August 16, 2022

Mr. Greg Huth
Department of Law
Cuyahoga County
2079 East 9th Street
Cleveland, Ohio 44115

RE: Phase II Subsurface Investigation Report
2700 Transport Road
Cleveland, Cuyahoga County, Ohio

Dear Mr. Huth:

Partners was contracted by Cuyahoga County to conduct a Voluntary Action Program (VAP) Phase II Property Assessment (Phase II) in accordance with OAC 3745-300-06 at 2700 Transport Road in the City of Cleveland, Cuyahoga County, Ohio (Property). The location of the Property is depicted on **Figure 1** and a Property Plan is included as **Figure 2**.

BACKGROUND

The Property consists of approximately 44.7-acres and is identified as parcels 122-27-001, 007, and 013. The Property has been industrially developed since 1863 when Standard Oil Company began refinery operations. Over the years activities included crude oil distillation, reforming, cracking, alkylation, coking and asphalt production. Dismantling of the facility began in 1966 as refinery operations were discontinued and portions of the facility remained in operation for production of asphalt. In 1977, the refinery property was subdivided, and Transport Road was constructed. Parcel 122-27-013 was developed for use by a trucking company which included truck repair and wash operations. Asphalt production continued at the other two (2) the parcels until 1981. Most of the asphalt and refinery facilities were demolished by 1990 and the two (2) parcels were regraded in 1991. Universal Intermodal, Inc. (current occupant) began operations in 2005 and undertook redevelopment activities to utilize the Property as a container storage yard. The construction activities for redevelopment were part of a remedy under the VAP and primarily involved the import and placement of 2 ft of clean compacted soil, grading to establish drainage, installation of catch basins and shallow storm sewers and the installation of and 8" thick asphalt pavement in 2005 and 2006 over 22-acres.

Parcels 122-27-007 and -001 are the subject