Not detected	60		ug/kg	61.8	107-06-2	
Trichloroethene	Not detected	60		ug/kg	61.8	79-01-6	
1,2-Dichloropropane	Not detected	60		ug/kg	61.8	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg	61.8	75-27-4	
Dibromomethane	Not detected	300		ug/kg	61.8	74-95-3	
cis-1,3-Dichloropropene	Not detected	60		ug/kg	61.8	10061-01-5	
Toluene	Not detected	60		ug/kg	61.8	108-88-3	
trans-1,3-Dichloropropene	Not detected	60		ug/kg	61.8	10061-02-6	
1,1,2-Trichloroethane	Not detected	60		ug/kg	61.8	79-00-5	
Tetrachloroethene	Not detected	60		ug/kg	61.8	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	60		ug/kg	61.8	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	61.8	124-48-1	
1,2-Dibromoethane	Not detected	20		ug/kg	61.8	106-93-4	M
Chlorobenzene	Not detected	60		ug/kg	61.8	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	61.8	630-20-6	
Ethylbenzene	Not detected	60		ug/kg	61.8	100-41-4	
p,m-Xylene	Not detected	100		ug/kg	61.8		
o-Xylene	Not detected	60		ug/kg	61.8	95-47-6	
Styrene	Not detected	60		ug/kg	61.8	100-42-5	
Isopropylbenzene	Not detected	300		ug/kg	61.8	98-82-8	
Bromoform	Not detected	100		ug/kg	61.8	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	60		ug/kg	61.8	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	61.8	96-18-4	
n-Propylbenzene	Not detected	60		ug/kg	61.8	103-65-1	
Bromobenzene	Not detected	100		ug/kg	61.8	108-86-1	
1,3,5-Trimethylbenzene	Not detected	60		ug/kg	61.8	108-67-8	
tert-Butylbenzene	Not detected	60		ug/kg	61.8	98-06-6	
1,2,4-Trimethylbenzene	Not detected	60		ug/kg	61.8	95-63-6	
sec-Butylbenzene	Not detected	60		ug/kg	61.8	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg	61.8	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg	61.8	541-73-1	

M-Result reported to MDL not RDL

Lab Sample ID: S23782.08 (continued)

Sample Tag: JS-SB-01_SO-042921(7.5-8.5)

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/07/21 19:09, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,4-Dichlorobenzene	Not detected	100		ug/kg	61.8	106-46-7	
1,2-Dichlorobenzene	Not detected	100		ug/kg	61.8	95-50-1	
1,2,3-Trimethylbenzene	Not detected	60		ug/kg	61.8	526-73-8	
n-Butylbenzene	Not detected	60		ug/kg	61.8	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	61.8	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	61.8	96-12-8	
1,2,4-Trichlorobenzene	Not detected	410		ug/kg	61.8	120-82-1	
1,2,3-Trichlorobenzene	Not detected	410		ug/kg	61.8	87-61-6	
Naphthalene	Not detected	300		ug/kg	61.8	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	61.8	91-57-6	

Lab Sample ID: S23782.09
Sample Tag: JS-SB-02_SO-042721(11-12)
Collected Date/Time: 04/27/2021 14:30
Matrix: Soil
COC Reference: 137336

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	6.0	IR
1	40ml Glass	MeOH	Yes	6.0	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	05/04/21 15:13	PTW	
Sample wt. (g) / Methanol (ml)*	9.933/10	SW5035A	05/05/21 10:19	HAS	

Inorganics

Method: SM2540B, Run Date: 05/04/21 17:40, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	90	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 05/04/21 18:57, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	300		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8	
Anthracene	Not detected	300		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2	
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9	
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2	
Chrysene	Not detected	300		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3	
Fluoranthene	Not detected	300		ug/kg	10	206-44-0	
Fluorene	Not detected	300		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5	
Naphthalene	Not detected	300		ug/kg	10	91-20-3	
Phenanthrene	Not detected	300		ug/kg	10	85-01-8	
Pyrene	Not detected	300		ug/kg	10	129-00-0	
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6	
1-Methylnaphthalene	Not detected	300		ug/kg	10	90-12-0	

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/07/21 19:32, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	200		ug/kg	61.5	60-29-7	
Acetone	Not detected	1,000		ug/kg	61.5	67-64-1	
Methyl iodide	Not detected	100		ug/kg	61.5	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	61.5	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	200		ug/kg	61.5	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	61.5	107-13-1	
2-Butanone (MEK)	Not detected	920		ug/kg	61.5	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	61.5	75-71-8	

Lab Sample ID: S23782.09 (continued)
Sample Tag: JS-SB-02_SO-042721(11-12)

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/07/21 19:32, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chloromethane	Not detected	300		ug/kg	61.5	74-87-3	
Vinyl chloride	Not detected	60		ug/kg	61.5	75-01-4	
Bromomethane	Not detected	200		ug/kg	61.5	74-83-9	
Chloroethane	Not detected	300		ug/kg	61.5	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	61.5	75-69-4	
1,1-Dichloroethene	Not detected	60		ug/kg	61.5	75-35-4	
Methylene chloride	Not detected	100		ug/kg	61.5	75-09-2	
trans-1,2-Dichloroethene	Not detected	60		ug/kg	61.5	156-60-5	
1,1-Dichloroethane	Not detected	60		ug/kg	61.5	75-34-3	
cis-1,2-Dichloroethene	Not detected	60		ug/kg	61.5	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	61.5	109-99-9	
Chloroform	Not detected	60		ug/kg	61.5	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	61.5	74-97-5	
1,1,1-Trichloroethane	Not detected	60		ug/kg	61.5	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	61.5	108-10-1	
2-Hexanone	Not detected	3,000		ug/kg	61.5	591-78-6	
Carbon tetrachloride	Not detected	60		ug/kg	61.5	56-23-5	
Benzene	Not detected	60		ug/kg	61.5	71-43-2	
1,2-Dichloroethane	Not detected	60		ug/kg	61.5	107-06-2	
Trichloroethene	Not detected	60		ug/kg	61.5	79-01-6	
1,2-Dichloropropane	Not detected	60		ug/kg	61.5	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg	61.5	75-27-4	
Dibromomethane	Not detected	300		ug/kg	61.5	74-95-3	
cis-1,3-Dichloropropene	Not detected	60		ug/kg	61.5	10061-01-5	
Toluene	Not detected	60		ug/kg	61.5	108-88-3	
trans-1,3-Dichloropropene	Not detected	60		ug/kg	61.5	10061-02-6	
1,1,2-Trichloroethane	Not detected	60		ug/kg	61.5	79-00-5	
Tetrachloroethene	Not detected	60		ug/kg	61.5	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	60		ug/kg	61.5	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	61.5	124-48-1	
1,2-Dibromoethane	Not detected	20		ug/kg	61.5	106-93-4	M
Chlorobenzene	Not detected	60		ug/kg	61.5	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	61.5	630-20-6	
Ethylbenzene	Not detected	60		ug/kg	61.5	100-41-4	
p,m-Xylene	Not detected	100		ug/kg	61.5		
o-Xylene	Not detected	60		ug/kg	61.5	95-47-6	
Styrene	Not detected	60		ug/kg	61.5	100-42-5	
Isopropylbenzene	Not detected	300		ug/kg	61.5	98-82-8	
Bromoform	Not detected	100		ug/kg	61.5	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	60		ug/kg	61.5	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	61.5	96-18-4	
n-Propylbenzene	Not detected	60		ug/kg	61.5	103-65-1	
Bromobenzene	Not detected	100		ug/kg	61.5	108-86-1	
1,3,5-Trimethylbenzene	Not detected	60		ug/kg	61.5	108-67-8	
tert-Butylbenzene	Not detected	60		ug/kg	61.5	98-06-6	
1,2,4-Trimethylbenzene	Not detected	60		ug/kg	61.5	95-63-6	
sec-Butylbenzene	Not detected	60		ug/kg	61.5	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg	61.5	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg	61.5	541-73-1	

M-Result reported to MDL not RDL

Lab Sample ID: S23782.09 (continued)
Sample Tag: JS-SB-02_SO-042721(11-12)

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/07/21 19:32, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,4-Dichlorobenzene	Not detected	100		ug/kg	61.5	106-46-7	
1,2-Dichlorobenzene	Not detected	100		ug/kg	61.5	95-50-1	
1,2,3-Trimethylbenzene	Not detected	60		ug/kg	61.5	526-73-8	
n-Butylbenzene	Not detected	60		ug/kg	61.5	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	61.5	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	61.5	96-12-8	
1,2,4-Trichlorobenzene	Not detected	410		ug/kg	61.5	120-82-1	
1,2,3-Trichlorobenzene	Not detected	410		ug/kg	61.5	87-61-6	
Naphthalene	Not detected	300		ug/kg	61.5	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	61.5	91-57-6	

Lab Sample ID: S23782.10
Sample Tag: JS-SB-03_SO-042821(2-3)
Collected Date/Time: 04/28/2021 09:20
Matrix: Soil
COC Reference: 137336

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	6.0	IR
1	40ml Glass	MeOH	Yes	6.0	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	05/04/21 15:13	PTW	
Sample wt. (g) / Methanol (ml)*	9.922/10	SW5035A	05/05/21 10:19	HAS	

Inorganics

Method: SM2540B, Run Date: 05/04/21 17:40, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	87	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 05/04/21 19:19, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	300		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8	
Anthracene	Not detected	300		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2	
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9	
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2	
Chrysene	Not detected	300		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3	
Fluoranthene	Not detected	300		ug/kg	10	206-44-0	
Fluorene	Not detected	300		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5	
Naphthalene	Not detected	300		ug/kg	10	91-20-3	
Phenanthrene	Not detected	300		ug/kg	10	85-01-8	
Pyrene	Not detected	300		ug/kg	10	129-00-0	
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6	
1-Methylnaphthalene	Not detected	300		ug/kg	10	90-12-0	

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/07/21 19:54, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	300		ug/kg	65.4	60-29-7	
Acetone	Not detected	1,000		ug/kg	65.4	67-64-1	
Methyl iodide	Not detected	100		ug/kg	65.4	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	65.4	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	300		ug/kg	65.4	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	65.4	107-13-1	
2-Butanone (MEK)	Not detected	980		ug/kg	65.4	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	65.4	75-71-8	

Lab Sample ID: S23782.10 (continued)
Sample Tag: JS-SB-03_SO-042821(2-3)

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/07/21 19:54, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chloromethane	Not detected	300		ug/kg	65.4	74-87-3	
Vinyl chloride	Not detected	70		ug/kg	65.4	75-01-4	
Bromomethane	Not detected	300		ug/kg	65.4	74-83-9	
Chloroethane	Not detected	300		ug/kg	65.4	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	65.4	75-69-4	
1,1-Dichloroethene	Not detected	70		ug/kg	65.4	75-35-4	
Methylene chloride	Not detected	100		ug/kg	65.4	75-09-2	
trans-1,2-Dichloroethene	Not detected	70		ug/kg	65.4	156-60-5	
1,1-Dichloroethane	Not detected	70		ug/kg	65.4	75-34-3	
cis-1,2-Dichloroethene	Not detected	70		ug/kg	65.4	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	65.4	109-99-9	
Chloroform	Not detected	70		ug/kg	65.4	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	65.4	74-97-5	
1,1,1-Trichloroethane	Not detected	70		ug/kg	65.4	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	65.4	108-10-1	
2-Hexanone	Not detected	3,000		ug/kg	65.4	591-78-6	
Carbon tetrachloride	Not detected	70		ug/kg	65.4	56-23-5	
Benzene	Not detected	70		ug/kg	65.4	71-43-2	
1,2-Dichloroethane	Not detected	70		ug/kg	65.4	107-06-2	
Trichloroethene	Not detected	70		ug/kg	65.4	79-01-6	
1,2-Dichloropropane	Not detected	70		ug/kg	65.4	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg	65.4	75-27-4	
Dibromomethane	Not detected	300		ug/kg	65.4	74-95-3	
cis-1,3-Dichloropropene	Not detected	70		ug/kg	65.4	10061-01-5	
Toluene	Not detected	70		ug/kg	65.4	108-88-3	
trans-1,3-Dichloropropene	Not detected	70		ug/kg	65.4	10061-02-6	
1,1,2-Trichloroethane	Not detected	70		ug/kg	65.4	79-00-5	
Tetrachloroethene	Not detected	70		ug/kg	65.4	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	70		ug/kg	65.4	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	65.4	124-48-1	
1,2-Dibromoethane	Not detected	30		ug/kg	65.4	106-93-4	M
Chlorobenzene	Not detected	70		ug/kg	65.4	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	65.4	630-20-6	
Ethylbenzene	Not detected	70		ug/kg	65.4	100-41-4	
p,m-Xylene	Not detected	100		ug/kg	65.4		
o-Xylene	Not detected	70		ug/kg	65.4	95-47-6	
Styrene	Not detected	70		ug/kg	65.4	100-42-5	
Isopropylbenzene	Not detected	300		ug/kg	65.4	98-82-8	
Bromoform	Not detected	100		ug/kg	65.4	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	70		ug/kg	65.4	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	65.4	96-18-4	
n-Propylbenzene	Not detected	70		ug/kg	65.4	103-65-1	
Bromobenzene	Not detected	100		ug/kg	65.4	108-86-1	
1,3,5-Trimethylbenzene	Not detected	70		ug/kg	65.4	108-67-8	
tert-Butylbenzene	Not detected	70		ug/kg	65.4	98-06-6	
1,2,4-Trimethylbenzene	Not detected	70		ug/kg	65.4	95-63-6	
sec-Butylbenzene	Not detected	70		ug/kg	65.4	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg	65.4	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg	65.4	541-73-1	

M-Result reported to MDL not RDL

Lab Sample ID: S23782.10 (continued)
Sample Tag: JS-SB-03_SO-042821(2-3)

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/07/21 19:54, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,4-Dichlorobenzene	Not detected	100		ug/kg	65.4	106-46-7	
1,2-Dichlorobenzene	Not detected	100		ug/kg	65.4	95-50-1	
1,2,3-Trimethylbenzene	Not detected	70		ug/kg	65.4	526-73-8	
n-Butylbenzene	Not detected	70		ug/kg	65.4	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	65.4	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	65.4	96-12-8	
1,2,4-Trichlorobenzene	Not detected	430		ug/kg	65.4	120-82-1	
1,2,3-Trichlorobenzene	Not detected	430		ug/kg	65.4	87-61-6	
Naphthalene	Not detected	300		ug/kg	65.4	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	65.4	91-57-6	

Lab Sample ID: S23782.11
Sample Tag: JS-SB-03_SO-042821(11.2-12.2)
Collected Date/Time: 04/28/2021 09:30
Matrix: Soil
COC Reference: 137336

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	6.0	IR
1	40ml Glass	MeOH	Yes	6.0	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	05/05/21 17:30	TTV	
Sample wt. (g) / Methanol (ml)*	10.165/10	SW5035A	05/05/21 10:19	HAS	

Inorganics

Method: SM2540B, Run Date: 05/04/21 17:40, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	89	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 05/05/21 18:59, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	300		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8	
Anthracene	Not detected	300		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2	
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9	
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2	
Chrysene	Not detected	300		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3	
Fluoranthene	Not detected	300		ug/kg	10	206-44-0	
Fluorene	Not detected	300		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5	
Naphthalene	Not detected	300		ug/kg	10	91-20-3	
Phenanthrene	Not detected	300		ug/kg	10	85-01-8	
Pyrene	Not detected	300		ug/kg	10	129-00-0	
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6	
1-Methylnaphthalene	Not detected	300		ug/kg	10	90-12-0	

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/07/21 20:17, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	200		ug/kg	61.4	60-29-7	
Acetone	Not detected	1,000		ug/kg	61.4	67-64-1	
Methyl iodide	Not detected	100		ug/kg	61.4	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	61.4	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	200		ug/kg	61.4	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	61.4	107-13-1	
2-Butanone (MEK)	Not detected	920		ug/kg	61.4	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	61.4	75-71-8	

Lab Sample ID: S23782.11 (continued)
Sample Tag: JS-SB-03_SO-042821(11.2-12.2)

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/07/21 20:17, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chloromethane	Not detected	300		ug/kg	61.4	74-87-3	
Vinyl chloride	Not detected	60		ug/kg	61.4	75-01-4	
Bromomethane	Not detected	200		ug/kg	61.4	74-83-9	
Chloroethane	Not detected	300		ug/kg	61.4	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	61.4	75-69-4	
1,1-Dichloroethene	Not detected	60		ug/kg	61.4	75-35-4	
Methylene chloride	Not detected	100		ug/kg	61.4	75-09-2	
trans-1,2-Dichloroethene	Not detected	60		ug/kg	61.4	156-60-5	
1,1-Dichloroethane	Not detected	60		ug/kg	61.4	75-34-3	
cis-1,2-Dichloroethene	Not detected	60		ug/kg	61.4	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	61.4	109-99-9	
Chloroform	Not detected	60		ug/kg	61.4	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	61.4	74-97-5	
1,1,1-Trichloroethane	Not detected	60		ug/kg	61.4	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	61.4	108-10-1	
2-Hexanone	Not detected	3,000		ug/kg	61.4	591-78-6	
Carbon tetrachloride	Not detected	60		ug/kg	61.4	56-23-5	
Benzene	Not detected	60		ug/kg	61.4	71-43-2	
1,2-Dichloroethane	Not detected	60		ug/kg	61.4	107-06-2	
Trichloroethene	Not detected	60		ug/kg	61.4	79-01-6	
1,2-Dichloropropane	Not detected	60		ug/kg	61.4	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg	61.4	75-27-4	
Dibromomethane	Not detected	300		ug/kg	61.4	74-95-3	
cis-1,3-Dichloropropene	Not detected	60		ug/kg	61.4	10061-01-5	
Toluene	Not detected	60		ug/kg	61.4	108-88-3	
trans-1,3-Dichloropropene	Not detected	60		ug/kg	61.4	10061-02-6	
1,1,2-Trichloroethane	Not detected	60		ug/kg	61.4	79-00-5	
Tetrachloroethene	Not detected	60		ug/kg	61.4	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	60		ug/kg	61.4	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	61.4	124-48-1	
1,2-Dibromoethane	Not detected	20		ug/kg	61.4	106-93-4	M
Chlorobenzene	Not detected	60		ug/kg	61.4	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	61.4	630-20-6	
Ethylbenzene	Not detected	60		ug/kg	61.4	100-41-4	
p,m-Xylene	Not detected	100		ug/kg	61.4		
o-Xylene	Not detected	60		ug/kg	61.4	95-47-6	
Styrene	Not detected	60		ug/kg	61.4	100-42-5	
Isopropylbenzene	Not detected	300		ug/kg	61.4	98-82-8	
Bromoform	Not detected	100		ug/kg	61.4	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	60		ug/kg	61.4	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	61.4	96-18-4	
n-Propylbenzene	Not detected	60		ug/kg	61.4	103-65-1	
Bromobenzene	Not detected	100		ug/kg	61.4	108-86-1	
1,3,5-Trimethylbenzene	Not detected	60		ug/kg	61.4	108-67-8	
tert-Butylbenzene	Not detected	60		ug/kg	61.4	98-06-6	
1,2,4-Trimethylbenzene	Not detected	60		ug/kg	61.4	95-63-6	
sec-Butylbenzene	Not detected	60		ug/kg	61.4	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg	61.4	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg	61.4	541-73-1	

M-Result reported to MDL not RDL

Lab Sample ID: S23782.11 (continued)

Sample Tag: JS-SB-03_SO-042821(11.2-12.2)

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/07/21 20:17, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,4-Dichlorobenzene	Not detected	100		ug/kg	61.4	106-46-7	
1,2-Dichlorobenzene	Not detected	100		ug/kg	61.4	95-50-1	
1,2,3-Trimethylbenzene	Not detected	60		ug/kg	61.4	526-73-8	
n-Butylbenzene	Not detected	60		ug/kg	61.4	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	61.4	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	61.4	96-12-8	
1,2,4-Trichlorobenzene	Not detected	410		ug/kg	61.4	120-82-1	
1,2,3-Trichlorobenzene	Not detected	410		ug/kg	61.4	87-61-6	
Naphthalene	Not detected	300		ug/kg	61.4	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	61.4	91-57-6	

Lab Sample ID: S23782.12
Sample Tag: JS-SB-04_SO-042821(4.6-5.6)
Collected Date/Time: 04/28/2021 11:30
Matrix: Soil
COC Reference: 137336

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	6.0	IR
1	40ml Glass	MeOH	Yes	6.0	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	05/05/21 17:30	TTV	
Sample wt. (g) / Methanol (ml)*	10.131/10	SW5035A	05/05/21 10:19	HAS	

Inorganics

Method: SM2540B, Run Date: 05/04/21 17:40, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	87	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 05/05/21 19:17, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	300		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8	
Anthracene	Not detected	300		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2	
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9	
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2	
Chrysene	Not detected	300		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3	
Fluoranthene	Not detected	300		ug/kg	10	206-44-0	
Fluorene	Not detected	300		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5	
Naphthalene	Not detected	300		ug/kg	10	91-20-3	
Phenanthrene	Not detected	300		ug/kg	10	85-01-8	
Pyrene	Not detected	300		ug/kg	10	129-00-0	
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6	
1-Methylnaphthalene	Not detected	300		ug/kg	10	90-12-0	

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 15:06, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	300		ug/kg	64.2	60-29-7	
Acetone	Not detected	1,000		ug/kg	64.2	67-64-1	
Methyl iodide	Not detected	100		ug/kg	64.2	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	64.2	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	300		ug/kg	64.2	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	64.2	107-13-1	
2-Butanone (MEK)	Not detected	960		ug/kg	64.2	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	64.2	75-71-8	

Lab Sample ID: S23782.12 (continued)
Sample Tag: JS-SB-04_SO-042821(4.6-5.6)

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 15:06, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chloromethane	Not detected	300		ug/kg	64.2	74-87-3	
Vinyl chloride	Not detected	60		ug/kg	64.2	75-01-4	
Bromomethane	Not detected	300		ug/kg	64.2	74-83-9	
Chloroethane	Not detected	300		ug/kg	64.2	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	64.2	75-69-4	
1,1-Dichloroethene	Not detected	60		ug/kg	64.2	75-35-4	
Methylene chloride	Not detected	100		ug/kg	64.2	75-09-2	
trans-1,2-Dichloroethene	Not detected	60		ug/kg	64.2	156-60-5	
1,1-Dichloroethane	Not detected	60		ug/kg	64.2	75-34-3	
cis-1,2-Dichloroethene	Not detected	60		ug/kg	64.2	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	64.2	109-99-9	
Chloroform	Not detected	60		ug/kg	64.2	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	64.2	74-97-5	
1,1,1-Trichloroethane	Not detected	60		ug/kg	64.2	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	64.2	108-10-1	
2-Hexanone	Not detected	3,000		ug/kg	64.2	591-78-6	
Carbon tetrachloride	Not detected	60		ug/kg	64.2	56-23-5	
Benzene	Not detected	60		ug/kg	64.2	71-43-2	
1,2-Dichloroethane	Not detected	60		ug/kg	64.2	107-06-2	
Trichloroethene	Not detected	60		ug/kg	64.2	79-01-6	
1,2-Dichloropropane	Not detected	60		ug/kg	64.2	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg	64.2	75-27-4	
Dibromomethane	Not detected	300		ug/kg	64.2	74-95-3	
cis-1,3-Dichloropropene	Not detected	60		ug/kg	64.2	10061-01-5	
Toluene	Not detected	60		ug/kg	64.2	108-88-3	
trans-1,3-Dichloropropene	Not detected	60		ug/kg	64.2	10061-02-6	
1,1,2-Trichloroethane	Not detected	60		ug/kg	64.2	79-00-5	
Tetrachloroethene	Not detected	60		ug/kg	64.2	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	60		ug/kg	64.2	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	64.2	124-48-1	
1,2-Dibromoethane	Not detected	30		ug/kg	64.2	106-93-4	M
Chlorobenzene	Not detected	60		ug/kg	64.2	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	64.2	630-20-6	
Ethylbenzene	Not detected	60		ug/kg	64.2	100-41-4	
p,m-Xylene	Not detected	100		ug/kg	64.2		
o-Xylene	Not detected	60		ug/kg	64.2	95-47-6	
Styrene	Not detected	60		ug/kg	64.2	100-42-5	
Isopropylbenzene	Not detected	300		ug/kg	64.2	98-82-8	
Bromoform	Not detected	100		ug/kg	64.2	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	60		ug/kg	64.2	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	64.2	96-18-4	
n-Propylbenzene	Not detected	60		ug/kg	64.2	103-65-1	
Bromobenzene	Not detected	100		ug/kg	64.2	108-86-1	
1,3,5-Trimethylbenzene	Not detected	60		ug/kg	64.2	108-67-8	
tert-Butylbenzene	Not detected	60		ug/kg	64.2	98-06-6	
1,2,4-Trimethylbenzene	Not detected	60		ug/kg	64.2	95-63-6	
sec-Butylbenzene	Not detected	60		ug/kg	64.2	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg	64.2	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg	64.2	541-73-1	

M-Result reported to MDL not RDL

Lab Sample ID: S23782.12 (continued)

Sample Tag: JS-SB-04_SO-042821(4.6-5.6)

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 15:06, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,4-Dichlorobenzene	Not detected	100		ug/kg	64.2	106-46-7	
1,2-Dichlorobenzene	Not detected	100		ug/kg	64.2	95-50-1	
1,2,3-Trimethylbenzene	Not detected	60		ug/kg	64.2	526-73-8	
n-Butylbenzene	Not detected	60		ug/kg	64.2	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	64.2	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	64.2	96-12-8	
1,2,4-Trichlorobenzene	Not detected	420		ug/kg	64.2	120-82-1	
1,2,3-Trichlorobenzene	Not detected	420		ug/kg	64.2	87-61-6	
Naphthalene	Not detected	300		ug/kg	64.2	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	64.2	91-57-6	

Lab Sample ID: S23782.13
Sample Tag: JS-SB-05_SO-042821(5-6)
Collected Date/Time: 04/28/2021 14:00
Matrix: Soil
COC Reference: 137338

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	6.0	IR
1	40ml Glass	MeOH	Yes	6.0	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	05/05/21 17:30	TTV	
Sample wt. (g) / Methanol (ml)*	10.648/10	SW5035A	05/05/21 10:19	HAS	

Inorganics

Method: SM2540B, Run Date: 05/04/21 17:40, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	90	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 05/06/21 03:11, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	300		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8	
Anthracene	Not detected	300		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2	
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9	
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2	
Chrysene	Not detected	300		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3	
Fluoranthene	Not detected	300		ug/kg	10	206-44-0	
Fluorene	Not detected	300		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5	
Naphthalene	8,800	300		ug/kg	10	91-20-3	
Phenanthrene	Not detected	300		ug/kg	10	85-01-8	
Pyrene	Not detected	300		ug/kg	10	129-00-0	
2-Methylnaphthalene	12,600	300		ug/kg	10	91-57-6	
1-Methylnaphthalene	5,100	300		ug/kg	10	90-12-0	

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 21:52, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	2,000		ug/kg	577	60-29-7	Y
Acetone	Not detected	10,000		ug/kg	577	67-64-1	Y
Methyl iodide	Not detected	1,000		ug/kg	577	74-88-4	Y
Carbon disulfide	Not detected	3,000		ug/kg	577	75-15-0	Y
tert-Methyl butyl ether (MTBE)	Not detected	2,000		ug/kg	577	1634-04-4	Y
Acrylonitrile	Not detected	1,000		ug/kg	577	107-13-1	Y
2-Butanone (MEK)	Not detected	8,700		ug/kg	577	78-93-3	Y

Y-Elevated reporting limit due to high target concentration

Lab Sample ID: S23782.13 (continued)
Sample Tag: JS-SB-05_SO-042821(5-6)

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 21:52, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Dichlorodifluoromethane	Not detected	3,000		ug/kg	577	75-71-8	Y
Chloromethane	Not detected	3,000		ug/kg	577	74-87-3	Y
Vinyl chloride	Not detected	600		ug/kg	577	75-01-4	Y
Bromomethane	Not detected	2,000		ug/kg	577	74-83-9	Y
Chloroethane	Not detected	3,000		ug/kg	577	75-00-3	Y
Trichlorofluoromethane	Not detected	1,000		ug/kg	577	75-69-4	Y
1,1-Dichloroethene	Not detected	600		ug/kg	577	75-35-4	Y
Methylene chloride	Not detected	1,000		ug/kg	577	75-09-2	Y
trans-1,2-Dichloroethene	Not detected	600		ug/kg	577	156-60-5	Y
1,1-Dichloroethane	Not detected	600		ug/kg	577	75-34-3	Y
cis-1,2-Dichloroethene	Not detected	600		ug/kg	577	156-59-2	Y
Tetrahydrofuran*	Not detected	10,000		ug/kg	577	109-99-9	Y
Chloroform	Not detected	600		ug/kg	577	67-66-3	Y
Bromochloromethane	Not detected	1,000		ug/kg	577	74-97-5	Y
1,1,1-Trichloroethane	Not detected	600		ug/kg	577	71-55-6	Y
4-Methyl-2-pentanone (MIBK)	Not detected	30,000		ug/kg	577	108-10-1	Y
2-Hexanone	Not detected	30,000		ug/kg	577	591-78-6	Y
Carbon tetrachloride	Not detected	600		ug/kg	577	56-23-5	Y
Benzene	Not detected	600		ug/kg	577	71-43-2	Y
1,2-Dichloroethane	Not detected	600		ug/kg	577	107-06-2	Y
Trichloroethene	Not detected	600		ug/kg	577	79-01-6	Y
1,2-Dichloropropane	Not detected	600		ug/kg	577	78-87-5	Y
Bromodichloromethane	Not detected	1,000		ug/kg	577	75-27-4	Y
Dibromomethane	Not detected	3,000		ug/kg	577	74-95-3	Y
cis-1,3-Dichloropropene	Not detected	600		ug/kg	577	10061-01-5	Y
Toluene	Not detected	600		ug/kg	577	108-88-3	Y
trans-1,3-Dichloropropene	Not detected	600		ug/kg	577	10061-02-6	Y
1,1,2-Trichloroethane	Not detected	600		ug/kg	577	79-00-5	Y
Tetrachloroethene	Not detected	600		ug/kg	577	127-18-4	Y
trans-1,4-Dichloro-2-butene	Not detected	600		ug/kg	577	110-57-6	Y
Dibromochloromethane	Not detected	1,000		ug/kg	577	124-48-1	Y
1,2-Dibromoethane	Not detected	200		ug/kg	577	106-93-4	YM
Chlorobenzene	Not detected	600		ug/kg	577	108-90-7	Y
1,1,1,2-Tetrachloroethane	Not detected	1,000		ug/kg	577	630-20-6	Y
Ethylbenzene	9,000	600		ug/kg	577	100-41-4	Y
p,m-Xylene	18,000	1,000		ug/kg	577		Y
o-Xylene	Not detected	600		ug/kg	577	95-47-6	Y
Styrene	Not detected	600		ug/kg	577	100-42-5	Y
Isopropylbenzene	Not detected	3,000		ug/kg	577	98-82-8	Y
Bromoform	Not detected	1,000		ug/kg	577	75-25-2	Y
1,1,2,2-Tetrachloroethane	Not detected	600		ug/kg	577	79-34-5	Y
1,2,3-Trichloropropane	Not detected	1,000		ug/kg	577	96-18-4	Y
n-Propylbenzene	4,600	600		ug/kg	577	103-65-1	Y
Bromobenzene	Not detected	1,000		ug/kg	577	108-86-1	Y
1,3,5-Trimethylbenzene	6,000	600		ug/kg	577	108-67-8	Y
tert-Butylbenzene	Not detected	600		ug/kg	577	98-06-6	Y
1,2,4-Trimethylbenzene	6,700	600		ug/kg	577	95-63-6	Y
sec-Butylbenzene	Not detected	600		ug/kg	577	135-98-8	Y

Y-Elevated reporting limit due to high target concentration
M-Result reported to MDL not RDL

Lab Sample ID: S23782.13 (continued)

Sample Tag: JS-SB-05_SO-042821(5-6)

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 21:52, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
p-Isopropyltoluene	Not detected	1,000		ug/kg	577	99-87-6	Y
1,3-Dichlorobenzene	Not detected	1,000		ug/kg	577	541-73-1	Y
1,4-Dichlorobenzene	Not detected	1,000		ug/kg	577	106-46-7	Y
1,2-Dichlorobenzene	Not detected	1,000		ug/kg	577	95-50-1	Y
1,2,3-Trimethylbenzene	6,900	600		ug/kg	577	526-73-8	Y
n-Butylbenzene	3,900	600		ug/kg	577	104-51-8	Y
Hexachloroethane	Not detected	3,000		ug/kg	577	67-72-1	Y
1,2-Dibromo-3-chloropropane	Not detected	3,000		ug/kg	577	96-12-8	Y
1,2,4-Trichlorobenzene	Not detected	3,800		ug/kg	577	120-82-1	Y
1,2,3-Trichlorobenzene	Not detected	3,800		ug/kg	577	87-61-6	Y
Naphthalene	10,000	3,000		ug/kg	577	91-20-3	Y
2-Methylnaphthalene	12,000	1,000		ug/kg	577	91-57-6	Y

Y-Elevated reporting limit due to high target concentration

Lab Sample ID: S23782.14
Sample Tag: JS-SB-05_SO-042821(7-8)
Collected Date/Time: 04/28/2021 14:05
Matrix: Soil
COC Reference: 137338

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	6.0	IR
1	40ml Glass	MeOH	Yes	6.0	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	05/05/21 17:30	TTV	
Sample wt. (g) / Methanol (ml)*	10.185/10	SW5035A	05/05/21 10:19	HAS	

Inorganics

Method: SM2540B, Run Date: 05/04/21 17:40, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	89	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 05/05/21 19:35, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	300		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8	
Anthracene	Not detected	300		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2	
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9	
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2	
Chrysene	Not detected	300		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3	
Fluoranthene	Not detected	300		ug/kg	10	206-44-0	
Fluorene	Not detected	300		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5	
Naphthalene	14,700	300		ug/kg	10	91-20-3	
Phenanthrene	Not detected	300		ug/kg	10	85-01-8	
Pyrene	Not detected	300		ug/kg	10	129-00-0	
2-Methylnaphthalene	17,600	300		ug/kg	10	91-57-6	
1-Methylnaphthalene	7,100	300		ug/kg	10	90-12-0	

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/11/21 15:13, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	10,000		ug/kg	3070	60-29-7	Y
Acetone	Not detected	60,000		ug/kg	3070	67-64-1	Y
Methyl iodide	Not detected	6,000		ug/kg	3070	74-88-4	Y
Carbon disulfide	Not detected	20,000		ug/kg	3070	75-15-0	Y
tert-Methyl butyl ether (MTBE)	Not detected	10,000		ug/kg	3070	1634-04-4	Y
Acrylonitrile	Not detected	6,000		ug/kg	3070	107-13-1	Y
2-Butanone (MEK)	Not detected	46,000		ug/kg	3070	78-93-3	Y

Y-Elevated reporting limit due to high target concentration

Lab Sample ID: S23782.14 (continued)
Sample Tag: JS-SB-05_SO-042821(7-8)

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/11/21 15:13, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Dichlorodifluoromethane	Not detected	20,000		ug/kg	3070	75-71-8	Y
Chloromethane	Not detected	20,000		ug/kg	3070	74-87-3	Y
Vinyl chloride	Not detected	3,000		ug/kg	3070	75-01-4	Y
Bromomethane	Not detected	10,000		ug/kg	3070	74-83-9	Y
Chloroethane	Not detected	20,000		ug/kg	3070	75-00-3	Y
Trichlorofluoromethane	Not detected	6,000		ug/kg	3070	75-69-4	Y
1,1-Dichloroethene	Not detected	3,000		ug/kg	3070	75-35-4	Y
Methylene chloride	Not detected	6,000		ug/kg	3070	75-09-2	Y
trans-1,2-Dichloroethene	Not detected	3,000		ug/kg	3070	156-60-5	Y
1,1-Dichloroethane	Not detected	3,000		ug/kg	3070	75-34-3	Y
cis-1,2-Dichloroethene	Not detected	3,000		ug/kg	3070	156-59-2	Y
Tetrahydrofuran*	Not detected	60,000		ug/kg	3070	109-99-9	Y
Chloroform	Not detected	3,000		ug/kg	3070	67-66-3	Y
Bromochloromethane	Not detected	6,000		ug/kg	3070	74-97-5	Y
1,1,1-Trichloroethane	Not detected	3,000		ug/kg	3070	71-55-6	Y
4-Methyl-2-pentanone (MIBK)	Not detected	200,000		ug/kg	3070	108-10-1	Y
2-Hexanone	Not detected	200,000		ug/kg	3070	591-78-6	Y
Carbon tetrachloride	Not detected	3,000		ug/kg	3070	56-23-5	Y
Benzene	Not detected	3,000		ug/kg	3070	71-43-2	Y
1,2-Dichloroethane	Not detected	3,000		ug/kg	3070	107-06-2	Y
Trichloroethene	Not detected	3,000		ug/kg	3070	79-01-6	Y
1,2-Dichloropropane	Not detected	3,000		ug/kg	3070	78-87-5	Y
Bromodichloromethane	Not detected	6,000		ug/kg	3070	75-27-4	Y
Dibromomethane	Not detected	20,000		ug/kg	3070	74-95-3	Y
cis-1,3-Dichloropropene	Not detected	3,000		ug/kg	3070	10061-01-5	Y
Toluene	Not detected	3,000		ug/kg	3070	108-88-3	Y
trans-1,3-Dichloropropene	Not detected	3,000		ug/kg	3070	10061-02-6	Y
1,1,2-Trichloroethane	Not detected	3,000		ug/kg	3070	79-00-5	Y
Tetrachloroethene	Not detected	3,000		ug/kg	3070	127-18-4	Y
trans-1,4-Dichloro-2-butene	Not detected	3,000		ug/kg	3070	110-57-6	Y
Dibromochloromethane	Not detected	6,000		ug/kg	3070	124-48-1	Y
1,2-Dibromoethane	Not detected	1,000		ug/kg	3070	106-93-4	YM
Chlorobenzene	Not detected	3,000		ug/kg	3070	108-90-7	Y
1,1,1,2-Tetrachloroethane	Not detected	6,000		ug/kg	3070	630-20-6	Y
Ethylbenzene	48,000	3,000		ug/kg	3070	100-41-4	Y
p,m-Xylene	220,000	6,000		ug/kg	3070		Y
o-Xylene	Not detected	3,000		ug/kg	3070	95-47-6	Y
Styrene	Not detected	3,000		ug/kg	3070	100-42-5	Y
Isopropylbenzene	Not detected	20,000		ug/kg	3070	98-82-8	Y
Bromoform	Not detected	6,000		ug/kg	3070	75-25-2	Y
1,1,2,2-Tetrachloroethane	Not detected	3,000		ug/kg	3070	79-34-5	Y
1,2,3-Trichloropropane	Not detected	6,000		ug/kg	3070	96-18-4	Y
n-Propylbenzene	19,000	3,000		ug/kg	3070	103-65-1	Y
Bromobenzene	Not detected	6,000		ug/kg	3070	108-86-1	Y
1,3,5-Trimethylbenzene	48,000	3,000		ug/kg	3070	108-67-8	Y
tert-Butylbenzene	Not detected	3,000		ug/kg	3070	98-06-6	Y
1,2,4-Trimethylbenzene	136,000	3,000		ug/kg	3070	95-63-6	Y
sec-Butylbenzene	Not detected	3,000		ug/kg	3070	135-98-8	Y

Y-Elevated reporting limit due to high target concentration
M-Result reported to MDL not RDL

Lab Sample ID: S23782.14 (continued)
Sample Tag: JS-SB-05_SO-042821(7-8)

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/11/21 15:13, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
p-Isopropyltoluene	Not detected	6,000		ug/kg	3070	99-87-6	Y
1,3-Dichlorobenzene	Not detected	6,000		ug/kg	3070	541-73-1	Y
1,4-Dichlorobenzene	Not detected	6,000		ug/kg	3070	106-46-7	Y
1,2-Dichlorobenzene	Not detected	6,000		ug/kg	3070	95-50-1	Y
1,2,3-Trimethylbenzene	31,000	3,000		ug/kg	3070	526-73-8	Y
n-Butylbenzene	15,000	3,000		ug/kg	3070	104-51-8	Y
Hexachloroethane	Not detected	20,000		ug/kg	3070	67-72-1	Y
1,2-Dibromo-3-chloropropane	Not detected	20,000		ug/kg	3070	96-12-8	Y
1,2,4-Trichlorobenzene	Not detected	20,000		ug/kg	3070	120-82-1	Y
1,2,3-Trichlorobenzene	Not detected	20,000		ug/kg	3070	87-61-6	Y
Naphthalene	40,000	20,000		ug/kg	3070	91-20-3	Y
2-Methylnaphthalene	40,000	6,000		ug/kg	3070	91-57-6	Y

Y-Elevated reporting limit due to high target concentration

Lab Sample ID: S23782.15
Sample Tag: JS-SB-06_SO-042821(12.1-13.1)
Collected Date/Time: 04/28/2021 14:50
Matrix: Soil
COC Reference: 137338

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	6.0	IR
1	40ml Glass	MeOH	Yes	6.0	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	05/05/21 17:30	TTV	
Sample wt. (g) / Methanol (ml)*	10.215/10	SW5035A	05/05/21 10:19	HAS	

Inorganics

Method: SM2540B, Run Date: 05/04/21 17:40, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	90	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 05/05/21 19:54, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	300		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8	
Anthracene	Not detected	300		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2	
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9	
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2	
Chrysene	Not detected	300		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3	
Fluoranthene	Not detected	300		ug/kg	10	206-44-0	
Fluorene	Not detected	300		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5	
Naphthalene	Not detected	300		ug/kg	10	91-20-3	
Phenanthrene	Not detected	300		ug/kg	10	85-01-8	
Pyrene	Not detected	300		ug/kg	10	129-00-0	
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6	
1-Methylnaphthalene	Not detected	300		ug/kg	10	90-12-0	

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/11/21 14:50, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	200		ug/kg	59.9	60-29-7	
Acetone	Not detected	1,000		ug/kg	59.9	67-64-1	
Methyl iodide	Not detected	100		ug/kg	59.9	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	59.9	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	200		ug/kg	59.9	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	59.9	107-13-1	
2-Butanone (MEK)	Not detected	900		ug/kg	59.9	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	59.9	75-71-8	

Lab Sample ID: S23782.15 (continued)
Sample Tag: JS-SB-06_SO-042821(12.1-13.1)

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/11/21 14:50, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chloromethane	Not detected	300		ug/kg	59.9	74-87-3	
Vinyl chloride	Not detected	60		ug/kg	59.9	75-01-4	
Bromomethane	Not detected	200		ug/kg	59.9	74-83-9	
Chloroethane	Not detected	300		ug/kg	59.9	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	59.9	75-69-4	
1,1-Dichloroethene	Not detected	60		ug/kg	59.9	75-35-4	
Methylene chloride	Not detected	100		ug/kg	59.9	75-09-2	
trans-1,2-Dichloroethene	Not detected	60		ug/kg	59.9	156-60-5	
1,1-Dichloroethane	Not detected	60		ug/kg	59.9	75-34-3	
cis-1,2-Dichloroethene	Not detected	60		ug/kg	59.9	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	59.9	109-99-9	
Chloroform	Not detected	60		ug/kg	59.9	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	59.9	74-97-5	
1,1,1-Trichloroethane	Not detected	60		ug/kg	59.9	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	59.9	108-10-1	
2-Hexanone	Not detected	3,000		ug/kg	59.9	591-78-6	
Carbon tetrachloride	Not detected	60		ug/kg	59.9	56-23-5	
Benzene	Not detected	60		ug/kg	59.9	71-43-2	
1,2-Dichloroethane	Not detected	60		ug/kg	59.9	107-06-2	
Trichloroethene	Not detected	60		ug/kg	59.9	79-01-6	
1,2-Dichloropropane	Not detected	60		ug/kg	59.9	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg	59.9	75-27-4	
Dibromomethane	Not detected	300		ug/kg	59.9	74-95-3	
cis-1,3-Dichloropropene	Not detected	60		ug/kg	59.9	10061-01-5	
Toluene	Not detected	60		ug/kg	59.9	108-88-3	
trans-1,3-Dichloropropene	Not detected	60		ug/kg	59.9	10061-02-6	
1,1,2-Trichloroethane	Not detected	60		ug/kg	59.9	79-00-5	
Tetrachloroethene	Not detected	60		ug/kg	59.9	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	60		ug/kg	59.9	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	59.9	124-48-1	
1,2-Dibromoethane	Not detected	20		ug/kg	59.9	106-93-4	M
Chlorobenzene	Not detected	60		ug/kg	59.9	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	59.9	630-20-6	
Ethylbenzene	Not detected	60		ug/kg	59.9	100-41-4	
p,m-Xylene	Not detected	100		ug/kg	59.9		
o-Xylene	Not detected	60		ug/kg	59.9	95-47-6	
Styrene	Not detected	60		ug/kg	59.9	100-42-5	
Isopropylbenzene	Not detected	300		ug/kg	59.9	98-82-8	
Bromoform	Not detected	100		ug/kg	59.9	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	60		ug/kg	59.9	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	59.9	96-18-4	
n-Propylbenzene	Not detected	60		ug/kg	59.9	103-65-1	
Bromobenzene	Not detected	100		ug/kg	59.9	108-86-1	
1,3,5-Trimethylbenzene	Not detected	60		ug/kg	59.9	108-67-8	
tert-Butylbenzene	Not detected	60		ug/kg	59.9	98-06-6	
1,2,4-Trimethylbenzene	Not detected	60		ug/kg	59.9	95-63-6	
sec-Butylbenzene	Not detected	60		ug/kg	59.9	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg	59.9	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg	59.9	541-73-1	

M-Result reported to MDL not RDL

Lab Sample ID: S23782.15 (continued)

Sample Tag: JS-SB-06_SO-042821(12.1-13.1)

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/11/21 14:50, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,4-Dichlorobenzene	Not detected	100		ug/kg	59.9	106-46-7	
1,2-Dichlorobenzene	Not detected	100		ug/kg	59.9	95-50-1	
1,2,3-Trimethylbenzene	Not detected	60		ug/kg	59.9	526-73-8	
n-Butylbenzene	Not detected	60		ug/kg	59.9	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	59.9	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	59.9	96-12-8	
1,2,4-Trichlorobenzene	Not detected	400		ug/kg	59.9	120-82-1	
1,2,3-Trichlorobenzene	Not detected	400		ug/kg	59.9	87-61-6	
Naphthalene	Not detected	300		ug/kg	59.9	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	59.9	91-57-6	

Lab Sample ID: S23782.16
Sample Tag: JS-SB-07_SO-042921(12.4-13.4)
Collected Date/Time: 04/29/2021 09:10
Matrix: Soil
COC Reference: 137338

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	6.0	IR
1	40ml Glass	MeOH	Yes	6.0	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	05/05/21 17:30	TTV	
Sample wt. (g) / Methanol (ml)*	10.015/10	SW5035A	05/05/21 10:19	HAS	

Inorganics

Method: SM2540B, Run Date: 05/04/21 17:40, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	88	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 05/05/21 20:12, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	300		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8	
Anthracene	Not detected	300		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2	
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9	
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2	
Chrysene	Not detected	300		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3	
Fluoranthene	Not detected	300		ug/kg	10	206-44-0	
Fluorene	Not detected	300		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5	
Naphthalene	Not detected	300		ug/kg	10	91-20-3	
Phenanthrene	Not detected	300		ug/kg	10	85-01-8	
Pyrene	Not detected	300		ug/kg	10	129-00-0	
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6	
1-Methylnaphthalene	Not detected	300		ug/kg	10	90-12-0	

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 16:36, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	300		ug/kg	63.6	60-29-7	
Acetone	Not detected	1,000		ug/kg	63.6	67-64-1	
Methyl iodide	Not detected	100		ug/kg	63.6	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	63.6	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	300		ug/kg	63.6	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	63.6	107-13-1	
2-Butanone (MEK)	Not detected	950		ug/kg	63.6	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	63.6	75-71-8	

Lab Sample ID: S23782.16 (continued)
Sample Tag: JS-SB-07_SO-042921(12.4-13.4)

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 16:36, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chloromethane	Not detected	300		ug/kg	63.6	74-87-3	
Vinyl chloride	Not detected	60		ug/kg	63.6	75-01-4	
Bromomethane	Not detected	300		ug/kg	63.6	74-83-9	
Chloroethane	Not detected	300		ug/kg	63.6	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	63.6	75-69-4	
1,1-Dichloroethene	Not detected	60		ug/kg	63.6	75-35-4	
Methylene chloride	Not detected	100		ug/kg	63.6	75-09-2	
trans-1,2-Dichloroethene	Not detected	60		ug/kg	63.6	156-60-5	
1,1-Dichloroethane	Not detected	60		ug/kg	63.6	75-34-3	
cis-1,2-Dichloroethene	Not detected	60		ug/kg	63.6	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	63.6	109-99-9	
Chloroform	Not detected	60		ug/kg	63.6	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	63.6	74-97-5	
1,1,1-Trichloroethane	Not detected	60		ug/kg	63.6	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	63.6	108-10-1	
2-Hexanone	Not detected	3,000		ug/kg	63.6	591-78-6	
Carbon tetrachloride	Not detected	60		ug/kg	63.6	56-23-5	
Benzene	Not detected	60		ug/kg	63.6	71-43-2	
1,2-Dichloroethane	Not detected	60		ug/kg	63.6	107-06-2	
Trichloroethene	Not detected	60		ug/kg	63.6	79-01-6	
1,2-Dichloropropane	Not detected	60		ug/kg	63.6	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg	63.6	75-27-4	
Dibromomethane	Not detected	300		ug/kg	63.6	74-95-3	
cis-1,3-Dichloropropene	Not detected	60		ug/kg	63.6	10061-01-5	
Toluene	Not detected	60		ug/kg	63.6	108-88-3	
trans-1,3-Dichloropropene	Not detected	60		ug/kg	63.6	10061-02-6	
1,1,2-Trichloroethane	Not detected	60		ug/kg	63.6	79-00-5	
Tetrachloroethene	Not detected	60		ug/kg	63.6	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	60		ug/kg	63.6	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	63.6	124-48-1	
1,2-Dibromoethane	Not detected	30		ug/kg	63.6	106-93-4	M
Chlorobenzene	Not detected	60		ug/kg	63.6	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	63.6	630-20-6	
Ethylbenzene	Not detected	60		ug/kg	63.6	100-41-4	
p,m-Xylene	Not detected	100		ug/kg	63.6		
o-Xylene	Not detected	60		ug/kg	63.6	95-47-6	
Styrene	Not detected	60		ug/kg	63.6	100-42-5	
Isopropylbenzene	Not detected	300		ug/kg	63.6	98-82-8	
Bromoform	Not detected	100		ug/kg	63.6	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	60		ug/kg	63.6	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	63.6	96-18-4	
n-Propylbenzene	Not detected	60		ug/kg	63.6	103-65-1	
Bromobenzene	Not detected	100		ug/kg	63.6	108-86-1	
1,3,5-Trimethylbenzene	Not detected	60		ug/kg	63.6	108-67-8	
tert-Butylbenzene	Not detected	60		ug/kg	63.6	98-06-6	
1,2,4-Trimethylbenzene	Not detected	60		ug/kg	63.6	95-63-6	
sec-Butylbenzene	Not detected	60		ug/kg	63.6	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg	63.6	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg	63.6	541-73-1	

M-Result reported to MDL not RDL

Lab Sample ID: S23782.16 (continued)

Sample Tag: JS-SB-07_SO-042921(12.4-13.4)

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 16:36, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,4-Dichlorobenzene	Not detected	100		ug/kg	63.6	106-46-7	
1,2-Dichlorobenzene	Not detected	100		ug/kg	63.6	95-50-1	
1,2,3-Trimethylbenzene	Not detected	60		ug/kg	63.6	526-73-8	
n-Butylbenzene	Not detected	60		ug/kg	63.6	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	63.6	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	63.6	96-12-8	
1,2,4-Trichlorobenzene	Not detected	420		ug/kg	63.6	120-82-1	
1,2,3-Trichlorobenzene	Not detected	420		ug/kg	63.6	87-61-6	
Naphthalene	Not detected	300		ug/kg	63.6	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	63.6	91-57-6	

Lab Sample ID: S23782.17
Sample Tag: JS-SB-07_SO-042921(12.4-13.4) MS
Collected Date/Time: 04/29/2021 09:10
Matrix: Soil
COC Reference: 137338

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	6.0	IR
1	40ml Glass	MeOH	Yes	6.0	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	05/05/21 17:30	TTV	
Sample wt. (g) / Methanol (ml)*	9.890/10	SW5035A	05/05/21 10:19	HAS	

Inorganics

Method: SM2540B, Run Date: 05/04/21 17:40, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	88	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 05/05/21 20:30, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	2,300	300		ug/kg	10	83-32-9	1
Acenaphthylene	2,200	300		ug/kg	10	208-96-8	1
Anthracene	2,600	300		ug/kg	10	120-12-7	1
Benzo(a)anthracene	2,100	300		ug/kg	10	56-55-3	1
Benzo(a)pyrene	2,100	300		ug/kg	10	50-32-8	1
Benzo(b)fluoranthene	1,700	300		ug/kg	10	205-99-2	1
Benzo(k)fluoranthene	2,300	300		ug/kg	10	207-08-9	1
Benzo(ghi)perylene	1,800	300		ug/kg	10	191-24-2	1
Chrysene	2,300	300		ug/kg	10	218-01-9	1
Dibenzo(ah)anthracene	1,800	300		ug/kg	10	53-70-3	1
Fluoranthene	2,300	300		ug/kg	10	206-44-0	1
Fluorene	2,200	300		ug/kg	10	86-73-7	1
Indeno(1,2,3-cd)pyrene	1,800	300		ug/kg	10	193-39-5	1
Naphthalene	1,900	300		ug/kg	10	91-20-3	1
Phenanthrene	2,200	300		ug/kg	10	85-01-8	1
Pyrene	2,300	300		ug/kg	10	129-00-0	1
2-Methylnaphthalene	2,000	300		ug/kg	10	91-57-6	1
1-Methylnaphthalene	2,100	300		ug/kg	10	90-12-0	1

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 13:12, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	3,800	300		ug/kg	64.3	60-29-7	2
Acetone	4,000	1,000		ug/kg	64.3	67-64-1	2
Methyl iodide	3,300	100		ug/kg	64.3	74-88-4	2
Carbon disulfide	3,600	300		ug/kg	64.3	75-15-0	2
tert-Methyl butyl ether (MTBE)	3,500	300		ug/kg	64.3	1634-04-4	2
Acrylonitrile	3,500	100		ug/kg	64.3	107-13-1	2

1-Sample spiked at 2.5 mg/kg
2-Spiked at 3.22mg/kg

Lab Sample ID: S23782.17 (continued)

Sample Tag: JS-SB-07_SO-042921(12.4-13.4) MS

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 13:12, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
2-Butanone (MEK)	3,080	960		ug/kg	64.3	78-93-3	1
Dichlorodifluoromethane	3,400	300		ug/kg	64.3	75-71-8	1
Chloromethane	3,100	300		ug/kg	64.3	74-87-3	1
Vinyl chloride	3,480	60		ug/kg	64.3	75-01-4	1
Bromomethane	3,200	300		ug/kg	64.3	74-83-9	1
Chloroethane	3,400	300		ug/kg	64.3	75-00-3	1
Trichlorofluoromethane	4,600	100		ug/kg	64.3	75-69-4	1
1,1-Dichloroethene	3,700	60		ug/kg	64.3	75-35-4	1
Methylene chloride	3,300	100		ug/kg	64.3	75-09-2	1
trans-1,2-Dichloroethene	3,630	60		ug/kg	64.3	156-60-5	1
1,1-Dichloroethane	3,610	60		ug/kg	64.3	75-34-3	1
cis-1,2-Dichloroethene	3,440	60		ug/kg	64.3	156-59-2	1
Tetrahydrofuran*	3,000	1,000		ug/kg	64.3	109-99-9	1
Chloroform	3,560	60		ug/kg	64.3	67-66-3	1
Bromochloromethane	3,400	100		ug/kg	64.3	74-97-5	1
1,1,1-Trichloroethane	3,700	60		ug/kg	64.3	71-55-6	1
4-Methyl-2-pentanone (MIBK)	3,000	3,000		ug/kg	64.3	108-10-1	1
2-Hexanone	3,000	3,000		ug/kg	64.3	591-78-6	1
Carbon tetrachloride	3,690	60		ug/kg	64.3	56-23-5	1
Benzene	3,510	60		ug/kg	64.3	71-43-2	1
1,2-Dichloroethane	3,620	60		ug/kg	64.3	107-06-2	1
Trichloroethene	3,460	60		ug/kg	64.3	79-01-6	1
1,2-Dichloropropane	3,540	60		ug/kg	64.3	78-87-5	1
Bromodichloromethane	3,600	100		ug/kg	64.3	75-27-4	1
Dibromomethane	3,100	300		ug/kg	64.3	74-95-3	1
cis-1,3-Dichloropropene	3,580	60		ug/kg	64.3	10061-01-5	1
Toluene	3,450	60		ug/kg	64.3	108-88-3	1
trans-1,3-Dichloropropene	3,600	60		ug/kg	64.3	10061-02-6	1
1,1,2-Trichloroethane	3,440	60		ug/kg	64.3	79-00-5	1
Tetrachloroethene	3,470	60		ug/kg	64.3	127-18-4	1
trans-1,4-Dichloro-2-butene	3,490	60		ug/kg	64.3	110-57-6	1
Dibromochloromethane	3,200	100		ug/kg	64.3	124-48-1	1
1,2-Dibromoethane	3,080	30		ug/kg	64.3	106-93-4	1M
Chlorobenzene	3,240	60		ug/kg	64.3	108-90-7	1
1,1,1,2-Tetrachloroethane	3,400	100		ug/kg	64.3	630-20-6	1
Ethylbenzene	3,400	60		ug/kg	64.3	100-41-4	1
p,m-Xylene	6,700	100		ug/kg	64.3		1
o-Xylene	3,410	60		ug/kg	64.3	95-47-6	1
Styrene	3,360	60		ug/kg	64.3	100-42-5	1
Isopropylbenzene	3,400	300		ug/kg	64.3	98-82-8	1
Bromoform	3,200	100		ug/kg	64.3	75-25-2	1
1,1,2,2-Tetrachloroethane	3,270	60		ug/kg	64.3	79-34-5	1
1,2,3-Trichloropropane	3,200	100		ug/kg	64.3	96-18-4	1
n-Propylbenzene	3,410	60		ug/kg	64.3	103-65-1	1
Bromobenzene	3,300	100		ug/kg	64.3	108-86-1	1
1,3,5-Trimethylbenzene	3,380	60		ug/kg	64.3	108-67-8	1
tert-Butylbenzene	3,380	60		ug/kg	64.3	98-06-6	1
1,2,4-Trimethylbenzene	3,380	60		ug/kg	64.3	95-63-6	1

1-Spiked at 3.22mg/kg

M-Result reported to MDL not RDL

Lab Sample ID: S23782.17 (continued)

Sample Tag: JS-SB-07_SO-042921(12.4-13.4) MS

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 13:12, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
sec-Butylbenzene	3,400	60		ug/kg	64.3	135-98-8	1
p-Isopropyltoluene	3,400	100		ug/kg	64.3	99-87-6	1
1,3-Dichlorobenzene	3,400	100		ug/kg	64.3	541-73-1	1
1,4-Dichlorobenzene	3,400	100		ug/kg	64.3	106-46-7	1
1,2-Dichlorobenzene	3,400	100		ug/kg	64.3	95-50-1	1
1,2,3-Trimethylbenzene	3,340	60		ug/kg	64.3	526-73-8	1
n-Butylbenzene	3,480	60		ug/kg	64.3	104-51-8	1
Hexachloroethane	3,500	400		ug/kg	64.3	67-72-1	1
1,2-Dibromo-3-chloropropane	2,900	300		ug/kg	64.3	96-12-8	1
1,2,4-Trichlorobenzene	3,360	420		ug/kg	64.3	120-82-1	1
1,2,3-Trichlorobenzene	3,260	420		ug/kg	64.3	87-61-6	1
Naphthalene	3,100	300		ug/kg	64.3	91-20-3	1
2-Methylnaphthalene	3,100	100		ug/kg	64.3	91-57-6	1

1-Spiked at 3.22mg/kg

Lab Sample ID: S23782.18
Sample Tag: JS-SB-07_SO-042921(12.4-13.4) MSD
Collected Date/Time: 04/29/2021 09:10
Matrix: Soil
COC Reference: 137338

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	6.0	IR
1	40ml Glass	MeOH	Yes	6.0	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	05/05/21 17:30	TTV	
Sample wt. (g) / Methanol (ml)*	9.292/10	SW5035A	05/05/21 10:19	HAS	

Inorganics

Method: SM2540B, Run Date: 05/04/21 17:40, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	88	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 05/05/21 20:48, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	1,900	300		ug/kg	10	83-32-9	1
Acenaphthylene	1,800	300		ug/kg	10	208-96-8	1
Anthracene	2,300	300		ug/kg	10	120-12-7	1
Benzo(a)anthracene	1,800	300		ug/kg	10	56-55-3	1
Benzo(a)pyrene	1,800	300		ug/kg	10	50-32-8	1
Benzo(b)fluoranthene	1,500	300		ug/kg	10	205-99-2	1
Benzo(k)fluoranthene	2,000	300		ug/kg	10	207-08-9	1
Benzo(ghi)perylene	1,500	300		ug/kg	10	191-24-2	1
Chrysene	2,000	300		ug/kg	10	218-01-9	1
Dibenzo(ah)anthracene	1,600	300		ug/kg	10	53-70-3	1
Fluoranthene	2,000	300		ug/kg	10	206-44-0	1
Fluorene	1,900	300		ug/kg	10	86-73-7	1
Indeno(1,2,3-cd)pyrene	1,500	300		ug/kg	10	193-39-5	1
Naphthalene	1,500	300		ug/kg	10	91-20-3	1
Phenanthrene	1,900	300		ug/kg	10	85-01-8	1
Pyrene	2,000	300		ug/kg	10	129-00-0	1
2-Methylnaphthalene	1,700	300		ug/kg	10	91-57-6	1
1-Methylnaphthalene	1,800	300		ug/kg	10	90-12-0	1

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 13:35, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	3,800	300		ug/kg	68	60-29-7	2
Acetone	4,000	1,000		ug/kg	68	67-64-1	2
Methyl iodide	3,300	100		ug/kg	68	74-88-4	2
Carbon disulfide	3,500	300		ug/kg	68	75-15-0	2
tert-Methyl butyl ether (MTBE)	3,500	300		ug/kg	68	1634-04-4	2
Acrylonitrile	3,600	100		ug/kg	68	107-13-1	2

1-Sample spiked at 2.5 mg/kg
2-Spiked at 3.4mg/kg

Lab Sample ID: S23782.18 (continued)

Sample Tag: JS-SB-07_SO-042921(12.4-13.4) MSD

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 13:35, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
2-Butanone (MEK)	3,100	1,000		ug/kg	68	78-93-3	1
Dichlorodifluoromethane	3,400	300		ug/kg	68	75-71-8	1
Chloromethane	3,100	300		ug/kg	68	74-87-3	1
Vinyl chloride	3,440	70		ug/kg	68	75-01-4	1
Bromomethane	3,200	300		ug/kg	68	74-83-9	1
Chloroethane	3,400	300		ug/kg	68	75-00-3	1
Trichlorofluoromethane	4,300	100		ug/kg	68	75-69-4	1
1,1-Dichloroethene	3,700	70		ug/kg	68	75-35-4	1
Methylene chloride	3,300	100		ug/kg	68	75-09-2	1
trans-1,2-Dichloroethene	3,640	70		ug/kg	68	156-60-5	1
1,1-Dichloroethane	3,610	70		ug/kg	68	75-34-3	1
cis-1,2-Dichloroethene	3,450	70		ug/kg	68	156-59-2	1
Tetrahydrofuran*	4,000	1,000		ug/kg	68	109-99-9	1
Chloroform	3,560	70		ug/kg	68	67-66-3	1
Bromochloromethane	3,400	100		ug/kg	68	74-97-5	1
1,1,1-Trichloroethane	3,710	70		ug/kg	68	71-55-6	1
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	68	108-10-1	1
2-Hexanone	Not detected	3,000		ug/kg	68	591-78-6	1
Carbon tetrachloride	3,620	70		ug/kg	68	56-23-5	1
Benzene	3,490	70		ug/kg	68	71-43-2	1
1,2-Dichloroethane	3,610	70		ug/kg	68	107-06-2	1
Trichloroethene	3,450	70		ug/kg	68	79-01-6	1
1,2-Dichloropropane	3,540	70		ug/kg	68	78-87-5	1
Bromodichloromethane	3,500	100		ug/kg	68	75-27-4	1
Dibromomethane	3,100	300		ug/kg	68	74-95-3	1
cis-1,3-Dichloropropene	3,560	70		ug/kg	68	10061-01-5	1
Toluene	3,450	70		ug/kg	68	108-88-3	1
trans-1,3-Dichloropropene	3,610	70		ug/kg	68	10061-02-6	1
1,1,2-Trichloroethane	3,420	70		ug/kg	68	79-00-5	1
Tetrachloroethene	3,450	70		ug/kg	68	127-18-4	1
trans-1,4-Dichloro-2-butene	3,530	70		ug/kg	68	110-57-6	1
Dibromochloromethane	3,100	100		ug/kg	68	124-48-1	1
1,2-Dibromoethane	3,080	30		ug/kg	68	106-93-4	1M
Chlorobenzene	3,220	70		ug/kg	68	108-90-7	1
1,1,1,2-Tetrachloroethane	3,300	100		ug/kg	68	630-20-6	1
Ethylbenzene	3,310	70		ug/kg	68	100-41-4	1
p,m-Xylene	6,500	100		ug/kg	68		1
o-Xylene	3,280	70		ug/kg	68	95-47-6	1
Styrene	3,260	70		ug/kg	68	100-42-5	1
Isopropylbenzene	3,300	300		ug/kg	68	98-82-8	1
Bromoform	3,200	100		ug/kg	68	75-25-2	1
1,1,2,2-Tetrachloroethane	3,230	70		ug/kg	68	79-34-5	1
1,2,3-Trichloropropane	3,300	100		ug/kg	68	96-18-4	1
n-Propylbenzene	3,360	70		ug/kg	68	103-65-1	1
Bromobenzene	3,300	100		ug/kg	68	108-86-1	1
1,3,5-Trimethylbenzene	3,260	70		ug/kg	68	108-67-8	1
tert-Butylbenzene	3,240	70		ug/kg	68	98-06-6	1
1,2,4-Trimethylbenzene	3,260	70		ug/kg	68	95-63-6	1

1-Spiked at 3.4mg/kg

M-Result reported to MDL not RDL

Lab Sample ID: S23782.18 (continued)

Sample Tag: JS-SB-07_SO-042921(12.4-13.4) MSD

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 13:35, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
sec-Butylbenzene	3,310	70		ug/kg	68	135-98-8	1
p-Isopropyltoluene	3,300	100		ug/kg	68	99-87-6	1
1,3-Dichlorobenzene	3,300	100		ug/kg	68	541-73-1	1
1,4-Dichlorobenzene	3,400	100		ug/kg	68	106-46-7	1
1,2-Dichlorobenzene	3,300	100		ug/kg	68	95-50-1	1
1,2,3-Trimethylbenzene	3,280	70		ug/kg	68	526-73-8	1
n-Butylbenzene	3,390	70		ug/kg	68	104-51-8	1
Hexachloroethane	3,500	400		ug/kg	68	67-72-1	1
1,2-Dibromo-3-chloropropane	3,000	300		ug/kg	68	96-12-8	1
1,2,4-Trichlorobenzene	3,320	450		ug/kg	68	120-82-1	1
1,2,3-Trichlorobenzene	3,260	450		ug/kg	68	87-61-6	1
Naphthalene	3,100	300		ug/kg	68	91-20-3	1
2-Methylnaphthalene	3,400	100		ug/kg	68	91-57-6	1

1-Spiked at 3.4mg/kg

Lab Sample ID: S23782.19
Sample Tag: DUP-01_SO-042921
Collected Date/Time: 04/29/2021 00:01
Matrix: Soil
COC Reference: 137338

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	6.0	IR
1	40ml Glass	MeOH	Yes	6.0	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	05/05/21 17:30	TTV	
Sample wt. (g) / Methanol (ml)*	9.813/10	SW5035A	05/05/21 10:19	HAS	

Inorganics

Method: SM2540B, Run Date: 05/04/21 17:40, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	89	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 05/05/21 21:06, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	300		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8	
Anthracene	Not detected	300		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2	
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9	
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2	
Chrysene	Not detected	300		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3	
Fluoranthene	Not detected	300		ug/kg	10	206-44-0	
Fluorene	Not detected	300		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5	
Naphthalene	Not detected	300		ug/kg	10	91-20-3	
Phenanthrene	Not detected	300		ug/kg	10	85-01-8	
Pyrene	Not detected	300		ug/kg	10	129-00-0	
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6	
1-Methylnaphthalene	Not detected	300		ug/kg	10	90-12-0	

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 16:59, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	300		ug/kg	63.4	60-29-7	
Acetone	Not detected	1,000		ug/kg	63.4	67-64-1	
Methyl iodide	Not detected	100		ug/kg	63.4	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	63.4	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	300		ug/kg	63.4	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	63.4	107-13-1	
2-Butanone (MEK)	Not detected	950		ug/kg	63.4	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	63.4	75-71-8	

Lab Sample ID: S23782.19 (continued)
Sample Tag: DUP-01_SO-042921

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 16:59, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chloromethane	Not detected	300		ug/kg	63.4	74-87-3	
Vinyl chloride	Not detected	60		ug/kg	63.4	75-01-4	
Bromomethane	Not detected	300		ug/kg	63.4	74-83-9	
Chloroethane	Not detected	300		ug/kg	63.4	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	63.4	75-69-4	
1,1-Dichloroethene	Not detected	60		ug/kg	63.4	75-35-4	
Methylene chloride	Not detected	100		ug/kg	63.4	75-09-2	
trans-1,2-Dichloroethene	Not detected	60		ug/kg	63.4	156-60-5	
1,1-Dichloroethane	Not detected	60		ug/kg	63.4	75-34-3	
cis-1,2-Dichloroethene	Not detected	60		ug/kg	63.4	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	63.4	109-99-9	
Chloroform	Not detected	60		ug/kg	63.4	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	63.4	74-97-5	
1,1,1-Trichloroethane	Not detected	60		ug/kg	63.4	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	63.4	108-10-1	
2-Hexanone	Not detected	3,000		ug/kg	63.4	591-78-6	
Carbon tetrachloride	Not detected	60		ug/kg	63.4	56-23-5	
Benzene	Not detected	60		ug/kg	63.4	71-43-2	
1,2-Dichloroethane	Not detected	60		ug/kg	63.4	107-06-2	
Trichloroethene	Not detected	60		ug/kg	63.4	79-01-6	
1,2-Dichloropropane	Not detected	60		ug/kg	63.4	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg	63.4	75-27-4	
Dibromomethane	Not detected	300		ug/kg	63.4	74-95-3	
cis-1,3-Dichloropropene	Not detected	60		ug/kg	63.4	10061-01-5	
Toluene	Not detected	60		ug/kg	63.4	108-88-3	
trans-1,3-Dichloropropene	Not detected	60		ug/kg	63.4	10061-02-6	
1,1,2-Trichloroethane	Not detected	60		ug/kg	63.4	79-00-5	
Tetrachloroethene	Not detected	60		ug/kg	63.4	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	60		ug/kg	63.4	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	63.4	124-48-1	
1,2-Dibromoethane	Not detected	30		ug/kg	63.4	106-93-4	M
Chlorobenzene	Not detected	60		ug/kg	63.4	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	63.4	630-20-6	
Ethylbenzene	Not detected	60		ug/kg	63.4	100-41-4	
p,m-Xylene	Not detected	100		ug/kg	63.4		
o-Xylene	Not detected	60		ug/kg	63.4	95-47-6	
Styrene	Not detected	60		ug/kg	63.4	100-42-5	
Isopropylbenzene	Not detected	300		ug/kg	63.4	98-82-8	
Bromoform	Not detected	100		ug/kg	63.4	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	60		ug/kg	63.4	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	63.4	96-18-4	
n-Propylbenzene	Not detected	60		ug/kg	63.4	103-65-1	
Bromobenzene	Not detected	100		ug/kg	63.4	108-86-1	
1,3,5-Trimethylbenzene	Not detected	60		ug/kg	63.4	108-67-8	
tert-Butylbenzene	Not detected	60		ug/kg	63.4	98-06-6	
1,2,4-Trimethylbenzene	Not detected	60		ug/kg	63.4	95-63-6	
sec-Butylbenzene	Not detected	60		ug/kg	63.4	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg	63.4	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg	63.4	541-73-1	

M-Result reported to MDL not RDL

Lab Sample ID: S23782.19 (continued)

Sample Tag: DUP-01_SO-042921

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 16:59, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,4-Dichlorobenzene	Not detected	100		ug/kg	63.4	106-46-7	
1,2-Dichlorobenzene	Not detected	100		ug/kg	63.4	95-50-1	
1,2,3-Trimethylbenzene	Not detected	60		ug/kg	63.4	526-73-8	
n-Butylbenzene	Not detected	60		ug/kg	63.4	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	63.4	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	63.4	96-12-8	
1,2,4-Trichlorobenzene	Not detected	420		ug/kg	63.4	120-82-1	
1,2,3-Trichlorobenzene	Not detected	420		ug/kg	63.4	87-61-6	
Naphthalene	Not detected	300		ug/kg	63.4	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	63.4	91-57-6	

Lab Sample ID: S23782.20
Sample Tag: JS-SB-08_SO-042921(4.2-5.2)
Collected Date/Time: 04/29/2021 10:30
Matrix: Soil
COC Reference: 137338

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	6.0	IR
1	40ml Glass	MeOH	Yes	6.0	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	05/05/21 17:30	TTV	
Sample wt. (g) / Methanol (ml)*	9.418/10	SW5035A	05/05/21 10:19	HAS	

Inorganics

Method: SM2540B, Run Date: 05/04/21 17:40, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	84	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 05/05/21 21:25, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	300		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8	
Anthracene	Not detected	300		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2	
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9	
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2	
Chrysene	Not detected	300		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3	
Fluoranthene	Not detected	300		ug/kg	10	206-44-0	
Fluorene	Not detected	300		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5	
Naphthalene	Not detected	300		ug/kg	10	91-20-3	
Phenanthrene	Not detected	300		ug/kg	10	85-01-8	
Pyrene	Not detected	300		ug/kg	10	129-00-0	
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6	
1-Methylnaphthalene	Not detected	300		ug/kg	10	90-12-0	

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 17:21, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	300		ug/kg	72.7	60-29-7	
Acetone	Not detected	1,000		ug/kg	72.7	67-64-1	
Methyl iodide	Not detected	100		ug/kg	72.7	74-88-4	
Carbon disulfide	Not detected	400		ug/kg	72.7	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	300		ug/kg	72.7	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	72.7	107-13-1	
2-Butanone (MEK)	Not detected	1,100		ug/kg	72.7	78-93-3	
Dichlorodifluoromethane	Not detected	400		ug/kg	72.7	75-71-8	

Lab Sample ID: S23782.20 (continued)
Sample Tag: JS-SB-08_SO-042921(4.2-5.2)

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 17:21, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chloromethane	Not detected	400		ug/kg	72.7	74-87-3	
Vinyl chloride	Not detected	70		ug/kg	72.7	75-01-4	
Bromomethane	Not detected	300		ug/kg	72.7	74-83-9	
Chloroethane	Not detected	400		ug/kg	72.7	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	72.7	75-69-4	
1,1-Dichloroethene	Not detected	70		ug/kg	72.7	75-35-4	
Methylene chloride	Not detected	100		ug/kg	72.7	75-09-2	
trans-1,2-Dichloroethene	Not detected	70		ug/kg	72.7	156-60-5	
1,1-Dichloroethane	Not detected	70		ug/kg	72.7	75-34-3	
cis-1,2-Dichloroethene	Not detected	70		ug/kg	72.7	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	72.7	109-99-9	
Chloroform	Not detected	70		ug/kg	72.7	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	72.7	74-97-5	
1,1,1-Trichloroethane	Not detected	70		ug/kg	72.7	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	4,000		ug/kg	72.7	108-10-1	
2-Hexanone	Not detected	4,000		ug/kg	72.7	591-78-6	
Carbon tetrachloride	Not detected	70		ug/kg	72.7	56-23-5	
Benzene	Not detected	70		ug/kg	72.7	71-43-2	
1,2-Dichloroethane	Not detected	70		ug/kg	72.7	107-06-2	
Trichloroethene	Not detected	70		ug/kg	72.7	79-01-6	
1,2-Dichloropropane	Not detected	70		ug/kg	72.7	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg	72.7	75-27-4	
Dibromomethane	Not detected	400		ug/kg	72.7	74-95-3	
cis-1,3-Dichloropropene	Not detected	70		ug/kg	72.7	10061-01-5	
Toluene	Not detected	70		ug/kg	72.7	108-88-3	
trans-1,3-Dichloropropene	Not detected	70		ug/kg	72.7	10061-02-6	
1,1,2-Trichloroethane	Not detected	70		ug/kg	72.7	79-00-5	
Tetrachloroethene	Not detected	70		ug/kg	72.7	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	70		ug/kg	72.7	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	72.7	124-48-1	
1,2-Dibromoethane	Not detected	30		ug/kg	72.7	106-93-4	M
Chlorobenzene	Not detected	70		ug/kg	72.7	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	72.7	630-20-6	
Ethylbenzene	Not detected	70		ug/kg	72.7	100-41-4	
p,m-Xylene	Not detected	100		ug/kg	72.7		
o-Xylene	Not detected	70		ug/kg	72.7	95-47-6	
Styrene	Not detected	70		ug/kg	72.7	100-42-5	
Isopropylbenzene	Not detected	400		ug/kg	72.7	98-82-8	
Bromoform	Not detected	100		ug/kg	72.7	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	70		ug/kg	72.7	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	72.7	96-18-4	
n-Propylbenzene	Not detected	70		ug/kg	72.7	103-65-1	
Bromobenzene	Not detected	100		ug/kg	72.7	108-86-1	
1,3,5-Trimethylbenzene	Not detected	70		ug/kg	72.7	108-67-8	
tert-Butylbenzene	Not detected	70		ug/kg	72.7	98-06-6	
1,2,4-Trimethylbenzene	Not detected	70		ug/kg	72.7	95-63-6	
sec-Butylbenzene	Not detected	70		ug/kg	72.7	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg	72.7	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg	72.7	541-73-1	

M-Result reported to MDL not RDL

Lab Sample ID: S23782.20 (continued)

Sample Tag: JS-SB-08_SO-042921(4.2-5.2)

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 17:21, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,4-Dichlorobenzene	Not detected	100		ug/kg	72.7	106-46-7	
1,2-Dichlorobenzene	Not detected	100		ug/kg	72.7	95-50-1	
1,2,3-Trimethylbenzene	Not detected	70		ug/kg	72.7	526-73-8	
n-Butylbenzene	Not detected	70		ug/kg	72.7	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	72.7	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	400		ug/kg	72.7	96-12-8	
1,2,4-Trichlorobenzene	Not detected	480		ug/kg	72.7	120-82-1	
1,2,3-Trichlorobenzene	Not detected	480		ug/kg	72.7	87-61-6	
Naphthalene	Not detected	400		ug/kg	72.7	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	72.7	91-57-6	

Lab Sample ID: S23782.21
Sample Tag: DUP-02_SO-042921
Collected Date/Time: 04/29/2021 00:01
Matrix: Soil
COC Reference: 137338

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	6.0	IR
1	40ml Glass	MeOH	Yes	6.0	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	05/05/21 17:30	TTV	
Sample wt. (g) / Methanol (ml)*	10.068/10	SW5035A	05/05/21 10:19	HAS	

Inorganics

Method: SM2540B, Run Date: 05/04/21 17:40, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	85	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 05/05/21 21:43, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	300		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8	
Anthracene	Not detected	300		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2	
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9	
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2	
Chrysene	Not detected	300		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3	
Fluoranthene	Not detected	300		ug/kg	10	206-44-0	
Fluorene	Not detected	300		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5	
Naphthalene	Not detected	300		ug/kg	10	91-20-3	
Phenanthrene	Not detected	300		ug/kg	10	85-01-8	
Pyrene	Not detected	300		ug/kg	10	129-00-0	
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6	
1-Methylnaphthalene	Not detected	300		ug/kg	10	90-12-0	

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 17:44, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	300		ug/kg	67.2	60-29-7	
Acetone	Not detected	1,000		ug/kg	67.2	67-64-1	
Methyl iodide	Not detected	100		ug/kg	67.2	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	67.2	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	300		ug/kg	67.2	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	67.2	107-13-1	
2-Butanone (MEK)	Not detected	1,000		ug/kg	67.2	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	67.2	75-71-8	

Lab Sample ID: S23782.21 (continued)
Sample Tag: DUP-02_SO-042921

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 17:44, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chloromethane	Not detected	300		ug/kg	67.2	74-87-3	
Vinyl chloride	Not detected	70		ug/kg	67.2	75-01-4	
Bromomethane	Not detected	300		ug/kg	67.2	74-83-9	
Chloroethane	Not detected	300		ug/kg	67.2	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	67.2	75-69-4	
1,1-Dichloroethene	Not detected	70		ug/kg	67.2	75-35-4	
Methylene chloride	Not detected	100		ug/kg	67.2	75-09-2	
trans-1,2-Dichloroethene	Not detected	70		ug/kg	67.2	156-60-5	
1,1-Dichloroethane	Not detected	70		ug/kg	67.2	75-34-3	
cis-1,2-Dichloroethene	Not detected	70		ug/kg	67.2	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	67.2	109-99-9	
Chloroform	Not detected	70		ug/kg	67.2	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	67.2	74-97-5	
1,1,1-Trichloroethane	Not detected	70		ug/kg	67.2	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	67.2	108-10-1	
2-Hexanone	Not detected	3,000		ug/kg	67.2	591-78-6	
Carbon tetrachloride	Not detected	70		ug/kg	67.2	56-23-5	
Benzene	Not detected	70		ug/kg	67.2	71-43-2	
1,2-Dichloroethane	Not detected	70		ug/kg	67.2	107-06-2	
Trichloroethene	Not detected	70		ug/kg	67.2	79-01-6	
1,2-Dichloropropane	Not detected	70		ug/kg	67.2	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg	67.2	75-27-4	
Dibromomethane	Not detected	300		ug/kg	67.2	74-95-3	
cis-1,3-Dichloropropene	Not detected	70		ug/kg	67.2	10061-01-5	
Toluene	Not detected	70		ug/kg	67.2	108-88-3	
trans-1,3-Dichloropropene	Not detected	70		ug/kg	67.2	10061-02-6	
1,1,2-Trichloroethane	Not detected	70		ug/kg	67.2	79-00-5	
Tetrachloroethene	Not detected	70		ug/kg	67.2	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	70		ug/kg	67.2	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	67.2	124-48-1	
1,2-Dibromoethane	Not detected	30		ug/kg	67.2	106-93-4	M
Chlorobenzene	Not detected	70		ug/kg	67.2	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	67.2	630-20-6	
Ethylbenzene	Not detected	70		ug/kg	67.2	100-41-4	
p,m-Xylene	Not detected	100		ug/kg	67.2		
o-Xylene	Not detected	70		ug/kg	67.2	95-47-6	
Styrene	Not detected	70		ug/kg	67.2	100-42-5	
Isopropylbenzene	Not detected	300		ug/kg	67.2	98-82-8	
Bromoform	Not detected	100		ug/kg	67.2	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	70		ug/kg	67.2	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	67.2	96-18-4	
n-Propylbenzene	Not detected	70		ug/kg	67.2	103-65-1	
Bromobenzene	Not detected	100		ug/kg	67.2	108-86-1	
1,3,5-Trimethylbenzene	Not detected	70		ug/kg	67.2	108-67-8	
tert-Butylbenzene	Not detected	70		ug/kg	67.2	98-06-6	
1,2,4-Trimethylbenzene	Not detected	70		ug/kg	67.2	95-63-6	
sec-Butylbenzene	Not detected	70		ug/kg	67.2	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg	67.2	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg	67.2	541-73-1	

M-Result reported to MDL not RDL

Lab Sample ID: S23782.21 (continued)

Sample Tag: DUP-02_SO-042921

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 17:44, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,4-Dichlorobenzene	Not detected	100		ug/kg	67.2	106-46-7	
1,2-Dichlorobenzene	Not detected	100		ug/kg	67.2	95-50-1	
1,2,3-Trimethylbenzene	Not detected	70		ug/kg	67.2	526-73-8	
n-Butylbenzene	Not detected	70		ug/kg	67.2	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	67.2	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	67.2	96-12-8	
1,2,4-Trichlorobenzene	Not detected	440		ug/kg	67.2	120-82-1	
1,2,3-Trichlorobenzene	Not detected	440		ug/kg	67.2	87-61-6	
Naphthalene	Not detected	300		ug/kg	67.2	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	67.2	91-57-6	

Lab Sample ID: S23782.22
Sample Tag: JS-SB-09_SO-043021(9-10)
Collected Date/Time: 04/30/2021 09:05
Matrix: Soil
COC Reference: 137338

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	6.0	IR
1	40ml Glass	MeOH	Yes	6.0	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	05/07/21 17:00	JWR	
Sample wt. (g) / Methanol (ml)*	10.085/10	SW5035A	05/05/21 10:19	HAS	

Inorganics

Method: SM2540B, Run Date: 05/04/21 17:40, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	88	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 05/07/21 20:08, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	300		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8	
Anthracene	Not detected	300		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2	
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9	
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2	
Chrysene	Not detected	300		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3	
Fluoranthene	Not detected	300		ug/kg	10	206-44-0	
Fluorene	Not detected	300		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5	
Naphthalene	1,500	300		ug/kg	10	91-20-3	
Phenanthrene	Not detected	300		ug/kg	10	85-01-8	
Pyrene	Not detected	300		ug/kg	10	129-00-0	
2-Methylnaphthalene	1,000	300		ug/kg	10	91-57-6	
1-Methylnaphthalene	500	300		ug/kg	10	90-12-0	

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 18:07, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	3,000		ug/kg	632	60-29-7	Y
Acetone	Not detected	10,000		ug/kg	632	67-64-1	Y
Methyl iodide	Not detected	1,000		ug/kg	632	74-88-4	Y
Carbon disulfide	Not detected	3,000		ug/kg	632	75-15-0	Y
tert-Methyl butyl ether (MTBE)	Not detected	3,000		ug/kg	632	1634-04-4	Y
Acrylonitrile	Not detected	1,000		ug/kg	632	107-13-1	Y
2-Butanone (MEK)	Not detected	9,500		ug/kg	632	78-93-3	Y

Y-Elevated reporting limit due to high target concentration

Lab Sample ID: S23782.22 (continued)
Sample Tag: JS-SB-09_SO-043021(9-10)

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 18:07, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Dichlorodifluoromethane	Not detected	3,000		ug/kg	632	75-71-8	Y
Chloromethane	Not detected	3,000		ug/kg	632	74-87-3	Y
Vinyl chloride	Not detected	600		ug/kg	632	75-01-4	Y
Bromomethane	Not detected	3,000		ug/kg	632	74-83-9	Y
Chloroethane	Not detected	3,000		ug/kg	632	75-00-3	Y
Trichlorofluoromethane	Not detected	1,000		ug/kg	632	75-69-4	Y
1,1-Dichloroethene	Not detected	600		ug/kg	632	75-35-4	Y
Methylene chloride	Not detected	1,000		ug/kg	632	75-09-2	Y
trans-1,2-Dichloroethene	Not detected	600		ug/kg	632	156-60-5	Y
1,1-Dichloroethane	Not detected	600		ug/kg	632	75-34-3	Y
cis-1,2-Dichloroethene	Not detected	600		ug/kg	632	156-59-2	Y
Tetrahydrofuran*	Not detected	10,000		ug/kg	632	109-99-9	Y
Chloroform	Not detected	600		ug/kg	632	67-66-3	Y
Bromochloromethane	Not detected	1,000		ug/kg	632	74-97-5	Y
1,1,1-Trichloroethane	Not detected	600		ug/kg	632	71-55-6	Y
4-Methyl-2-pentanone (MIBK)	Not detected	30,000		ug/kg	632	108-10-1	Y
2-Hexanone	Not detected	30,000		ug/kg	632	591-78-6	Y
Carbon tetrachloride	Not detected	600		ug/kg	632	56-23-5	Y
Benzene	Not detected	600		ug/kg	632	71-43-2	Y
1,2-Dichloroethane	Not detected	600		ug/kg	632	107-06-2	Y
Trichloroethene	Not detected	600		ug/kg	632	79-01-6	Y
1,2-Dichloropropane	Not detected	600		ug/kg	632	78-87-5	Y
Bromodichloromethane	Not detected	1,000		ug/kg	632	75-27-4	Y
Dibromomethane	Not detected	3,000		ug/kg	632	74-95-3	Y
cis-1,3-Dichloropropene	Not detected	600		ug/kg	632	10061-01-5	Y
Toluene	Not detected	600		ug/kg	632	108-88-3	Y
trans-1,3-Dichloropropene	Not detected	600		ug/kg	632	10061-02-6	Y
1,1,2-Trichloroethane	Not detected	600		ug/kg	632	79-00-5	Y
Tetrachloroethene	Not detected	600		ug/kg	632	127-18-4	Y
trans-1,4-Dichloro-2-butene	Not detected	600		ug/kg	632	110-57-6	Y
Dibromochloromethane	Not detected	1,000		ug/kg	632	124-48-1	Y
1,2-Dibromoethane	Not detected	300		ug/kg	632	106-93-4	YM
Chlorobenzene	Not detected	600		ug/kg	632	108-90-7	Y
1,1,1,2-Tetrachloroethane	Not detected	1,000		ug/kg	632	630-20-6	Y
Ethylbenzene	2,100	600		ug/kg	632	100-41-4	Y
p,m-Xylene	3,000	1,000		ug/kg	632		Y
o-Xylene	Not detected	600		ug/kg	632	95-47-6	Y
Styrene	Not detected	600		ug/kg	632	100-42-5	Y
Isopropylbenzene	Not detected	3,000		ug/kg	632	98-82-8	Y
Bromoform	Not detected	1,000		ug/kg	632	75-25-2	Y
1,1,2,2-Tetrachloroethane	Not detected	600		ug/kg	632	79-34-5	Y
1,2,3-Trichloropropane	Not detected	1,000		ug/kg	632	96-18-4	Y
n-Propylbenzene	1,900	600		ug/kg	632	103-65-1	Y
Bromobenzene	Not detected	1,000		ug/kg	632	108-86-1	Y
1,3,5-Trimethylbenzene	Not detected	600		ug/kg	632	108-67-8	Y
tert-Butylbenzene	Not detected	600		ug/kg	632	98-06-6	Y
1,2,4-Trimethylbenzene	11,400	600		ug/kg	632	95-63-6	Y
sec-Butylbenzene	Not detected	600		ug/kg	632	135-98-8	Y

Y-Elevated reporting limit due to high target concentration
M-Result reported to MDL not RDL

Lab Sample ID: S23782.22 (continued)

Sample Tag: JS-SB-09_SO-043021(9-10)

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 18:07, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
p-Isopropyltoluene	Not detected	1,000		ug/kg	632	99-87-6	Y
1,3-Dichlorobenzene	Not detected	1,000		ug/kg	632	541-73-1	Y
1,4-Dichlorobenzene	Not detected	1,000		ug/kg	632	106-46-7	Y
1,2-Dichlorobenzene	Not detected	1,000		ug/kg	632	95-50-1	Y
1,2,3-Trimethylbenzene	1,700	600		ug/kg	632	526-73-8	Y
n-Butylbenzene	800	600		ug/kg	632	104-51-8	Y
Hexachloroethane	Not detected	4,000		ug/kg	632	67-72-1	Y
1,2-Dibromo-3-chloropropane	Not detected	3,000		ug/kg	632	96-12-8	Y
1,2,4-Trichlorobenzene	Not detected	4,200		ug/kg	632	120-82-1	Y
1,2,3-Trichlorobenzene	Not detected	4,200		ug/kg	632	87-61-6	Y
Naphthalene	Not detected	3,000		ug/kg	632	91-20-3	Y
2-Methylnaphthalene	1,000	1,000		ug/kg	632	91-57-6	Y

Y-Elevated reporting limit due to high target concentration

Lab Sample ID: S23782.23
Sample Tag: JS-SB-09_SO-043021(10-11)
Collected Date/Time: 04/30/2021 09:00
Matrix: Soil
COC Reference: 137338

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	6.0	IR
1	40ml Glass	MeOH	Yes	6.0	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	05/07/21 17:00	JWR	
Sample wt. (g) / Methanol (ml)*	10.862/10	SW5035A	05/05/21 10:19	HAS	

Inorganics

Method: SM2540B, Run Date: 05/04/21 17:40, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	88	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 05/07/21 20:26, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	300		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8	
Anthracene	Not detected	300		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2	
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9	
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2	
Chrysene	Not detected	300		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3	
Fluoranthene	Not detected	300		ug/kg	10	206-44-0	
Fluorene	Not detected	300		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5	
Naphthalene	700	300		ug/kg	10	91-20-3	
Phenanthrene	Not detected	300		ug/kg	10	85-01-8	
Pyrene	Not detected	300		ug/kg	10	129-00-0	
2-Methylnaphthalene	500	300		ug/kg	10	91-57-6	
1-Methylnaphthalene	Not detected	300		ug/kg	10	90-12-0	

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 18:29, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	200		ug/kg	59.1	60-29-7	
Acetone	Not detected	1,000		ug/kg	59.1	67-64-1	
Methyl iodide	Not detected	100		ug/kg	59.1	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	59.1	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	200		ug/kg	59.1	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	59.1	107-13-1	
2-Butanone (MEK)	Not detected	890		ug/kg	59.1	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	59.1	75-71-8	

Lab Sample ID: S23782.23 (continued)
Sample Tag: JS-SB-09_SO-043021(10-11)

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 18:29, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chloromethane	Not detected	300		ug/kg	59.1	74-87-3	
Vinyl chloride	Not detected	60		ug/kg	59.1	75-01-4	
Bromomethane	Not detected	200		ug/kg	59.1	74-83-9	
Chloroethane	Not detected	300		ug/kg	59.1	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	59.1	75-69-4	
1,1-Dichloroethene	Not detected	60		ug/kg	59.1	75-35-4	
Methylene chloride	Not detected	100		ug/kg	59.1	75-09-2	
trans-1,2-Dichloroethene	Not detected	60		ug/kg	59.1	156-60-5	
1,1-Dichloroethane	Not detected	60		ug/kg	59.1	75-34-3	
cis-1,2-Dichloroethene	Not detected	60		ug/kg	59.1	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	59.1	109-99-9	
Chloroform	Not detected	60		ug/kg	59.1	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	59.1	74-97-5	
1,1,1-Trichloroethane	Not detected	60		ug/kg	59.1	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	59.1	108-10-1	
2-Hexanone	Not detected	3,000		ug/kg	59.1	591-78-6	
Carbon tetrachloride	Not detected	60		ug/kg	59.1	56-23-5	
Benzene	450	60		ug/kg	59.1	71-43-2	
1,2-Dichloroethane	Not detected	60		ug/kg	59.1	107-06-2	
Trichloroethene	Not detected	60		ug/kg	59.1	79-01-6	
1,2-Dichloropropane	Not detected	60		ug/kg	59.1	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg	59.1	75-27-4	
Dibromomethane	Not detected	300		ug/kg	59.1	74-95-3	
cis-1,3-Dichloropropene	Not detected	60		ug/kg	59.1	10061-01-5	
Toluene	Not detected	60		ug/kg	59.1	108-88-3	
trans-1,3-Dichloropropene	Not detected	60		ug/kg	59.1	10061-02-6	
1,1,2-Trichloroethane	Not detected	60		ug/kg	59.1	79-00-5	
Tetrachloroethene	Not detected	60		ug/kg	59.1	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	60		ug/kg	59.1	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	59.1	124-48-1	
1,2-Dibromoethane	Not detected	20		ug/kg	59.1	106-93-4	M
Chlorobenzene	Not detected	60		ug/kg	59.1	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	59.1	630-20-6	
Ethylbenzene	4,770	60		ug/kg	59.1	100-41-4	
p,m-Xylene	4,500	100		ug/kg	59.1		
o-Xylene	100	60		ug/kg	59.1	95-47-6	
Styrene	Not detected	60		ug/kg	59.1	100-42-5	
Isopropylbenzene	Not detected	300		ug/kg	59.1	98-82-8	
Bromoform	Not detected	100		ug/kg	59.1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	60		ug/kg	59.1	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	59.1	96-18-4	
n-Propylbenzene	1,490	60		ug/kg	59.1	103-65-1	
Bromobenzene	Not detected	100		ug/kg	59.1	108-86-1	
1,3,5-Trimethylbenzene	680	60		ug/kg	59.1	108-67-8	
tert-Butylbenzene	Not detected	60		ug/kg	59.1	98-06-6	
1,2,4-Trimethylbenzene	5,090	60		ug/kg	59.1	95-63-6	
sec-Butylbenzene	100	60		ug/kg	59.1	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg	59.1	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg	59.1	541-73-1	

M-Result reported to MDL not RDL

Lab Sample ID: S23782.23 (continued)

Sample Tag: JS-SB-09_SO-043021(10-11)

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 18:29, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,4-Dichlorobenzene	Not detected	100		ug/kg	59.1	106-46-7	
1,2-Dichlorobenzene	Not detected	100		ug/kg	59.1	95-50-1	
1,2,3-Trimethylbenzene	2,040	60		ug/kg	59.1	526-73-8	
n-Butylbenzene	510	60		ug/kg	59.1	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	59.1	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	59.1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	390		ug/kg	59.1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	390		ug/kg	59.1	87-61-6	
Naphthalene	1,600	300		ug/kg	59.1	91-20-3	
2-Methylnaphthalene	900	100		ug/kg	59.1	91-57-6	

Lab Sample ID: S23782.24
Sample Tag: JS-SB-10_SO-043021(14-15)
Collected Date/Time: 04/30/2021 10:30
Matrix: Soil
COC Reference: 137338

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	6.0	IR
1	40ml Glass	MeOH	Yes	6.0	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	05/07/21 17:00	JWR	
Sample wt. (g) / Methanol (ml)*	10.200/10	SW5035A	05/05/21 10:19	HAS	

Inorganics

Method: SM2540B, Run Date: 05/04/21 17:40, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	91	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 05/07/21 20:44, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	300		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8	
Anthracene	Not detected	300		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2	
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9	
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2	
Chrysene	Not detected	300		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3	
Fluoranthene	Not detected	300		ug/kg	10	206-44-0	
Fluorene	Not detected	300		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5	
Naphthalene	Not detected	300		ug/kg	10	91-20-3	
Phenanthrene	Not detected	300		ug/kg	10	85-01-8	
Pyrene	Not detected	300		ug/kg	10	129-00-0	
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6	
1-Methylnaphthalene	Not detected	300		ug/kg	10	90-12-0	

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 18:52, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	200		ug/kg	58.8	60-29-7	
Acetone	Not detected	1,000		ug/kg	58.8	67-64-1	
Methyl iodide	Not detected	100		ug/kg	58.8	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	58.8	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	200		ug/kg	58.8	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	58.8	107-13-1	
2-Butanone (MEK)	Not detected	880		ug/kg	58.8	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	58.8	75-71-8	

Lab Sample ID: S23782.24 (continued)
Sample Tag: JS-SB-10_SO-043021(14-15)

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 18:52, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chloromethane	Not detected	300		ug/kg	58.8	74-87-3	
Vinyl chloride	Not detected	60		ug/kg	58.8	75-01-4	
Bromomethane	Not detected	200		ug/kg	58.8	74-83-9	
Chloroethane	Not detected	300		ug/kg	58.8	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	58.8	75-69-4	
1,1-Dichloroethene	Not detected	60		ug/kg	58.8	75-35-4	
Methylene chloride	Not detected	100		ug/kg	58.8	75-09-2	
trans-1,2-Dichloroethene	Not detected	60		ug/kg	58.8	156-60-5	
1,1-Dichloroethane	Not detected	60		ug/kg	58.8	75-34-3	
cis-1,2-Dichloroethene	Not detected	60		ug/kg	58.8	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	58.8	109-99-9	
Chloroform	Not detected	60		ug/kg	58.8	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	58.8	74-97-5	
1,1,1-Trichloroethane	Not detected	60		ug/kg	58.8	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	58.8	108-10-1	
2-Hexanone	Not detected	3,000		ug/kg	58.8	591-78-6	
Carbon tetrachloride	Not detected	60		ug/kg	58.8	56-23-5	
Benzene	Not detected	60		ug/kg	58.8	71-43-2	
1,2-Dichloroethane	110	60		ug/kg	58.8	107-06-2	
Trichloroethene	Not detected	60		ug/kg	58.8	79-01-6	
1,2-Dichloropropane	Not detected	60		ug/kg	58.8	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg	58.8	75-27-4	
Dibromomethane	Not detected	300		ug/kg	58.8	74-95-3	
cis-1,3-Dichloropropene	Not detected	60		ug/kg	58.8	10061-01-5	
Toluene	Not detected	60		ug/kg	58.8	108-88-3	
trans-1,3-Dichloropropene	Not detected	60		ug/kg	58.8	10061-02-6	
1,1,2-Trichloroethane	Not detected	60		ug/kg	58.8	79-00-5	
Tetrachloroethene	Not detected	60		ug/kg	58.8	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	60		ug/kg	58.8	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	58.8	124-48-1	
1,2-Dibromoethane	Not detected	20		ug/kg	58.8	106-93-4	M
Chlorobenzene	Not detected	60		ug/kg	58.8	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	58.8	630-20-6	
Ethylbenzene	Not detected	60		ug/kg	58.8	100-41-4	
p,m-Xylene	Not detected	100		ug/kg	58.8		
o-Xylene	Not detected	60		ug/kg	58.8	95-47-6	
Styrene	Not detected	60		ug/kg	58.8	100-42-5	
Isopropylbenzene	Not detected	300		ug/kg	58.8	98-82-8	
Bromoform	Not detected	100		ug/kg	58.8	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	60		ug/kg	58.8	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	58.8	96-18-4	
n-Propylbenzene	Not detected	60		ug/kg	58.8	103-65-1	
Bromobenzene	Not detected	100		ug/kg	58.8	108-86-1	
1,3,5-Trimethylbenzene	Not detected	60		ug/kg	58.8	108-67-8	
tert-Butylbenzene	Not detected	60		ug/kg	58.8	98-06-6	
1,2,4-Trimethylbenzene	Not detected	60		ug/kg	58.8	95-63-6	
sec-Butylbenzene	Not detected	60		ug/kg	58.8	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg	58.8	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg	58.8	541-73-1	

M-Result reported to MDL not RDL

Lab Sample ID: S23782.24 (continued)
Sample Tag: JS-SB-10_SO-043021(14-15)

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 18:52, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,4-Dichlorobenzene	Not detected	100		ug/kg	58.8	106-46-7	
1,2-Dichlorobenzene	Not detected	100		ug/kg	58.8	95-50-1	
1,2,3-Trimethylbenzene	Not detected	60		ug/kg	58.8	526-73-8	
n-Butylbenzene	Not detected	60		ug/kg	58.8	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	58.8	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	58.8	96-12-8	
1,2,4-Trichlorobenzene	Not detected	390		ug/kg	58.8	120-82-1	
1,2,3-Trichlorobenzene	Not detected	390		ug/kg	58.8	87-61-6	
Naphthalene	Not detected	300		ug/kg	58.8	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	58.8	91-57-6	

Lab Sample ID: S23782.25
Sample Tag: JS-SB-11_SO-043021(12.4-13.4)
Collected Date/Time: 04/30/2021 11:40
Matrix: Soil
COC Reference: 137338

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	6.0	IR
1	40ml Glass	MeOH	Yes	6.0	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	05/07/21 17:00	JWR	
Sample wt. (g) / Methanol (ml)*	10.343/10	SW5035A	05/05/21 10:19	HAS	

Inorganics

Method: SM2540B, Run Date: 05/04/21 17:40, Analyst: ELR

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	90	1		%	1		

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 05/07/21 21:02, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	300		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8	
Anthracene	Not detected	300		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2	
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9	
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2	
Chrysene	Not detected	300		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3	
Fluoranthene	Not detected	300		ug/kg	10	206-44-0	
Fluorene	Not detected	300		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5	
Naphthalene	Not detected	300		ug/kg	10	91-20-3	
Phenanthrene	Not detected	300		ug/kg	10	85-01-8	
Pyrene	Not detected	300		ug/kg	10	129-00-0	
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6	
1-Methylnaphthalene	Not detected	300		ug/kg	10	90-12-0	

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 19:14, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	200		ug/kg	59.3	60-29-7	
Acetone	Not detected	1,000		ug/kg	59.3	67-64-1	
Methyl iodide	Not detected	100		ug/kg	59.3	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	59.3	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	200		ug/kg	59.3	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	59.3	107-13-1	
2-Butanone (MEK)	Not detected	890		ug/kg	59.3	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	59.3	75-71-8	

Lab Sample ID: S23782.25 (continued)
Sample Tag: JS-SB-11_SO-043021(12.4-13.4)

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 19:14, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Chloromethane	Not detected	300		ug/kg	59.3	74-87-3	
Vinyl chloride	Not detected	60		ug/kg	59.3	75-01-4	
Bromomethane	Not detected	200		ug/kg	59.3	74-83-9	
Chloroethane	Not detected	300		ug/kg	59.3	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	59.3	75-69-4	
1,1-Dichloroethene	Not detected	60		ug/kg	59.3	75-35-4	
Methylene chloride	Not detected	100		ug/kg	59.3	75-09-2	
trans-1,2-Dichloroethene	Not detected	60		ug/kg	59.3	156-60-5	
1,1-Dichloroethane	Not detected	60		ug/kg	59.3	75-34-3	
cis-1,2-Dichloroethene	Not detected	60		ug/kg	59.3	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	59.3	109-99-9	
Chloroform	Not detected	60		ug/kg	59.3	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	59.3	74-97-5	
1,1,1-Trichloroethane	Not detected	60		ug/kg	59.3	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	59.3	108-10-1	
2-Hexanone	Not detected	3,000		ug/kg	59.3	591-78-6	
Carbon tetrachloride	Not detected	60		ug/kg	59.3	56-23-5	
Benzene	Not detected	60		ug/kg	59.3	71-43-2	
1,2-Dichloroethane	Not detected	60		ug/kg	59.3	107-06-2	
Trichloroethene	Not detected	60		ug/kg	59.3	79-01-6	
1,2-Dichloropropane	Not detected	60		ug/kg	59.3	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg	59.3	75-27-4	
Dibromomethane	Not detected	300		ug/kg	59.3	74-95-3	
cis-1,3-Dichloropropene	Not detected	60		ug/kg	59.3	10061-01-5	
Toluene	Not detected	60		ug/kg	59.3	108-88-3	
trans-1,3-Dichloropropene	Not detected	60		ug/kg	59.3	10061-02-6	
1,1,2-Trichloroethane	Not detected	60		ug/kg	59.3	79-00-5	
Tetrachloroethene	Not detected	60		ug/kg	59.3	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	60		ug/kg	59.3	110-57-6	
Dibromochloromethane	Not detected	100		ug/kg	59.3	124-48-1	
1,2-Dibromoethane	Not detected	20		ug/kg	59.3	106-93-4	M
Chlorobenzene	Not detected	60		ug/kg	59.3	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	59.3	630-20-6	
Ethylbenzene	Not detected	60		ug/kg	59.3	100-41-4	
p,m-Xylene	Not detected	100		ug/kg	59.3		
o-Xylene	Not detected	60		ug/kg	59.3	95-47-6	
Styrene	Not detected	60		ug/kg	59.3	100-42-5	
Isopropylbenzene	Not detected	300		ug/kg	59.3	98-82-8	
Bromoform	Not detected	100		ug/kg	59.3	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	60		ug/kg	59.3	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	59.3	96-18-4	
n-Propylbenzene	Not detected	60		ug/kg	59.3	103-65-1	
Bromobenzene	Not detected	100		ug/kg	59.3	108-86-1	
1,3,5-Trimethylbenzene	Not detected	60		ug/kg	59.3	108-67-8	
tert-Butylbenzene	Not detected	60		ug/kg	59.3	98-06-6	
1,2,4-Trimethylbenzene	Not detected	60		ug/kg	59.3	95-63-6	
sec-Butylbenzene	Not detected	60		ug/kg	59.3	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg	59.3	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg	59.3	541-73-1	

M-Result reported to MDL not RDL

Lab Sample ID: S23782.25 (continued)

Sample Tag: JS-SB-11_SO-043021(12.4-13.4)

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 19:14, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,4-Dichlorobenzene	Not detected	100		ug/kg	59.3	106-46-7	
1,2-Dichlorobenzene	Not detected	100		ug/kg	59.3	95-50-1	
1,2,3-Trimethylbenzene	Not detected	60		ug/kg	59.3	526-73-8	
n-Butylbenzene	Not detected	60		ug/kg	59.3	104-51-8	
Hexachloroethane	Not detected	400		ug/kg	59.3	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	59.3	96-12-8	
1,2,4-Trichlorobenzene	Not detected	390		ug/kg	59.3	120-82-1	
1,2,3-Trichlorobenzene	Not detected	390		ug/kg	59.3	87-61-6	
Naphthalene	Not detected	300		ug/kg	59.3	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	59.3	91-57-6	

Lab Sample ID: S23782.26
Sample Tag: Trip Blank
Collected Date/Time: 04/30/2021 00:01
Matrix: Methanol
COC Reference: 137338

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	6.0	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Sample wt. (g) / Methanol (ml)*	10/10	SW5035A	05/05/21 10:19	HAS	

Organics - Volatiles

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 14:43, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Diethyl ether	Not detected	200		ug/kg	50	60-29-7	
Acetone	Not detected	1,000		ug/kg	50	67-64-1	
Methyl iodide	Not detected	100		ug/kg	50	74-88-4	
Carbon disulfide	Not detected	300		ug/kg	50	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	200		ug/kg	50	1634-04-4	
Acrylonitrile	Not detected	100		ug/kg	50	107-13-1	
2-Butanone (MEK)	Not detected	750		ug/kg	50	78-93-3	
Dichlorodifluoromethane	Not detected	300		ug/kg	50	75-71-8	
Chloromethane	Not detected	300		ug/kg	50	74-87-3	
Vinyl chloride	Not detected	50		ug/kg	50	75-01-4	
Bromomethane	Not detected	200		ug/kg	50	74-83-9	
Chloroethane	Not detected	300		ug/kg	50	75-00-3	
Trichlorofluoromethane	Not detected	100		ug/kg	50	75-69-4	
1,1-Dichloroethene	Not detected	50		ug/kg	50	75-35-4	
Methylene chloride	Not detected	100		ug/kg	50	75-09-2	
trans-1,2-Dichloroethene	Not detected	50		ug/kg	50	156-60-5	
1,1-Dichloroethane	Not detected	50		ug/kg	50	75-34-3	
cis-1,2-Dichloroethene	Not detected	50		ug/kg	50	156-59-2	
Tetrahydrofuran*	Not detected	1,000		ug/kg	50	109-99-9	
Chloroform	Not detected	50		ug/kg	50	67-66-3	
Bromochloromethane	Not detected	100		ug/kg	50	74-97-5	
1,1,1-Trichloroethane	Not detected	50		ug/kg	50	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	3,000		ug/kg	50	108-10-1	
2-Hexanone	Not detected	3,000		ug/kg	50	591-78-6	
Carbon tetrachloride	Not detected	50		ug/kg	50	56-23-5	
Benzene	Not detected	50		ug/kg	50	71-43-2	
1,2-Dichloroethane	Not detected	50		ug/kg	50	107-06-2	
Trichloroethene	Not detected	50		ug/kg	50	79-01-6	
1,2-Dichloropropane	Not detected	50		ug/kg	50	78-87-5	
Bromodichloromethane	Not detected	100		ug/kg	50	75-27-4	
Dibromomethane	Not detected	300		ug/kg	50	74-95-3	
cis-1,3-Dichloropropene	Not detected	50		ug/kg	50	10061-01-5	
Toluene	Not detected	50		ug/kg	50	108-88-3	
trans-1,3-Dichloropropene	Not detected	50		ug/kg	50	10061-02-6	
1,1,2-Trichloroethane	Not detected	50		ug/kg	50	79-00-5	
Tetrachloroethene	Not detected	50		ug/kg	50	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	50		ug/kg	50	110-57-6	

Lab Sample ID: S23782.26 (continued)

Sample Tag: Trip Blank

Volatile Organics 5035, Method: SW5035A/8260C, Run Date: 05/10/21 14:43, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Dibromochloromethane	Not detected	100		ug/kg	50	124-48-1	
1,2-Dibromoethane	Not detected	20		ug/kg	50	106-93-4	M
Chlorobenzene	Not detected	50		ug/kg	50	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	100		ug/kg	50	630-20-6	
Ethylbenzene	Not detected	50		ug/kg	50	100-41-4	
p,m-Xylene	Not detected	100		ug/kg	50		
o-Xylene	Not detected	50		ug/kg	50	95-47-6	
Styrene	Not detected	50		ug/kg	50	100-42-5	
Isopropylbenzene	Not detected	300		ug/kg	50	98-82-8	
Bromoform	Not detected	100		ug/kg	50	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	50		ug/kg	50	79-34-5	
1,2,3-Trichloropropane	Not detected	100		ug/kg	50	96-18-4	
n-Propylbenzene	Not detected	50		ug/kg	50	103-65-1	
Bromobenzene	Not detected	100		ug/kg	50	108-86-1	
1,3,5-Trimethylbenzene	Not detected	50		ug/kg	50	108-67-8	
tert-Butylbenzene	Not detected	50		ug/kg	50	98-06-6	
1,2,4-Trimethylbenzene	Not detected	50		ug/kg	50	95-63-6	
sec-Butylbenzene	Not detected	50		ug/kg	50	135-98-8	
p-Isopropyltoluene	Not detected	100		ug/kg	50	99-87-6	
1,3-Dichlorobenzene	Not detected	100		ug/kg	50	541-73-1	
1,4-Dichlorobenzene	Not detected	100		ug/kg	50	106-46-7	
1,2-Dichlorobenzene	Not detected	100		ug/kg	50	95-50-1	
1,2,3-Trimethylbenzene	Not detected	50		ug/kg	50	526-73-8	
n-Butylbenzene	Not detected	50		ug/kg	50	104-51-8	
Hexachloroethane	Not detected	300		ug/kg	50	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	300		ug/kg	50	96-12-8	
1,2,4-Trichlorobenzene	Not detected	330		ug/kg	50	120-82-1	
1,2,3-Trichlorobenzene	Not detected	330		ug/kg	50	87-61-6	
Naphthalene	Not detected	300		ug/kg	50	91-20-3	
2-Methylnaphthalene	Not detected	100		ug/kg	50	91-57-6	

M-Result reported to MDL not RDL

Merit Laboratories Login Checklist

Lab Set ID: S23782
Client: ARCADIS_NOVI (ARCADIS U.S., Inc.)
Project: 30075936 / Racer PNC
Submitted: 05/04/2021 09:20 Login User: MMC

Attention: Brad Saunders
Address: Arcadis
28550 Cabot Drive
Suite 500
Novi, MI 48377

Phone: 810-225-1904 FAX:
Email: brad.saunders@arcadis.com

Selection				Description	Note
Sample Receiving					
01.	[X] Yes	[ ] No	[ ] N/A	Samples are received at 4C +/- 2C Thermometer #	IR 6.0
02.	[X] Yes	[ ] No	[ ] N/A	Received on ice/ cooling process begun	
03.	[ ] Yes	[X] No	[ ] N/A	Samples shipped	
04.	[ ] Yes	[X] No	[ ] N/A	Samples left in 24 hr. drop box	
05.	[ ] Yes	[ ] No	[X] N/A	Are there custody seals/tape or is the drop box locked	
Chain of Custody					
06.	[X] Yes	[ ] No	[ ] N/A	COC adequately filled out	
07.	[ ] Yes	[X] No	[ ] N/A	COC signed and relinquished to the lab	Page 1 was not signed
08.	[X] Yes	[ ] No	[ ] N/A	Sample tag on bottles match COC	
09.	[ ] Yes	[X] No	[ ] N/A	Subcontracting needed? Subcontacted to:	
Preservation					
10.	[X] Yes	[ ] No	[ ] N/A	Do sample have correct chemical preservation	
11.	[ ] Yes	[ ] No	[X] N/A	Completed pH checks on preserved samples? (no VOAs)	
12.	[ ] Yes	[X] No	[ ] N/A	Did any samples need to be preserved in the lab?	
Bottle Conditions					
13.	[X] Yes	[ ] No	[ ] N/A	All bottles intact	
14.	[X] Yes	[ ] No	[ ] N/A	Appropriate analytical bottles are used	
15.	[X] Yes	[ ] No	[ ] N/A	Merit bottles used	
16.	[X] Yes	[ ] No	[ ] N/A	Sufficient sample volume received	
17.	[ ] Yes	[X] No	[ ] N/A	Samples require laboratory filtration	
18.	[X] Yes	[ ] No	[ ] N/A	Samples submitted within holding time	
19.	[ ] Yes	[ ] No	[X] N/A	Do water VOC or TOX bottles contain headspace	

Corrective action for all exceptions is to call the client and to notify the project manager.

Client Review By: _____ Date: _____

Merit Laboratories, Inc.
2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # 1 OF 2

137336

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Brad Saunders, ~~Colleen Barton~~ Lexi Crisp
COMPANY: Arcadis
ADDRESS: 28550 Cabot Drive
CITY: Novi STATE: MI ZIP CODE: 48377
PHONE NO.: 248 994 2240 FAX NO.: 248 9942241 P.O. NO.: 30075936
E-MAIL ADDRESS: Brad.Saunders@arcadis.com, ~~Colleen.Barton@arcadis.com~~ Lexi.Crisp@arcadis.com QUOTE NO.:

INVOICE TO

CONTACT NAME: ☒ SAME
COMPANY:
ADDRESS:
CITY: STATE: ZIP CODE:
PHONE NO.: E-MAIL ADDRESS:

PROJECT NO./NAME: 30075936 / Racer PNC
SAMPLER(S) - PLEASE PRINT/SIGN NAME: Seth Turner / Seth Turner

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED ☒ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER

MATRIX CODE: GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR W=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications: ☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES
Project Locations: ☐ Detroit ☐ New York ☐ Other
Special Instructions

MERIT LAB NO. (FOR LAB USE ONLY)	YEAR DATE	YEAR TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	VOCs / 8260	PAHs / 8270
23782.01	4/26/21	1210	JN-SB-01_SO-042621(5.5-6.5)	S	2	1						1	X	+ 5
.02	4/26/21	1215	JN-SB-01_SO-042621(12.1-13.1)	S	2	1						1		+ 5
.03	4/26/21	1405	JN-SB-02_SO-042621(11-12)	S	2	1						1		+ 5
.04	4/26/21	1410	JN-SB-02_SO-042621(14-15)	S	2	1						1		+ 5
.05	4/27/21	0850	JN-SB-03_SO-042721(5.7-6.7)	S	2	1						1		+ 5
.06	4/27/21	1020	JN-SB-04_SO-042721(10.5-11.5)	S	2	1						1		+ 5
.07	4/27/21	1305	JN-SB-05_SO-042721(12.3-13.3)	S	2	1						1		+ 5
.08	4/29/21	1405	JS-SB-01_SO-042921(7.5-8.5)	S	2	1						1	X	
.09	4/27/21	1430	JS-SB-02_SO-042721(11-12)	S	2	1						1		
.10	4/28/21	0920	JS-SB-03_SO-042821(2-3)	S	2	1						1		
.11	4/28/21	0930	JS-SB-03_SO-042821(11.2-12.2)	S	2	1						1		
.12	4/28/21	1130	JS-SB-04_SO-042821(4.6-5.6)	S	2	1						1		

RELINQUISHED BY: SIGNATURE/ORGANIZATION: Seth Turner / Arcadis ☒ Sampler	DATE: 4/30/21	TIME: 1530	
RECEIVED BY: SIGNATURE/ORGANIZATION: Novi cold storage / Arcadis	DATE: 4/30/21	TIME: 1630	
RELINQUISHED BY: SIGNATURE/ORGANIZATION:	DATE:	TIME:	
RECEIVED BY: SIGNATURE/ORGANIZATION:	DATE:	TIME:	

RELINQUISHED BY: SIGNATURE/ORGANIZATION:	DATE:	TIME:	
RECEIVED BY: SIGNATURE/ORGANIZATION: M Chilcote	DATE: 5/4/21	TIME: 0920	
SEAL NO.: SEAL INTACT YES ☐ NO ☐ INITIALS:	NOTES: TEMP. ON ARRIVAL: 6.0		
SEAL NO.: SEAL INTACT YES ☐ NO ☐ INITIALS:			

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

Rev. 5.18.12

Merit Laboratories, Inc.

2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # 2 OF 2

137338

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Brad Saunders, Lexi Crisp
COMPANY: Arcadis
ADDRESS: 28550 Cabot Drive
CITY: Novi STATE: MI ZIP CODE: 48377
PHONE NO.: FAX NO.: P.O. NO.: 30075936
E-MAIL ADDRESS: Brad.Saunders@arcadis.com, Lexi.Crisp@arcadis.com QUOTE NO.:

INVOICE TO

CONTACT NAME: ☒ SAME
COMPANY:
ADDRESS:
CITY: STATE: ZIP CODE:
PHONE NO.: E-MAIL ADDRESS:

PROJECT NO./NAME: Racer PNC/30075936
SAMPLER(S) - PLEASE PRINT/SIGN NAME: Seth Turner/Sth turner

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED ☒ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER

MATRIX CODE: GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR W=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications
☐ OHIO VAP ☐ Drinking Water
☐ DoD ☐ NPDES
Project Locations
☐ Detroit ☐ New York
☐ Other
Special Instructions

MERIT LAB NO. (FOR LAB USE ONLY)	YEAR DATE	YEAR TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	VOCs/8260	PAH's/8270	Special Instructions
23782.13	4/28/21	1400	JS-SB-05_SO-042821(5-6)	S	2	1						1	X	X	
.14	4/28/21	1405	JS-SB-05_SO-042821(7-8)	S	2	1						1			
.15	4/28/21	1450	JS-SB-06_SO-042821(12.1-13.1)	S	2	1						1			
.16/.17/.18	4/29/21	0910	JS-SB-07_SO-042921(12.4-13.4)	S	6	3						3			MS/MSD
.19	4/29/21	—	DUP-01_SO-042921	S	2	1						1			
.20	4/29/21	1030	JS-SB-08_SO-043021(4.2-5.2)	S	2	1						1			
.21	4/29/21	—	DUP-02_SO-042921	S	2	1						1			
.22	4/30/21	0905	JS-SB-09_SO-043021(9-10)	S	2	1						1			
.23	4/30/21	0900	JS-SB-09_SO-043021(10-11)	S	2	1						1			
.24	4/30/21	1030	JS-SB-10_SO-043021(14-15)	S	2	1						1			
.25	4/30/21	1140	JS-SB-11_SO-043021(12.4-13.4)	S	2	1						1			
.26			Trip Blank												

RELINQUISHED BY: SIGNATURE/ORGANIZATION	Sth turner/Arcadis ☒ Sampler	DATE 4/30/21	TIME 1530
RECEIVED BY: SIGNATURE/ORGANIZATION	Novi cold Storage/Arcadis	DATE 4/30/21	TIME 1530
RELINQUISHED BY: SIGNATURE/ORGANIZATION	Sth turner/Arcadis	DATE 5/4/21	TIME 0920
RECEIVED BY: SIGNATURE/ORGANIZATION	M Chilcote	DATE 5/4/21	TIME 0920

RELINQUISHED BY: SIGNATURE/ORGANIZATION	Novi cold Storage/Arcadis	DATE 5/4/21	TIME 0730
RECEIVED BY: SIGNATURE/ORGANIZATION	Sth turner/Arcadis	DATE 5/4/21	TIME 0730

SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS

NOTES: TEMP. ON ARRIVAL 6.0

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

Rev. 5.18.12

Analytical Laboratory Report

Report ID: S24103.01(01)
Generated on 05/21/2021

Report to

Attention: Alexis Crisp
Arcadis US, Inc.
28550 Cabot Drive
Suite 500
Novi, MI 48377

Phone: n/a FAX:
Email: Alexis.Crisp@arcadis.com

Addtional Contacts: Brad Saunders

Report produced by

Merit Laboratories, Inc.
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Contacts for report questions:
John Laverty (johnlaverty@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S24103.01-S24103.15
Project: Racer PNC / 30075936 Task 5
Collected Date(s): 05/11/2021 - 05/12/2021
Submitted Date/Time: 05/12/2021 13:55
Sampled by: Seth Turner
P.O. #: 30075936 TASK 5

Table of Contents

Maya Murshak
Technical Director

General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).
40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.
QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.
Full accreditation certificates are available upon request. Starred (*) analytes are not NELAP accredited.
Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.

Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)
PFAS requirement: Section 9.3.8 of U.S. EPA Method 537.1 states "If the method analyte(s) found in the Field Sample is present in the FRB at a concentration greater than 1/3 the MRL, then all samples collected with that FRB are invalid and must be recollected and reanalyzed."
Samples submitted without an accompanying FRB may not be acceptable for compliance purposes.

Report Narrative

There is no additional narrative for this analytical report

Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Alaska CSLAP	#17-001
Pennsylvania DEP	#68-05884

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods
LN	Linear
BR	Branched

Method Summary

Method	Version
N/A	Not Applicable
SW3510C	SW 846 Method 3510C Revision 3 December 1996
SW5030C/8260C	SW 846 Method 8260C Revision 3 August 2006 / 5030C Revision 3 May 2003
SW8270D	SW 846 Method 8270D Revision 4 February 2007

Sample Summary (15 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S24103.01	JS-SB-01_GW-051121	Groundwater	05/11/21 08:40
S24103.02	JS-SB-02_GW-051121	Groundwater	05/11/21 09:30
S24103.03	JS-SB-03_GW-051121	Groundwater	05/11/21 10:30
S24103.04	JS-SB-04_GW-051121	Groundwater	05/11/21 11:55
S24103.05	JS-SB-06_GW-051121	Groundwater	05/11/21 13:00
S24103.06	JS-SB-07_GW-051121	Groundwater	05/11/21 13:45
S24103.07	JS-SB-08_GW-051121	Groundwater	05/11/21 14:40
S24103.08	JS-SB-09_GW-051221	Groundwater	05/12/21 09:00
S24103.09	JS-SB-10_GW-051221	Groundwater	05/12/21 09:50
S24103.10	JS-SB-11_GW-051221	Groundwater	05/12/21 12:10
S24103.11	DUP-03_GW-051221	Groundwater	05/12/21 00:01
S24103.12	JS-SB-05_GW-051221	Groundwater	05/12/21 10:55
S24103.13	JS-SB-05_GW-051221 MS	Groundwater	05/12/21 10:55
S24103.14	JS-SB-05_GW-051221 MSD	Groundwater	05/12/21 10:55
S24103.15	DUP-04_GW-051221	Groundwater	05/12/21 00:01

Analytical Laboratory Report

Lab Sample ID: S24103.01
Sample Tag: JS-SB-01_GW-051121
Collected Date/Time: 05/11/2021 08:40
Matrix: Groundwater
COC Reference: 137669

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	5.1	IR
1	1L Amber	None	Yes	5.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	05/19/21 11:00	BML	
PNA Extraction	Completed	SW3510C	05/12/21 17:00	JWR	

Organics - Semi-Volatiles

Polynuclear Aromatic Hydrocarbon, Method: SW8270D, Run Date: 05/12/21 18:40, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	1		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(k)fluoranthene	Not detected	1		ug/L	2	207-08-9	
Benzo(ghi)perylene	Not detected	1		ug/L	2	191-24-2	
Chrysene	Not detected	1		ug/L	2	218-01-9	
Dibenzo(ah)anthracene	Not detected	2		ug/L	2	53-70-3	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	2		ug/L	2	193-39-5	
Naphthalene	Not detected	5		ug/L	2	91-20-3	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	
Pyrene	Not detected	5		ug/L	2	129-00-0	
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	
1-Methylnaphthalene	Not detected	5		ug/L	2	90-12-0	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/18/21 04:47, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Benzene	Not detected	1		ug/L	1	71-43-2	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Bromoform	Not detected	1		ug/L	1	75-25-2	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	

Lab Sample ID: S24103.01 (continued)
Sample Tag: JS-SB-01_GW-051121

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/18/21 04:47, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Styrene	Not detected	1		ug/L	1	100-42-5	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Toluene	Not detected	1		ug/L	1	108-88-3	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	

Lab Sample ID: S24103.01 (continued)

Sample Tag: JS-SB-01_GW-051121

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/18/21 04:47, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
o-Xylene	Not detected	1		ug/L	1	95-47-6	
p,m-Xylene*	Not detected	2		ug/L	1		

Lab Sample ID: S24103.02
Sample Tag: JS-SB-02_GW-051121
Collected Date/Time: 05/11/2021 09:30
Matrix: Groundwater
COC Reference: 137669

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	5.1	IR
1	1L Amber	None	Yes	5.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	05/18/21 10:30	BML	
PNA Extraction	Completed	SW3510C	05/12/21 17:00	JWR	

Organics - Semi-Volatiles

Polynuclear Aromatic Hydrocarbon, Method: SW8270D, Run Date: 05/12/21 19:02, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	1		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(k)fluoranthene	Not detected	1		ug/L	2	207-08-9	
Benzo(ghi)perylene	Not detected	1		ug/L	2	191-24-2	
Chrysene	Not detected	1		ug/L	2	218-01-9	
Dibenzo(ah)anthracene	Not detected	2		ug/L	2	53-70-3	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	2		ug/L	2	193-39-5	
Naphthalene	Not detected	5		ug/L	2	91-20-3	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	
Pyrene	Not detected	5		ug/L	2	129-00-0	
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	
1-Methylnaphthalene	Not detected	5		ug/L	2	90-12-0	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/18/21 05:10, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Benzene	Not detected	1		ug/L	1	71-43-2	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Bromoform	Not detected	1		ug/L	1	75-25-2	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	

Lab Sample ID: S24103.02 (continued)
Sample Tag: JS-SB-02_GW-051121

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/18/21 05:10, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Styrene	Not detected	1		ug/L	1	100-42-5	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Toluene	Not detected	1		ug/L	1	108-88-3	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	

Lab Sample ID: S24103.02 (continued)

Sample Tag: JS-SB-02_GW-051121

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/18/21 05:10, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
o-Xylene	Not detected	1		ug/L	1	95-47-6	
p,m-Xylene*	Not detected	2		ug/L	1		

Lab Sample ID: S24103.03
Sample Tag: JS-SB-03_GW-051121
Collected Date/Time: 05/11/2021 10:30
Matrix: Groundwater
COC Reference: 137669

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	5.1	IR
1	1L Amber	None	Yes	5.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	05/18/21 10:30	BML	
PNA Extraction	Completed	SW3510C	05/12/21 17:00	JWR	

Organics - Semi-Volatiles

Polynuclear Aromatic Hydrocarbon, Method: SW8270D, Run Date: 05/12/21 18:40, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	1		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(k)fluoranthene	Not detected	1		ug/L	2	207-08-9	
Benzo(ghi)perylene	Not detected	1		ug/L	2	191-24-2	
Chrysene	Not detected	1		ug/L	2	218-01-9	
Dibenzo(ah)anthracene	Not detected	2		ug/L	2	53-70-3	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	2		ug/L	2	193-39-5	
Naphthalene	Not detected	5		ug/L	2	91-20-3	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	
Pyrene	Not detected	5		ug/L	2	129-00-0	
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	
1-Methylnaphthalene	Not detected	5		ug/L	2	90-12-0	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/18/21 05:33, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Benzene	Not detected	1		ug/L	1	71-43-2	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Bromoform	Not detected	1		ug/L	1	75-25-2	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	

Lab Sample ID: S24103.03 (continued)
Sample Tag: JS-SB-03_GW-051121

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/18/21 05:33, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Styrene	Not detected	1		ug/L	1	100-42-5	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Toluene	Not detected	1		ug/L	1	108-88-3	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	

Lab Sample ID: S24103.03 (continued)

Sample Tag: JS-SB-03_GW-051121

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/18/21 05:33, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
o-Xylene	Not detected	1		ug/L	1	95-47-6	
p,m-Xylene*	Not detected	2		ug/L	1		

Lab Sample ID: S24103.04
Sample Tag: JS-SB-04_GW-051121
Collected Date/Time: 05/11/2021 11:55
Matrix: Groundwater
COC Reference: 137669

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	5.1	IR
1	1L Amber	None	Yes	5.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	05/18/21 10:30	BML	
PNA Extraction	Completed	SW3510C	05/18/21 10:00	TJT	

Organics - Semi-Volatiles

Polynuclear Aromatic Hydrocarbon, Method: SW8270D, Run Date: 05/19/21 20:01, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	1		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(k)fluoranthene	Not detected	1		ug/L	2	207-08-9	
Benzo(ghi)perylene	Not detected	1		ug/L	2	191-24-2	
Chrysene	Not detected	1		ug/L	2	218-01-9	
Dibenzo(ah)anthracene	Not detected	2		ug/L	2	53-70-3	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	2		ug/L	2	193-39-5	
Naphthalene	Not detected	5		ug/L	2	91-20-3	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	
Pyrene	Not detected	5		ug/L	2	129-00-0	
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	
1-Methylnaphthalene	Not detected	5		ug/L	2	90-12-0	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/18/21 05:56, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Benzene	Not detected	1		ug/L	1	71-43-2	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Bromoform	Not detected	1		ug/L	1	75-25-2	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	

Lab Sample ID: S24103.04 (continued)
Sample Tag: JS-SB-04_GW-051121

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/18/21 05:56, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Styrene	Not detected	1		ug/L	1	100-42-5	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Toluene	Not detected	1		ug/L	1	108-88-3	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	

Lab Sample ID: S24103.04 (continued)

Sample Tag: JS-SB-04_GW-051121

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/18/21 05:56, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
o-Xylene	Not detected	1		ug/L	1	95-47-6	
p,m-Xylene*	Not detected	2		ug/L	1		

Lab Sample ID: S24103.05
Sample Tag: JS-SB-06_GW-051121
Collected Date/Time: 05/11/2021 13:00
Matrix: Groundwater
COC Reference: 137669

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	5.1	IR
1	1L Amber	None	Yes	5.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	05/18/21 10:30	BML	
PNA Extraction	Completed	SW3510C	05/18/21 10:00	TJT	

Organics - Semi-Volatiles

Polynuclear Aromatic Hydrocarbon, Method: SW8270D, Run Date: 05/19/21 20:18, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	1		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(k)fluoranthene	Not detected	1		ug/L	2	207-08-9	
Benzo(ghi)perylene	Not detected	1		ug/L	2	191-24-2	
Chrysene	Not detected	1		ug/L	2	218-01-9	
Dibenzo(ah)anthracene	Not detected	2		ug/L	2	53-70-3	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	2		ug/L	2	193-39-5	
Naphthalene	20	5		ug/L	2	91-20-3	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	
Pyrene	Not detected	5		ug/L	2	129-00-0	
2-Methylnaphthalene	6	5		ug/L	2	91-57-6	
1-Methylnaphthalene	Not detected	5		ug/L	2	90-12-0	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/18/21 06:19, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Benzene	18	1		ug/L	1	71-43-2	
n-Butylbenzene	8	1		ug/L	1	104-51-8	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Bromoform	Not detected	1		ug/L	1	75-25-2	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
sec-Butylbenzene	4	1		ug/L	1	135-98-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	

Lab Sample ID: S24103.05 (continued)
Sample Tag: JS-SB-06_GW-051121

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/18/21 06:19, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	
Ethylbenzene	446	1		ug/L	1	100-41-4	E
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
Isopropylbenzene	24	5		ug/L	1	98-82-8	
2-Methylnaphthalene	13	5		ug/L	1	91-57-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
Naphthalene	58	5		ug/L	1	91-20-3	
n-Propylbenzene	82	1		ug/L	1	103-65-1	
Styrene	Not detected	1		ug/L	1	100-42-5	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
1,2,3-Trimethylbenzene	72	1		ug/L	1	526-73-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,4-Trimethylbenzene	453	1		ug/L	1	95-63-6	E
1,3,5-Trimethylbenzene	9	1		ug/L	1	108-67-8	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Toluene	6	1		ug/L	1	108-88-3	

E-Concentration exceeds calibration range

Lab Sample ID: S24103.05 (continued)
Sample Tag: JS-SB-06_GW-051121

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/18/21 06:19, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
o-Xylene	4	1		ug/L	1	95-47-6	
p,m-Xylene*	671	2		ug/L	1		E

Volatile Organics - DEQ List (Replicate 01), Method: SW5030C/8260C, Run Date: 05/19/21 18:39, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	500		ug/L	10	67-64-1	Y
Acrylonitrile	Not detected	20		ug/L	10	107-13-1	Y
2-Butanone (MEK)	Not detected	250		ug/L	10	78-93-3	Y
Benzene	20	10		ug/L	10	71-43-2	Y
n-Butylbenzene	Not detected	10		ug/L	10	104-51-8	Y
Bromobenzene	Not detected	10		ug/L	10	108-86-1	Y
Bromochloromethane	Not detected	10		ug/L	10	74-97-5	Y
Bromodichloromethane	Not detected	10		ug/L	10	75-27-4	Y
Bromoform	Not detected	10		ug/L	10	75-25-2	Y
Bromomethane	Not detected	50		ug/L	10	74-83-9	Y
sec-Butylbenzene	Not detected	10		ug/L	10	135-98-8	Y
tert-Butylbenzene	Not detected	10		ug/L	10	98-06-6	Y
Carbon disulfide	Not detected	50		ug/L	10	75-15-0	Y
Carbon tetrachloride	Not detected	10		ug/L	10	56-23-5	Y
Chlorobenzene	Not detected	10		ug/L	10	108-90-7	Y
Chloroethane	Not detected	50		ug/L	10	75-00-3	Y
Chloroform	Not detected	10		ug/L	10	67-66-3	Y
Chloromethane	Not detected	50		ug/L	10	74-87-3	Y
1,1-Dichloroethane	Not detected	10		ug/L	10	75-34-3	Y
1,1-Dichloroethene	Not detected	10		ug/L	10	75-35-4	Y
1,2-Dibromo-3-chloropropane	Not detected	50		ug/L	10	96-12-8	Y
1,2-Dibromoethane	Not detected	10		ug/L	10	106-93-4	Y
1,2-Dichlorobenzene	Not detected	10		ug/L	10	95-50-1	Y
1,2-Dichloroethane	Not detected	10		ug/L	10	107-06-2	Y
1,2-Dichloropropane	Not detected	10		ug/L	10	78-87-5	Y
1,3-Dichlorobenzene	Not detected	10		ug/L	10	541-73-1	Y
1,4-Dichlorobenzene	Not detected	10		ug/L	10	106-46-7	Y
cis-1,2-Dichloroethene	Not detected	10		ug/L	10	156-59-2	Y
cis-1,3-Dichloropropene	Not detected	10		ug/L	10	10061-01-5	Y
Dibromochloromethane	Not detected	50		ug/L	10	124-48-1	Y
Dibromomethane	Not detected	50		ug/L	10	74-95-3	Y
Dichlorodifluoromethane	Not detected	50		ug/L	10	75-71-8	Y
Diethyl ether	Not detected	100		ug/L	10	60-29-7	Y
trans-1,2-Dichloroethene	Not detected	10		ug/L	10	156-60-5	Y
trans-1,3-Dichloropropene	Not detected	10		ug/L	10	10061-02-6	Y
trans-1,4-Dichloro-2-butene	Not detected	10		ug/L	10	110-57-6	Y
Ethylbenzene	400	10		ug/L	10	100-41-4	Y
2-Hexanone	Not detected	500		ug/L	10	591-78-6	Y
Hexachloroethane	Not detected	50		ug/L	10	67-72-1	Y
p-Isopropyltoluene	Not detected	50		ug/L	10	99-87-6	Y

E-Concentration exceeds calibration range
Y-Elevated reporting limit due to high target concentration

Lab Sample ID: S24103.05 (continued)
Sample Tag: JS-SB-06_GW-051121

Volatile Organics - DEQ List (Replicate 01), Method: SW5030C/8260C, Run Date: 05/19/21 18:39, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Isopropylbenzene	Not detected	50		ug/L	10	98-82-8	Y
2-Methylnaphthalene	Not detected	50		ug/L	10	91-57-6	Y
4-Methyl-2-pentanone (MIBK)	Not detected	500		ug/L	10	108-10-1	Y
tert-Methyl butyl ether (MTBE)	Not detected	50		ug/L	10	1634-04-4	Y
Methyl iodide	Not detected	10		ug/L	10	74-88-4	Y
Methylene chloride	Not detected	50		ug/L	10	75-09-2	Y
Naphthalene	Not detected	50		ug/L	10	91-20-3	Y
n-Propylbenzene	70	10		ug/L	10	103-65-1	Y
Styrene	Not detected	10		ug/L	10	100-42-5	Y
1,1,1,2-Tetrachloroethane	Not detected	10		ug/L	10	630-20-6	Y
1,1,1-Trichloroethane	Not detected	10		ug/L	10	71-55-6	Y
1,1,2,2-Tetrachloroethane	Not detected	10		ug/L	10	79-34-5	Y
1,1,2-Trichloroethane	Not detected	10		ug/L	10	79-00-5	Y
1,2,3-Trichlorobenzene	Not detected	50		ug/L	10	87-61-6	Y
1,2,3-Trichloropropane	Not detected	10		ug/L	10	96-18-4	Y
1,2,3-Trimethylbenzene	60	10		ug/L	10	526-73-8	Y
1,2,4-Trichlorobenzene	Not detected	50		ug/L	10	120-82-1	Y
1,2,4-Trimethylbenzene	340	10		ug/L	10	95-63-6	Y
1,3,5-Trimethylbenzene	Not detected	10		ug/L	10	108-67-8	Y
Tetrachloroethene	Not detected	10		ug/L	10	127-18-4	Y
Tetrahydrofuran*	Not detected	900		ug/L	10	109-99-9	Y
Toluene	Not detected	10		ug/L	10	108-88-3	Y
Trichloroethene	Not detected	10		ug/L	10	79-01-6	Y
Trichlorofluoromethane	Not detected	10		ug/L	10	75-69-4	Y
Vinyl chloride	Not detected	10		ug/L	10	75-01-4	Y
o-Xylene	Not detected	10		ug/L	10	95-47-6	Y
p,m-Xylene*	560	20		ug/L	10		Y

Y-Elevated reporting limit due to high target concentration

Lab Sample ID: S24103.06
Sample Tag: JS-SB-07_GW-051121
Collected Date/Time: 05/11/2021 13:45
Matrix: Groundwater
COC Reference: 137669

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	5.1	IR
1	1L Amber	None	Yes	5.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	05/18/21 10:30	BML	
PNA Extraction	Completed	SW3510C	05/18/21 10:00	TJT	

Organics - Semi-Volatiles

Polynuclear Aromatic Hydrocarbon, Method: SW8270D, Run Date: 05/19/21 20:35, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	1		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(k)fluoranthene	Not detected	1		ug/L	2	207-08-9	
Benzo(ghi)perylene	Not detected	1		ug/L	2	191-24-2	
Chrysene	Not detected	1		ug/L	2	218-01-9	
Dibenzo(ah)anthracene	Not detected	2		ug/L	2	53-70-3	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	2		ug/L	2	193-39-5	
Naphthalene	Not detected	5		ug/L	2	91-20-3	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	
Pyrene	Not detected	5		ug/L	2	129-00-0	
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	
1-Methylnaphthalene	Not detected	5		ug/L	2	90-12-0	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/18/21 06:42, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Benzene	Not detected	1		ug/L	1	71-43-2	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Bromoform	Not detected	1		ug/L	1	75-25-2	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	

Lab Sample ID: S24103.06 (continued)
Sample Tag: JS-SB-07_GW-051121

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/18/21 06:42, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Styrene	Not detected	1		ug/L	1	100-42-5	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Toluene	Not detected	1		ug/L	1	108-88-3	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	

Lab Sample ID: S24103.06 (continued)

Sample Tag: JS-SB-07_GW-051121

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/18/21 06:42, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
o-Xylene	Not detected	1		ug/L	1	95-47-6	
p,m-Xylene*	Not detected	2		ug/L	1		

Lab Sample ID: S24103.07
Sample Tag: JS-SB-08_GW-051121
Collected Date/Time: 05/11/2021 14:40
Matrix: Groundwater
COC Reference: 137669

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	5.1	IR
1	1L Amber	None	Yes	5.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	05/18/21 10:30	BML	
PNA Extraction	Completed	SW3510C	05/18/21 10:00	TJT	

Organics - Semi-Volatiles

Polynuclear Aromatic Hydrocarbon, Method: SW8270D, Run Date: 05/19/21 20:53, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	1		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(k)fluoranthene	Not detected	1		ug/L	2	207-08-9	
Benzo(ghi)perylene	Not detected	1		ug/L	2	191-24-2	
Chrysene	Not detected	1		ug/L	2	218-01-9	
Dibenzo(ah)anthracene	Not detected	2		ug/L	2	53-70-3	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	2		ug/L	2	193-39-5	
Naphthalene	Not detected	5		ug/L	2	91-20-3	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	
Pyrene	Not detected	5		ug/L	2	129-00-0	
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	
1-Methylnaphthalene	Not detected	5		ug/L	2	90-12-0	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/18/21 07:05, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Benzene	Not detected	1		ug/L	1	71-43-2	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Bromoform	Not detected	1		ug/L	1	75-25-2	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	

Lab Sample ID: S24103.07 (continued)
Sample Tag: JS-SB-08_GW-051121

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/18/21 07:05, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Styrene	Not detected	1		ug/L	1	100-42-5	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Toluene	Not detected	1		ug/L	1	108-88-3	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	

Lab Sample ID: S24103.07 (continued)

Sample Tag: JS-SB-08_GW-051121

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/18/21 07:05, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
o-Xylene	Not detected	1		ug/L	1	95-47-6	
p,m-Xylene*	Not detected	2		ug/L	1		

Lab Sample ID: S24103.08
Sample Tag: JS-SB-09_GW-051221
Collected Date/Time: 05/12/2021 09:00
Matrix: Groundwater
COC Reference: 137669

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	5.1	IR
1	1L Amber	None	Yes	5.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	05/18/21 10:30	BML	
PNA Extraction	Completed	SW3510C	05/18/21 10:00	TJT	

Organics - Semi-Volatiles

Polynuclear Aromatic Hydrocarbon, Method: SW8270D, Run Date: 05/19/21 21:10, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	1		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(k)fluoranthene	Not detected	1		ug/L	2	207-08-9	
Benzo(ghi)perylene	Not detected	1		ug/L	2	191-24-2	
Chrysene	Not detected	1		ug/L	2	218-01-9	
Dibenzo(ah)anthracene	Not detected	2		ug/L	2	53-70-3	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	2		ug/L	2	193-39-5	
Naphthalene	143	5		ug/L	2	91-20-3	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	
Pyrene	Not detected	5		ug/L	2	129-00-0	
2-Methylnaphthalene	42	5		ug/L	2	91-57-6	
1-Methylnaphthalene	19	5		ug/L	2	90-12-0	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/19/21 08:15, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	1,000		ug/L	20	67-64-1	Y
Acrylonitrile	Not detected	40		ug/L	20	107-13-1	Y
2-Butanone (MEK)	Not detected	500		ug/L	20	78-93-3	Y
Benzene	690	20		ug/L	20	71-43-2	Y
n-Butylbenzene	Not detected	20		ug/L	20	104-51-8	Y
Bromobenzene	Not detected	20		ug/L	20	108-86-1	Y
Bromochloromethane	Not detected	20		ug/L	20	74-97-5	Y
Bromodichloromethane	Not detected	20		ug/L	20	75-27-4	Y
Bromoform	Not detected	20		ug/L	20	75-25-2	Y
Bromomethane	Not detected	100		ug/L	20	74-83-9	Y
sec-Butylbenzene	Not detected	20		ug/L	20	135-98-8	Y
tert-Butylbenzene	Not detected	20		ug/L	20	98-06-6	Y

Y-Elevated reporting limit due to high target concentration

Lab Sample ID: S24103.08 (continued)
Sample Tag: JS-SB-09_GW-051221

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/19/21 08:15, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon disulfide	Not detected	100		ug/L	20	75-15-0	Y
Carbon tetrachloride	Not detected	20		ug/L	20	56-23-5	Y
Chlorobenzene	Not detected	20		ug/L	20	108-90-7	Y
Chloroethane	Not detected	100		ug/L	20	75-00-3	Y
Chloroform	Not detected	20		ug/L	20	67-66-3	Y
Chloromethane	Not detected	100		ug/L	20	74-87-3	Y
1,1-Dichloroethane	Not detected	20		ug/L	20	75-34-3	Y
1,1-Dichloroethene	Not detected	20		ug/L	20	75-35-4	Y
1,2-Dibromo-3-chloropropane	Not detected	100		ug/L	20	96-12-8	Y
1,2-Dibromoethane	Not detected	20		ug/L	20	106-93-4	Y
1,2-Dichlorobenzene	Not detected	20		ug/L	20	95-50-1	Y
1,2-Dichloroethane	Not detected	20		ug/L	20	107-06-2	Y
1,2-Dichloropropane	Not detected	20		ug/L	20	78-87-5	Y
1,3-Dichlorobenzene	Not detected	20		ug/L	20	541-73-1	Y
1,4-Dichlorobenzene	Not detected	20		ug/L	20	106-46-7	Y
cis-1,2-Dichloroethene	Not detected	20		ug/L	20	156-59-2	Y
cis-1,3-Dichloropropene	Not detected	20		ug/L	20	10061-01-5	Y
Dibromochloromethane	Not detected	100		ug/L	20	124-48-1	Y
Dibromomethane	Not detected	100		ug/L	20	74-95-3	Y
Dichlorodifluoromethane	Not detected	100		ug/L	20	75-71-8	Y
Diethyl ether	Not detected	200		ug/L	20	60-29-7	Y
trans-1,2-Dichloroethene	Not detected	20		ug/L	20	156-60-5	Y
trans-1,3-Dichloropropene	Not detected	20		ug/L	20	10061-02-6	Y
trans-1,4-Dichloro-2-butene	Not detected	20		ug/L	20	110-57-6	Y
Ethylbenzene	1,810	20		ug/L	20	100-41-4	Y
2-Hexanone	Not detected	1,000		ug/L	20	591-78-6	Y
Hexachloroethane	Not detected	100		ug/L	20	67-72-1	Y
p-Isopropyltoluene	Not detected	100		ug/L	20	99-87-6	Y
Isopropylbenzene	Not detected	100		ug/L	20	98-82-8	Y
2-Methylnaphthalene	Not detected	100		ug/L	20	91-57-6	Y
4-Methyl-2-pentanone (MIBK)	Not detected	1,000		ug/L	20	108-10-1	Y
tert-Methyl butyl ether (MTBE)	Not detected	100		ug/L	20	1634-04-4	Y
Methyl iodide	Not detected	20		ug/L	20	74-88-4	Y
Methylene chloride	Not detected	100		ug/L	20	75-09-2	Y
Naphthalene	200	100		ug/L	20	91-20-3	Y
n-Propylbenzene	170	20		ug/L	20	103-65-1	Y
Styrene	Not detected	20		ug/L	20	100-42-5	Y
1,1,1,2-Tetrachloroethane	Not detected	20		ug/L	20	630-20-6	Y
1,1,1-Trichloroethane	Not detected	20		ug/L	20	71-55-6	Y
1,1,2,2-Tetrachloroethane	Not detected	20		ug/L	20	79-34-5	Y
1,1,2-Trichloroethane	Not detected	20		ug/L	20	79-00-5	Y
1,2,3-Trichlorobenzene	Not detected	100		ug/L	20	87-61-6	Y
1,2,3-Trichloropropane	Not detected	20		ug/L	20	96-18-4	Y
1,2,3-Trimethylbenzene	460	20		ug/L	20	526-73-8	Y
1,2,4-Trichlorobenzene	Not detected	100		ug/L	20	120-82-1	Y
1,2,4-Trimethylbenzene	1,400	20		ug/L	20	95-63-6	Y
1,3,5-Trimethylbenzene	420	20		ug/L	20	108-67-8	Y
Tetrachloroethene	Not detected	20		ug/L	20	127-18-4	Y
Tetrahydrofuran*	Not detected	1,800		ug/L	20	109-99-9	Y

Y-Elevated reporting limit due to high target concentration

Lab Sample ID: S24103.08 (continued)
Sample Tag: JS-SB-09_GW-051221

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/19/21 08:15, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Toluene	190	20		ug/L	20	108-88-3	Y
Trichloroethene	Not detected	20		ug/L	20	79-01-6	Y
Trichlorofluoromethane	Not detected	20		ug/L	20	75-69-4	Y
Vinyl chloride	Not detected	20		ug/L	20	75-01-4	Y
o-Xylene	160	20		ug/L	20	95-47-6	Y
p,m-Xylene*	6,020	40		ug/L	20		Y

Y-Elevated reporting limit due to high target concentration

Lab Sample ID: S24103.09
Sample Tag: JS-SB-10_GW-051221
Collected Date/Time: 05/12/2021 09:50
Matrix: Groundwater
COC Reference: 137669

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	5.1	IR
1	1L Amber	None	Yes	5.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	05/18/21 10:30	BML	
PNA Extraction	Completed	SW3510C	05/18/21 10:00	TJT	

Organics - Semi-Volatiles

Polynuclear Aromatic Hydrocarbon, Method: SW8270D, Run Date: 05/19/21 21:27, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	S
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	S
Anthracene	Not detected	5		ug/L	2	120-12-7	S
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	S
Benzo(a)pyrene	Not detected	1		ug/L	2	50-32-8	S
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	S
Benzo(k)fluoranthene	Not detected	1		ug/L	2	207-08-9	S
Benzo(ghi)perylene	Not detected	1		ug/L	2	191-24-2	S
Chrysene	Not detected	1		ug/L	2	218-01-9	S
Dibenzo(ah)anthracene	Not detected	2		ug/L	2	53-70-3	S
Fluoranthene	Not detected	1		ug/L	2	206-44-0	S
Fluorene	Not detected	5		ug/L	2	86-73-7	S
Indeno(1,2,3-cd)pyrene	Not detected	2		ug/L	2	193-39-5	S
Naphthalene	Not detected	5		ug/L	2	91-20-3	S
Phenanthrene	Not detected	2		ug/L	2	85-01-8	S
Pyrene	Not detected	5		ug/L	2	129-00-0	S
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	S
1-Methylnaphthalene	Not detected	5		ug/L	2	90-12-0	S

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/18/21 07:28, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Benzene	Not detected	1		ug/L	1	71-43-2	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Bromoform	Not detected	1		ug/L	1	75-25-2	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	

S-Surrogate recovery outside of control limits

Lab Sample ID: S24103.09 (continued)
Sample Tag: JS-SB-10_GW-051221

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/18/21 07:28, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dichloroethane	4	1		ug/L	1	107-06-2	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Styrene	Not detected	1		ug/L	1	100-42-5	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Toluene	Not detected	1		ug/L	1	108-88-3	

Lab Sample ID: S24103.09 (continued)
Sample Tag: JS-SB-10_GW-051221

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/18/21 07:28, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
o-Xylene	Not detected	1		ug/L	1	95-47-6	
p,m-Xylene*	Not detected	2		ug/L	1		

Lab Sample ID: S24103.10
Sample Tag: JS-SB-11_GW-051221
Collected Date/Time: 05/12/2021 12:10
Matrix: Groundwater
COC Reference: 137669

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	5.1	IR
1	1L Amber	None	Yes	5.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	05/19/21 11:00	BML	
PNA Extraction	Completed	SW3510C	05/18/21 10:00	TJT	

Organics - Semi-Volatiles

Polynuclear Aromatic Hydrocarbon, Method: SW8270D, Run Date: 05/19/21 21:44, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	1		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(k)fluoranthene	Not detected	1		ug/L	2	207-08-9	
Benzo(ghi)perylene	Not detected	1		ug/L	2	191-24-2	
Chrysene	Not detected	1		ug/L	2	218-01-9	
Dibenzo(ah)anthracene	Not detected	2		ug/L	2	53-70-3	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	2		ug/L	2	193-39-5	
Naphthalene	Not detected	5		ug/L	2	91-20-3	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	
Pyrene	Not detected	5		ug/L	2	129-00-0	
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	
1-Methylnaphthalene	Not detected	5		ug/L	2	90-12-0	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/19/21 05:10, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Benzene	Not detected	1		ug/L	1	71-43-2	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Bromoform	Not detected	1		ug/L	1	75-25-2	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	

Lab Sample ID: S24103.10 (continued)
Sample Tag: JS-SB-11_GW-051221

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/19/21 05:10, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Styrene	Not detected	1		ug/L	1	100-42-5	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Toluene	Not detected	1		ug/L	1	108-88-3	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	

Lab Sample ID: S24103.10 (continued)

Sample Tag: JS-SB-11_GW-051221

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/19/21 05:10, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
o-Xylene	Not detected	1		ug/L	1	95-47-6	
p,m-Xylene*	Not detected	2		ug/L	1		

Lab Sample ID: S24103.11
Sample Tag: DUP-03_GW-051221
Collected Date/Time: 05/12/2021 00:01
Matrix: Groundwater
COC Reference: 137669

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	5.1	IR
1	1L Amber	None	Yes	5.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	05/18/21 10:30	BML	
PNA Extraction	Completed	SW3510C	05/18/21 10:00	TJT	

Organics - Semi-Volatiles

Polynuclear Aromatic Hydrocarbon, Method: SW8270D, Run Date: 05/19/21 22:01, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	1		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(k)fluoranthene	Not detected	1		ug/L	2	207-08-9	
Benzo(ghi)perylene	Not detected	1		ug/L	2	191-24-2	
Chrysene	Not detected	1		ug/L	2	218-01-9	
Dibenzo(ah)anthracene	Not detected	2		ug/L	2	53-70-3	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	2		ug/L	2	193-39-5	
Naphthalene	Not detected	5		ug/L	2	91-20-3	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	
Pyrene	Not detected	5		ug/L	2	129-00-0	
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	
1-Methylnaphthalene	Not detected	5		ug/L	2	90-12-0	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/18/21 07:52, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	50		ug/L	1	67-64-1	
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	Not detected	25		ug/L	1	78-93-3	
Benzene	Not detected	1		ug/L	1	71-43-2	
n-Butylbenzene	Not detected	1		ug/L	1	104-51-8	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Bromoform	Not detected	1		ug/L	1	75-25-2	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
sec-Butylbenzene	Not detected	1		ug/L	1	135-98-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	

Lab Sample ID: S24103.11 (continued)
Sample Tag: DUP-03_GW-051221

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/18/21 07:52, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dichloroethane	4	1		ug/L	1	107-06-2	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
p-Isopropyltoluene	Not detected	5		ug/L	1	99-87-6	
Isopropylbenzene	Not detected	5		ug/L	1	98-82-8	
2-Methylnaphthalene	Not detected	5		ug/L	1	91-57-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
Naphthalene	Not detected	5		ug/L	1	91-20-3	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Styrene	Not detected	1		ug/L	1	100-42-5	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
1,2,3-Trimethylbenzene	Not detected	1		ug/L	1	526-73-8	
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,4-Trimethylbenzene	Not detected	1		ug/L	1	95-63-6	
1,3,5-Trimethylbenzene	Not detected	1		ug/L	1	108-67-8	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	
Toluene	Not detected	1		ug/L	1	108-88-3	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	

Lab Sample ID: S24103.11 (continued)

Sample Tag: DUP-03_GW-051221

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/18/21 07:52, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
o-Xylene	Not detected	1		ug/L	1	95-47-6	
p,m-Xylene*	Not detected	2		ug/L	1		

Lab Sample ID: S24103.12
Sample Tag: JS-SB-05_GW-051221
Collected Date/Time: 05/12/2021 10:55
Matrix: Groundwater
COC Reference: 137669

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	5.1	IR
1	1L Amber	None	Yes	5.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	05/18/21 10:30	BML	
PNA Extraction	Completed	SW3510C	05/19/21 15:00	TTV	

Organics - Semi-Volatiles

Polynuclear Aromatic Hydrocarbon, Method: SW8270D, Run Date: 05/19/21 20:26, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	1		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(k)fluoranthene	Not detected	1		ug/L	2	207-08-9	
Benzo(ghi)perylene	Not detected	1		ug/L	2	191-24-2	
Chrysene	Not detected	1		ug/L	2	218-01-9	
Dibenzo(ah)anthracene	Not detected	2		ug/L	2	53-70-3	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	2		ug/L	2	193-39-5	
Naphthalene	193	5		ug/L	2	91-20-3	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	
Pyrene	Not detected	5		ug/L	2	129-00-0	
2-Methylnaphthalene	89	5		ug/L	2	91-57-6	
1-Methylnaphthalene	46	5		ug/L	2	90-12-0	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/17/21 16:28, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	292	50		ug/L	1	67-64-1	E
Acrylonitrile	Not detected	2		ug/L	1	107-13-1	
2-Butanone (MEK)	57	25		ug/L	1	78-93-3	
Benzene	1,220	1		ug/L	1	71-43-2	E
n-Butylbenzene	125	1		ug/L	1	104-51-8	
Bromobenzene	Not detected	1		ug/L	1	108-86-1	
Bromochloromethane	Not detected	1		ug/L	1	74-97-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Bromoform	Not detected	1		ug/L	1	75-25-2	
Bromomethane	Not detected	5		ug/L	1	74-83-9	
sec-Butylbenzene	6	1		ug/L	1	135-98-8	
tert-Butylbenzene	Not detected	1		ug/L	1	98-06-6	

E-Concentration exceeds calibration range

Lab Sample ID: S24103.12 (continued)
Sample Tag: JS-SB-05_GW-051221

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/17/21 16:28, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
Chloroethane	Not detected	5		ug/L	1	75-00-3	
Chloroform	Not detected	1		ug/L	1	67-66-3	
Chloromethane	Not detected	5		ug/L	1	74-87-3	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
1,2-Dibromo-3-chloropropane	Not detected	5		ug/L	1	96-12-8	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Dibromochloromethane	Not detected	5		ug/L	1	124-48-1	
Dibromomethane	Not detected	5		ug/L	1	74-95-3	
Dichlorodifluoromethane	Not detected	5		ug/L	1	75-71-8	
Diethyl ether	Not detected	10		ug/L	1	60-29-7	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
trans-1,4-Dichloro-2-butene	Not detected	1		ug/L	1	110-57-6	
Ethylbenzene	894	1		ug/L	1	100-41-4	E
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Hexachloroethane	Not detected	5		ug/L	1	67-72-1	
p-Isopropyltoluene	14	5		ug/L	1	99-87-6	
Isopropylbenzene	36	5		ug/L	1	98-82-8	
2-Methylnaphthalene	199	5		ug/L	1	91-57-6	
4-Methyl-2-pentanone (MIBK)	Not detected	50		ug/L	1	108-10-1	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
Methyl iodide	Not detected	1		ug/L	1	74-88-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
Naphthalene	528	5		ug/L	1	91-20-3	E
n-Propylbenzene	137	1		ug/L	1	103-65-1	
Styrene	Not detected	1		ug/L	1	100-42-5	
1,1,1,2-Tetrachloroethane	Not detected	1		ug/L	1	630-20-6	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
1,2,3-Trichlorobenzene	Not detected	5		ug/L	1	87-61-6	
1,2,3-Trichloropropane	Not detected	1		ug/L	1	96-18-4	
1,2,3-Trimethylbenzene	370	1		ug/L	1	526-73-8	E
1,2,4-Trichlorobenzene	Not detected	5		ug/L	1	120-82-1	
1,2,4-Trimethylbenzene	1,021	1		ug/L	1	95-63-6	E
1,3,5-Trimethylbenzene	340	1		ug/L	1	108-67-8	E
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	

E-Concentration exceeds calibration range

Lab Sample ID: S24103.12 (continued)
Sample Tag: JS-SB-05_GW-051221

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/17/21 16:28, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Toluene	170	1		ug/L	1	108-88-3	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
o-Xylene	103	1		ug/L	1	95-47-6	
p,m-Xylene*	2,736	2		ug/L	1		E

Volatile Organics - DEQ List (Replicate 01), Method: SW5030C/8260C, Run Date: 05/17/21 17:14, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	2,500		ug/L	50	67-64-1	Y
Acrylonitrile	Not detected	100		ug/L	50	107-13-1	Y
2-Butanone (MEK)	Not detected	1,300		ug/L	50	78-93-3	Y
Benzene	1,300	50		ug/L	50	71-43-2	Y
n-Butylbenzene	110	50		ug/L	50	104-51-8	Y
Bromobenzene	Not detected	50		ug/L	50	108-86-1	Y
Bromochloromethane	Not detected	50		ug/L	50	74-97-5	Y
Bromodichloromethane	Not detected	50		ug/L	50	75-27-4	Y
Bromoform	Not detected	50		ug/L	50	75-25-2	Y
Bromomethane	Not detected	300		ug/L	50	74-83-9	Y
sec-Butylbenzene	Not detected	50		ug/L	50	135-98-8	Y
tert-Butylbenzene	Not detected	50		ug/L	50	98-06-6	Y
Carbon disulfide	Not detected	300		ug/L	50	75-15-0	Y
Carbon tetrachloride	Not detected	50		ug/L	50	56-23-5	Y
Chlorobenzene	Not detected	50		ug/L	50	108-90-7	Y
Chloroethane	Not detected	300		ug/L	50	75-00-3	Y
Chloroform	Not detected	50		ug/L	50	67-66-3	Y
Chloromethane	Not detected	300		ug/L	50	74-87-3	Y
1,1-Dichloroethane	Not detected	50		ug/L	50	75-34-3	Y
1,1-Dichloroethene	Not detected	50		ug/L	50	75-35-4	Y
1,2-Dibromo-3-chloropropane	Not detected	300		ug/L	50	96-12-8	Y
1,2-Dibromoethane	Not detected	50		ug/L	50	106-93-4	Y
1,2-Dichlorobenzene	Not detected	50		ug/L	50	95-50-1	Y
1,2-Dichloroethane	Not detected	50		ug/L	50	107-06-2	Y
1,2-Dichloropropane	Not detected	50		ug/L	50	78-87-5	Y
1,3-Dichlorobenzene	Not detected	50		ug/L	50	541-73-1	Y
1,4-Dichlorobenzene	Not detected	50		ug/L	50	106-46-7	Y
cis-1,2-Dichloroethene	Not detected	50		ug/L	50	156-59-2	Y
cis-1,3-Dichloropropene	Not detected	50		ug/L	50	10061-01-5	Y
Dibromochloromethane	Not detected	300		ug/L	50	124-48-1	Y
Dibromomethane	Not detected	300		ug/L	50	74-95-3	Y
Dichlorodifluoromethane	Not detected	300		ug/L	50	75-71-8	Y
Diethyl ether	Not detected	500		ug/L	50	60-29-7	Y
trans-1,2-Dichloroethene	Not detected	50		ug/L	50	156-60-5	Y
trans-1,3-Dichloropropene	Not detected	50		ug/L	50	10061-02-6	Y
trans-1,4-Dichloro-2-butene	Not detected	50		ug/L	50	110-57-6	Y
Ethylbenzene	1,090	50		ug/L	50	100-41-4	Y
2-Hexanone	Not detected	2,500		ug/L	50	591-78-6	Y
Hexachloroethane	Not detected	300		ug/L	50	67-72-1	Y

E-Concentration exceeds calibration range
Y-Elevated reporting limit due to high target concentration

Lab Sample ID: S24103.12 (continued)
Sample Tag: JS-SB-05_GW-051221

Volatile Organics - DEQ List (Replicate 01), Method: SW5030C/8260C, Run Date: 05/17/21 17:14, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
p-Isopropyltoluene	Not detected	300		ug/L	50	99-87-6	Y
Isopropylbenzene	Not detected	300		ug/L	50	98-82-8	Y
2-Methylnaphthalene	Not detected	300		ug/L	50	91-57-6	Y
4-Methyl-2-pentanone (MIBK)	Not detected	2,500		ug/L	50	108-10-1	Y
tert-Methyl butyl ether (MTBE)	Not detected	300		ug/L	50	1634-04-4	Y
Methyl iodide	Not detected	50		ug/L	50	74-88-4	Y
Methylene chloride	Not detected	300		ug/L	50	75-09-2	Y
Naphthalene	500	300		ug/L	50	91-20-3	Y
n-Propylbenzene	120	50		ug/L	50	103-65-1	Y
Styrene	Not detected	50		ug/L	50	100-42-5	Y
1,1,1,2-Tetrachloroethane	Not detected	50		ug/L	50	630-20-6	Y
1,1,1-Trichloroethane	Not detected	50		ug/L	50	71-55-6	Y
1,1,2,2-Tetrachloroethane	Not detected	50		ug/L	50	79-34-5	Y
1,1,2-Trichloroethane	Not detected	50		ug/L	50	79-00-5	Y
1,2,3-Trichlorobenzene	Not detected	300		ug/L	50	87-61-6	Y
1,2,3-Trichloropropane	Not detected	50		ug/L	50	96-18-4	Y
1,2,3-Trimethylbenzene	320	50		ug/L	50	526-73-8	Y
1,2,4-Trichlorobenzene	Not detected	300		ug/L	50	120-82-1	Y
1,2,4-Trimethylbenzene	930	50		ug/L	50	95-63-6	Y
1,3,5-Trimethylbenzene	300	50		ug/L	50	108-67-8	Y
Tetrachloroethene	Not detected	50		ug/L	50	127-18-4	Y
Tetrahydrofuran*	Not detected	4,500		ug/L	50	109-99-9	Y
Toluene	160	50		ug/L	50	108-88-3	Y
Trichloroethene	Not detected	50		ug/L	50	79-01-6	Y
Trichlorofluoromethane	Not detected	50		ug/L	50	75-69-4	Y
Vinyl chloride	Not detected	50		ug/L	50	75-01-4	Y
o-Xylene	100	50		ug/L	50	95-47-6	Y
p,m-Xylene*	4,000	100		ug/L	50		Y

Y-Elevated reporting limit due to high target concentration

Lab Sample ID: S24103.13
Sample Tag: JS-SB-05_GW-051221 MS
Collected Date/Time: 05/12/2021 10:55
Matrix: Groundwater
COC Reference: 137669

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	5.1	IR
1	1L Amber	None	Yes	5.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	05/18/21 10:30	BML	
PNA Extraction	Completed	SW3510C	05/19/21 15:00	TTV	

Organics - Semi-Volatiles

Polynuclear Aromatic Hydrocarbon, Method: SW8270D, Run Date: 05/19/21 20:48, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	41	5		ug/L	2	83-32-9	1
Acenaphthylene	41	5		ug/L	2	208-96-8	1
Anthracene	54	5		ug/L	2	120-12-7	1
Benzo(a)anthracene	43	1		ug/L	2	56-55-3	1
Benzo(a)pyrene	45	1		ug/L	2	50-32-8	1
Benzo(b)fluoranthene	41	1		ug/L	2	205-99-2	1
Benzo(k)fluoranthene	44	1		ug/L	2	207-08-9	1
Benzo(ghi)perylene	41	1		ug/L	2	191-24-2	1
Chrysene	45	1		ug/L	2	218-01-9	1
Dibenzo(ah)anthracene	43	2		ug/L	2	53-70-3	1
Fluoranthene	44	1		ug/L	2	206-44-0	1
Fluorene	45	5		ug/L	2	86-73-7	1
Indeno(1,2,3-cd)pyrene	42	2		ug/L	2	193-39-5	1
Naphthalene	236	5		ug/L	2	91-20-3	1E
Phenanthrene	45	2		ug/L	2	85-01-8	1
Pyrene	43	5		ug/L	2	129-00-0	1
2-Methylnaphthalene	116	5		ug/L	2	91-57-6	1
1-Methylnaphthalene	84	5		ug/L	2	90-12-0	1

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/17/21 12:37, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	311	50		ug/L	1	67-64-1	2E
Acrylonitrile	97	2		ug/L	1	107-13-1	2
2-Butanone (MEK)	92	25		ug/L	1	78-93-3	2
Benzene	1,137	1		ug/L	1	71-43-2	2E
n-Butylbenzene	83	1		ug/L	1	104-51-8	2
Bromobenzene	47	1		ug/L	1	108-86-1	2
Bromochloromethane	46	1		ug/L	1	74-97-5	2
Bromodichloromethane	52	1		ug/L	1	75-27-4	2
Bromoform	47	1		ug/L	1	75-25-2	2
Bromomethane	51	5		ug/L	1	74-83-9	2

1-Sample spiked at 0.050 mg/l
E-Concentration exceeds calibration range
2-Spiked at 50ug/L

Lab Sample ID: S24103.13 (continued)
Sample Tag: JS-SB-05_GW-051221 MS

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/17/21 12:37, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
sec-Butylbenzene	57	1		ug/L	1	135-98-8	1
tert-Butylbenzene	403	1		ug/L	1	98-06-6	1
Carbon disulfide	49	5		ug/L	1	75-15-0	1
Carbon tetrachloride	49	1		ug/L	1	56-23-5	1
Chlorobenzene	50	1		ug/L	1	108-90-7	1
Chloroethane	51	5		ug/L	1	75-00-3	1
Chloroform	59	1		ug/L	1	67-66-3	1
Chloromethane	62	5		ug/L	1	74-87-3	1
1,1-Dichloroethane	54	1		ug/L	1	75-34-3	1
1,1-Dichloroethene	49	1		ug/L	1	75-35-4	1
1,2-Dibromo-3-chloropropane	49	5		ug/L	1	96-12-8	1
1,2-Dibromoethane	49	1		ug/L	1	106-93-4	1
1,2-Dichlorobenzene	51	1		ug/L	1	95-50-1	1
1,2-Dichloroethane	88	1		ug/L	1	107-06-2	1
1,2-Dichloropropane	61	1		ug/L	1	78-87-5	1
1,3-Dichlorobenzene	52	1		ug/L	1	541-73-1	1
1,4-Dichlorobenzene	52	1		ug/L	1	106-46-7	1
cis-1,2-Dichloroethene	47	1		ug/L	1	156-59-2	1
cis-1,3-Dichloropropene	52	1		ug/L	1	10061-01-5	1
Dibromochloromethane	49	5		ug/L	1	124-48-1	1
Dibromomethane	47	5		ug/L	1	74-95-3	1
Dichlorodifluoromethane	42	5		ug/L	1	75-71-8	1
Diethyl ether	51	10		ug/L	1	60-29-7	1
trans-1,2-Dichloroethene	51	1		ug/L	1	156-60-5	1
trans-1,3-Dichloropropene	53	1		ug/L	1	10061-02-6	1
trans-1,4-Dichloro-2-butene	48	1		ug/L	1	110-57-6	1
Ethylbenzene	850	1		ug/L	1	100-41-4	1E
2-Hexanone	55	50		ug/L	1	591-78-6	1
Hexachloroethane	50	5		ug/L	1	67-72-1	1
p-Isopropyltoluene	55	5		ug/L	1	99-87-6	1
Isopropylbenzene	81	5		ug/L	1	98-82-8	1
2-Methylnaphthalene	216	5		ug/L	1	91-57-6	1E
4-Methyl-2-pentanone (MIBK)	53	50		ug/L	1	108-10-1	1
tert-Methyl butyl ether (MTBE)	46	5		ug/L	1	1634-04-4	1
Methyl iodide	48	1		ug/L	1	74-88-4	1
Methylene chloride	52	5		ug/L	1	75-09-2	1
Naphthalene	518	5		ug/L	1	91-20-3	1E
n-Propylbenzene	175	1		ug/L	1	103-65-1	1
Styrene	53	1		ug/L	1	100-42-5	1
1,1,1,2-Tetrachloroethane	50	1		ug/L	1	630-20-6	1
1,1,1-Trichloroethane	49	1		ug/L	1	71-55-6	1
1,1,2,2-Tetrachloroethane	48	1		ug/L	1	79-34-5	1
1,1,2-Trichloroethane	56	1		ug/L	1	79-00-5	1
1,2,3-Trichlorobenzene	43	5		ug/L	1	87-61-6	1
1,2,3-Trichloropropane	48	1		ug/L	1	96-18-4	1
1,2,3-Trimethylbenzene	385	1		ug/L	1	526-73-8	1E
1,2,4-Trichlorobenzene	46	5		ug/L	1	120-82-1	1
1,2,4-Trimethylbenzene	963	1		ug/L	1	95-63-6	1E

1-Spiked at 50ug/L
E-Concentration exceeds calibration range

Lab Sample ID: S24103.13 (continued)
Sample Tag: JS-SB-05_GW-051221 MS

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/17/21 12:37, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,3,5-Trimethylbenzene	365	1		ug/L	1	108-67-8	1E
Tetrachloroethene	45	1		ug/L	1	127-18-4	1
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	1
Toluene	207	1		ug/L	1	108-88-3	1E
Trichloroethene	52	1		ug/L	1	79-01-6	1
Trichlorofluoromethane	50	1		ug/L	1	75-69-4	1
Vinyl chloride	53	1		ug/L	1	75-01-4	1
o-Xylene	144	1		ug/L	1	95-47-6	1
p,m-Xylene*	2,594	2		ug/L	1		1E

1-Spiked at 50ug/L E-Concentration exceeds calibration range

Lab Sample ID: S24103.14
Sample Tag: JS-SB-05_GW-051221 MSD
Collected Date/Time: 05/12/2021 10:55
Matrix: Groundwater
COC Reference: 137669

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	5.1	IR
1	1L Amber	None	Yes	5.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	05/18/21 10:30	BML	
PNA Extraction	Completed	SW3510C	05/19/21 15:00	TTV	

Organics - Semi-Volatiles

Polynuclear Aromatic Hydrocarbon, Method: SW8270D, Run Date: 05/19/21 21:10, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	43	5		ug/L	2	83-32-9	1
Acenaphthylene	42	5		ug/L	2	208-96-8	1
Anthracene	55	5		ug/L	2	120-12-7	1
Benzo(a)anthracene	44	1		ug/L	2	56-55-3	1
Benzo(a)pyrene	45	1		ug/L	2	50-32-8	1
Benzo(b)fluoranthene	43	1		ug/L	2	205-99-2	1
Benzo(k)fluoranthene	44	1		ug/L	2	207-08-9	1
Benzo(ghi)perylene	38	1		ug/L	2	191-24-2	1
Chrysene	46	1		ug/L	2	218-01-9	1
Dibenzo(ah)anthracene	41	2		ug/L	2	53-70-3	1
Fluoranthene	45	1		ug/L	2	206-44-0	1
Fluorene	46	5		ug/L	2	86-73-7	1
Indeno(1,2,3-cd)pyrene	41	2		ug/L	2	193-39-5	1
Naphthalene	209	5		ug/L	2	91-20-3	1E
Phenanthrene	46	2		ug/L	2	85-01-8	1
Pyrene	44	5		ug/L	2	129-00-0	1
2-Methylnaphthalene	131	5		ug/L	2	91-57-6	1
1-Methylnaphthalene	90	5		ug/L	2	90-12-0	1

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/17/21 13:00, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	304	50		ug/L	1	67-64-1	2E
Acrylonitrile	93	2		ug/L	1	107-13-1	2
2-Butanone (MEK)	90	25		ug/L	1	78-93-3	2
Benzene	1,108	1		ug/L	1	71-43-2	2E
n-Butylbenzene	80	1		ug/L	1	104-51-8	2
Bromobenzene	47	1		ug/L	1	108-86-1	2
Bromochloromethane	46	1		ug/L	1	74-97-5	2
Bromodichloromethane	49	1		ug/L	1	75-27-4	2
Bromoform	45	1		ug/L	1	75-25-2	2
Bromomethane	49	5		ug/L	1	74-83-9	2

1-Sample spiked at 0.050 mg/l
E-Concentration exceeds calibration range
2-Spiked at 50ug/L

Lab Sample ID: S24103.14 (continued)
Sample Tag: JS-SB-05_GW-051221 MSD

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/17/21 13:00, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
sec-Butylbenzene	55	1		ug/L	1	135-98-8	1
tert-Butylbenzene	40	1		ug/L	1	98-06-6	1
Carbon disulfide	46	5		ug/L	1	75-15-0	1
Carbon tetrachloride	46	1		ug/L	1	56-23-5	1
Chlorobenzene	48	1		ug/L	1	108-90-7	1
Chloroethane	50	5		ug/L	1	75-00-3	1
Chloroform	58	1		ug/L	1	67-66-3	1
Chloromethane	63	5		ug/L	1	74-87-3	1
1,1-Dichloroethane	52	1		ug/L	1	75-34-3	1
1,1-Dichloroethene	47	1		ug/L	1	75-35-4	1
1,2-Dibromo-3-chloropropane	48	5		ug/L	1	96-12-8	1
1,2-Dibromoethane	48	1		ug/L	1	106-93-4	1
1,2-Dichlorobenzene	50	1		ug/L	1	95-50-1	1
1,2-Dichloroethane	85	1		ug/L	1	107-06-2	1
1,2-Dichloropropane	59	1		ug/L	1	78-87-5	1
1,3-Dichlorobenzene	51	1		ug/L	1	541-73-1	1
1,4-Dichlorobenzene	51	1		ug/L	1	106-46-7	1
cis-1,2-Dichloroethene	46	1		ug/L	1	156-59-2	1
cis-1,3-Dichloropropene	50	1		ug/L	1	10061-01-5	1
Dibromochloromethane	48	5		ug/L	1	124-48-1	1
Dibromomethane	46	5		ug/L	1	74-95-3	1
Dichlorodifluoromethane	39	5		ug/L	1	75-71-8	1
Diethyl ether	49	10		ug/L	1	60-29-7	1
trans-1,2-Dichloroethene	49	1		ug/L	1	156-60-5	1
trans-1,3-Dichloropropene	51	1		ug/L	1	10061-02-6	1
trans-1,4-Dichloro-2-butene	48	1		ug/L	1	110-57-6	1
Ethylbenzene	834	1		ug/L	1	100-41-4	1E
2-Hexanone	55	50		ug/L	1	591-78-6	1
Hexachloroethane	48	5		ug/L	1	67-72-1	1
p-Isopropyltoluene	54	5		ug/L	1	99-87-6	1
Isopropylbenzene	79	5		ug/L	1	98-82-8	1
2-Methylnaphthalene	216	5		ug/L	1	91-57-6	1E
4-Methyl-2-pentanone (MIBK)	52	50		ug/L	1	108-10-1	1
tert-Methyl butyl ether (MTBE)	45	5		ug/L	1	1634-04-4	1
Methyl iodide	47	1		ug/L	1	74-88-4	1
Methylene chloride	50	5		ug/L	1	75-09-2	1
Naphthalene	503	5		ug/L	1	91-20-3	1E
n-Propylbenzene	170	1		ug/L	1	103-65-1	1
Styrene	52	1		ug/L	1	100-42-5	1
1,1,1,2-Tetrachloroethane	48	1		ug/L	1	630-20-6	1
1,1,1-Trichloroethane	46	1		ug/L	1	71-55-6	1
1,1,2,2-Tetrachloroethane	48	1		ug/L	1	79-34-5	1
1,1,2-Trichloroethane	54	1		ug/L	1	79-00-5	1
1,2,3-Trichlorobenzene	41	5		ug/L	1	87-61-6	1
1,2,3-Trichloropropane	46	1		ug/L	1	96-18-4	1
1,2,3-Trimethylbenzene	374	1		ug/L	1	526-73-8	1E
1,2,4-Trichlorobenzene	44	5		ug/L	1	120-82-1	1
1,2,4-Trimethylbenzene	944	1		ug/L	1	95-63-6	1E

1-Spiked at 50ug/L
E-Concentration exceeds calibration range

Lab Sample ID: S24103.14 (continued)
Sample Tag: JS-SB-05_GW-051221 MSD

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/17/21 13:00, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,3,5-Trimethylbenzene	359	1		ug/L	1	108-67-8	1E
Tetrachloroethene	43	1		ug/L	1	127-18-4	1
Tetrahydrofuran*	Not detected	90		ug/L	1	109-99-9	1
Toluene	201	1		ug/L	1	108-88-3	1E
Trichloroethene	50	1		ug/L	1	79-01-6	1
Trichlorofluoromethane	48	1		ug/L	1	75-69-4	1
Vinyl chloride	51	1		ug/L	1	75-01-4	1
o-Xylene	140	1		ug/L	1	95-47-6	1
p,m-Xylene*	2,566	2		ug/L	1		1E

1-Spiked at 50ug/L E-Concentration exceeds calibration range

Lab Sample ID: S24103.15
Sample Tag: DUP-04_GW-051221
Collected Date/Time: 05/12/2021 00:01
Matrix: Groundwater
COC Reference: 137670

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	5.1	IR
1	1L Amber	None	Yes	5.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	05/18/21 10:30	BML	
PNA Extraction	Completed	SW3510C	05/19/21 15:00	TTV	

Organics - Semi-Volatiles

Polynuclear Aromatic Hydrocarbon, Method: SW8270D, Run Date: 05/19/21 21:32, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	1		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(k)fluoranthene	Not detected	1		ug/L	2	207-08-9	
Benzo(ghi)perylene	Not detected	1		ug/L	2	191-24-2	
Chrysene	Not detected	1		ug/L	2	218-01-9	
Dibenzo(ah)anthracene	Not detected	2		ug/L	2	53-70-3	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	2		ug/L	2	193-39-5	
Naphthalene	207	5		ug/L	2	91-20-3	E
Phenanthrene	Not detected	2		ug/L	2	85-01-8	
Pyrene	Not detected	5		ug/L	2	129-00-0	
2-Methylnaphthalene	82	5		ug/L	2	91-57-6	
1-Methylnaphthalene	46	5		ug/L	2	90-12-0	

Polynuclear Aromatic Hydrocarbon (Replicate 01), Method: SW8270D, Run Date: 05/20/21 22:22, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	4	83-32-9	
Acenaphthylene	Not detected	5		ug/L	4	208-96-8	
Anthracene	Not detected	5		ug/L	4	120-12-7	
Benzo(a)anthracene	Not detected	2		ug/L	4	56-55-3	Y
Benzo(a)pyrene	Not detected	2		ug/L	4	50-32-8	Y
Benzo(b)fluoranthene	Not detected	2		ug/L	4	205-99-2	Y
Benzo(k)fluoranthene	Not detected	2		ug/L	4	207-08-9	Y
Benzo(ghi)perylene	Not detected	2		ug/L	4	191-24-2	Y
Chrysene	Not detected	2		ug/L	4	218-01-9	Y
Dibenzo(ah)anthracene	Not detected	2		ug/L	4	53-70-3	
Fluoranthene	Not detected	2		ug/L	4	206-44-0	Y
Fluorene	Not detected	5		ug/L	4	86-73-7	

E-Concentration exceeds calibration range
Y-Elevated reporting limit due to high target concentration

Lab Sample ID: S24103.15 (continued)
Sample Tag: DUP-04_GW-051221

Polynuclear Aromatic Hydrocarbon (Replicate 01), Method: SW8270D, Run Date: 05/20/21 22:22, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Indeno(1,2,3-cd)pyrene	Not detected	2		ug/L	4	193-39-5	
Naphthalene	181	5		ug/L	4	91-20-3	
Phenanthrene	Not detected	2		ug/L	4	85-01-8	
Pyrene	Not detected	5		ug/L	4	129-00-0	
2-Methylnaphthalene	71	5		ug/L	4	91-57-6	
1-Methylnaphthalene	38	5		ug/L	4	90-12-0	

Organics - Volatiles

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/19/21 08:38, Analyst: KAG

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acetone	Not detected	2,500		ug/L	50	67-64-1	Y
Acrylonitrile	Not detected	100		ug/L	50	107-13-1	Y
2-Butanone (MEK)	Not detected	1,300		ug/L	50	78-93-3	Y
Benzene	1,280	50		ug/L	50	71-43-2	Y
n-Butylbenzene	Not detected	50		ug/L	50	104-51-8	Y
Bromobenzene	Not detected	50		ug/L	50	108-86-1	Y
Bromochloromethane	Not detected	50		ug/L	50	74-97-5	Y
Bromodichloromethane	Not detected	50		ug/L	50	75-27-4	Y
Bromoform	Not detected	50		ug/L	50	75-25-2	Y
Bromomethane	Not detected	300		ug/L	50	74-83-9	Y
sec-Butylbenzene	Not detected	50		ug/L	50	135-98-8	Y
tert-Butylbenzene	Not detected	50		ug/L	50	98-06-6	Y
Carbon disulfide	Not detected	300		ug/L	50	75-15-0	Y
Carbon tetrachloride	Not detected	50		ug/L	50	56-23-5	Y
Chlorobenzene	Not detected	50		ug/L	50	108-90-7	Y
Chloroethane	Not detected	300		ug/L	50	75-00-3	Y
Chloroform	Not detected	50		ug/L	50	67-66-3	Y
Chloromethane	Not detected	300		ug/L	50	74-87-3	Y
1,1-Dichloroethane	Not detected	50		ug/L	50	75-34-3	Y
1,1-Dichloroethene	Not detected	50		ug/L	50	75-35-4	Y
1,2-Dibromo-3-chloropropane	Not detected	300		ug/L	50	96-12-8	Y
1,2-Dibromoethane	Not detected	50		ug/L	50	106-93-4	Y
1,2-Dichlorobenzene	Not detected	50		ug/L	50	95-50-1	Y
1,2-Dichloroethane	Not detected	50		ug/L	50	107-06-2	Y
1,2-Dichloropropane	Not detected	50		ug/L	50	78-87-5	Y
1,3-Dichlorobenzene	Not detected	50		ug/L	50	541-73-1	Y
1,4-Dichlorobenzene	Not detected	50		ug/L	50	106-46-7	Y
cis-1,2-Dichloroethene	Not detected	50		ug/L	50	156-59-2	Y
cis-1,3-Dichloropropene	Not detected	50		ug/L	50	10061-01-5	Y
Dibromochloromethane	Not detected	300		ug/L	50	124-48-1	Y
Dibromomethane	Not detected	300		ug/L	50	74-95-3	Y
Dichlorodifluoromethane	Not detected	300		ug/L	50	75-71-8	Y
Diethyl ether	Not detected	500		ug/L	50	60-29-7	Y
trans-1,2-Dichloroethene	Not detected	50		ug/L	50	156-60-5	Y
trans-1,3-Dichloropropene	Not detected	50		ug/L	50	10061-02-6	Y
trans-1,4-Dichloro-2-butene	Not detected	50		ug/L	50	110-57-6	Y
Ethylbenzene	1,040	50		ug/L	50	100-41-4	Y
2-Hexanone	Not detected	2,500		ug/L	50	591-78-6	Y
Hexachloroethane	Not detected	300		ug/L	50	67-72-1	Y

Y-Elevated reporting limit due to high target concentration

Lab Sample ID: S24103.15 (continued)
Sample Tag: DUP-04_GW-051221

Volatile Organics - DEQ List, Method: SW5030C/8260C, Run Date: 05/19/21 08:38, Analyst: KAG (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
p-Isopropyltoluene	Not detected	300		ug/L	50	99-87-6	Y
Isopropylbenzene	Not detected	300		ug/L	50	98-82-8	Y
2-Methylnaphthalene	Not detected	300		ug/L	50	91-57-6	Y
4-Methyl-2-pentanone (MIBK)	Not detected	2,500		ug/L	50	108-10-1	Y
tert-Methyl butyl ether (MTBE)	Not detected	300		ug/L	50	1634-04-4	Y
Methyl iodide	Not detected	50		ug/L	50	74-88-4	Y
Methylene chloride	Not detected	300		ug/L	50	75-09-2	Y
Naphthalene	500	300		ug/L	50	91-20-3	Y
n-Propylbenzene	110	50		ug/L	50	103-65-1	Y
Styrene	Not detected	50		ug/L	50	100-42-5	Y
1,1,1,2-Tetrachloroethane	Not detected	50		ug/L	50	630-20-6	Y
1,1,1-Trichloroethane	Not detected	50		ug/L	50	71-55-6	Y
1,1,2,2-Tetrachloroethane	Not detected	50		ug/L	50	79-34-5	Y
1,1,2-Trichloroethane	Not detected	50		ug/L	50	79-00-5	Y
1,2,3-Trichlorobenzene	Not detected	300		ug/L	50	87-61-6	Y
1,2,3-Trichloropropane	Not detected	50		ug/L	50	96-18-4	Y
1,2,3-Trimethylbenzene	300	50		ug/L	50	526-73-8	Y
1,2,4-Trichlorobenzene	Not detected	300		ug/L	50	120-82-1	Y
1,2,4-Trimethylbenzene	800	50		ug/L	50	95-63-6	Y
1,3,5-Trimethylbenzene	260	50		ug/L	50	108-67-8	Y
Tetrachloroethene	Not detected	50		ug/L	50	127-18-4	Y
Tetrahydrofuran*	Not detected	4,500		ug/L	50	109-99-9	Y
Toluene	190	50		ug/L	50	108-88-3	Y
Trichloroethene	Not detected	50		ug/L	50	79-01-6	Y
Trichlorofluoromethane	Not detected	50		ug/L	50	75-69-4	Y
Vinyl chloride	Not detected	50		ug/L	50	75-01-4	Y
o-Xylene	90	50		ug/L	50	95-47-6	Y
p,m-Xylene*	3,700	100		ug/L	50		Y

Y-Elevated reporting limit due to high target concentration

Merit Laboratories Login Checklist

Lab Set ID: S24103
Client: ARCADIS_NOVI (ARCADIS U.S., Inc.)
Project: Racer PNC / 30075936 Task 5
Submitted: 05/12/2021 13:55 Login User: REJ

Attention: Alexis Crisp
Address: Arcadis US, Inc.
28550 Cabot Drive
Suite 500
Novi, MI 48377

Phone: n/a FAX:
Email: Alexis.Crisp@arcadis.com

Selection				Description	Note
Sample Receiving					
01.	[X] Yes	[ ] No	[ ] N/A	Samples are received at 4C +/- 2C Thermometer #	IR 5.1
02.	[X] Yes	[ ] No	[ ] N/A	Received on ice/ cooling process begun	
03.	[ ] Yes	[X] No	[ ] N/A	Samples shipped	
04.	[ ] Yes	[X] No	[ ] N/A	Samples left in 24 hr. drop box	
05.	[ ] Yes	[ ] No	[X] N/A	Are there custody seals/tape or is the drop box locked	
Chain of Custody					
06.	[X] Yes	[ ] No	[ ] N/A	COC adequately filled out	
07.	[X] Yes	[ ] No	[ ] N/A	COC signed and relinquished to the lab	
08.	[X] Yes	[ ] No	[ ] N/A	Sample tag on bottles match COC	
09.	[ ] Yes	[X] No	[ ] N/A	Subcontracting needed? Subcontacted to:	
Preservation					
10.	[X] Yes	[ ] No	[ ] N/A	Do sample have correct chemical preservation	
11.	[ ] Yes	[ ] No	[X] N/A	Completed pH checks on preserved samples? (no VOAs)	
12.	[ ] Yes	[X] No	[ ] N/A	Did any samples need to be preserved in the lab?	
Bottle Conditions					
13.	[X] Yes	[ ] No	[ ] N/A	All bottles intact	
14.	[X] Yes	[ ] No	[ ] N/A	Appropriate analytical bottles are used	
15.	[X] Yes	[ ] No	[ ] N/A	Merit bottles used	
16.	[X] Yes	[ ] No	[ ] N/A	Sufficient sample volume received	
17.	[ ] Yes	[X] No	[ ] N/A	Samples require laboratory filtration	
18.	[X] Yes	[ ] No	[ ] N/A	Samples submitted within holding time	
19.	[ ] Yes	[X] No	[ ] N/A	Do water VOC or TOX bottles contain headspace	

Corrective action for all exceptions is to call the client and to notify the project manager.

Client Review By: _____ Date: _____

Merit Laboratories, Inc.

2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # 1 OF 2

137669

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Lexi Crisp, Brad Saunders
COMPANY: Arcadis
ADDRESS: 28550 Cabot drive
CITY: Novi STATE: MI ZIP CODE: 48377
PHONE NO.: FAX NO.: P.O. NO.: 30075936 TASK 5
E-MAIL ADDRESS: lexi.crisp@arcadis.com; brad.saunders@arcadis.com QUOTE NO.:

INVOICE TO

CONTACT NAME: ☒ SAME
COMPANY:
ADDRESS:
CITY: STATE: ZIP CODE:
PHONE NO.: E-MAIL ADDRESS:

PROJECT NO./NAME: Raer PNC / 30075936 TASK 5
SAMPLER(S) - PLEASE PRINT/SIGN NAME: Seth Turner / Seth Turner

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED ☒ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER

MATRIX CODE: GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR W=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications
☐ OHIO VAP ☐ Drinking Water
☐ DoD ☐ NPDES
Project Locations
☐ Detroit ☐ New York
☐ Other
Special Instructions

MERIT LAB NO. FOR LAB USE ONLY	YEAR DATE	YEAR TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	VOCs	PAHs	Special Instructions
24103.01	5/11/21	840	JS-SB-01_GW-051121	GW	4	1	3						X	X	
.02	5/11/21	930	JS-SB-02_GW-051121	GW	4	1	3								
.03	5/11/21	1030	JS-SB-03_GW-051121	GW	4	1	3								
.04	5/11/21	1155	JS-SB-04_GW-051121	GW	4	1	3								
.05	5/11/21	1300	JS-SB-06_GW-051121	GW	4	1	3								
.06	5/11/21	1345	JS-SB-07_GW-051121	GW	4	1	3								
.07	5/11/21	1440	JS-SB-08_GW-051121	GW	4	1	3								
.08	5/12/21	900	JS-SB-09_GW-051221	GW	4	1	3								
.09	5/12/21	950	JS-SB-10_GW-051221	GW	4	1	3								
.10	5/12/21	1210	JS-SB-11_GW-051221	GW	4	1	3								
.11	5/12/21	—	DUP-03_GW-051221	GW	4	1	3								
.13.14.12	5/12/21	1055	JS-SB-05_GW-051221	GW	12	3	9								MS/MSD

RELINQUISHED BY: SIGNATURE/ORGANIZATION	☒ Sampler	DATE	TIME
Seth Turner / Arcadis		5/12/21	1355
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME
		5/12/21	1855
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE	TIME

RELINQUISHED BY: SIGNATURE/ORGANIZATION	DATE	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION	DATE	TIME

SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS

NOTES: TEMP. ON ARRIVAL 5.1

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

Rev. 5.18.12

Merit Laboratories, Inc.
2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # 2 OF 2

137670

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Lexi Crisp, Brad Saunders
COMPANY: Arcadis
ADDRESS: 28550 Cabot Drive
CITY: Novi STATE: MI ZIP CODE: 48377
PHONE NO.: FAX NO.: P.O. NO.: 30075936 Task 5
E-MAIL ADDRESS: lexi.crisp@arcadis.com, Brad.Saunders@arcadis.com QUOTE NO.:

INVOICE TO

CONTACT NAME: ☒ SAME
COMPANY:
ADDRESS:
CITY: STATE: ZIP CODE:
PHONE NO.: E-MAIL ADDRESS:

PROJECT NO./NAME: Racer INC / 30075936 Task 5
SAMPLER(S) - PLEASE PRINT/SIGN NAME: Seth Turner / Seth Turner

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED ☒ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER

MATRIX CODE: GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR W=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications
☐ OHIO VAP ☐ Drinking Water
☐ DoD ☐ NPDES

Project Locations
☐ Detroit ☐ New York
☐ Other

Special Instructions

MERIT LAB NO. (FOR LAB USE ONLY)	YEAR DATE	YEAR TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	VOCs	PAHs
29103.15	5/12/21	—	DUP-04_GW-051221	GW	4	1	3						X	X

RELINQUISHED BY: SIGNATURE/ORGANIZATION: Seth Turner / Arcadis ☒ Sampler DATE: 5/12/21 TIME: 1355
RECEIVED BY: SIGNATURE/ORGANIZATION: DATE: 5/12/21 TIME: 1355
RELINQUISHED BY: SIGNATURE/ORGANIZATION: DATE: TIME:
RECEIVED BY: SIGNATURE/ORGANIZATION: DATE: TIME:

RELINQUISHED BY: SIGNATURE/ORGANIZATION: DATE: TIME:
RECEIVED BY: SIGNATURE/ORGANIZATION: DATE: TIME:

SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS

NOTES: TEMP. ON ARRIVAL: 5.1

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

Rev. 5.18.12

Novi, Michigan 48377

Tel 248 994 2240

Fax 248 994 2241

www.arcadis.com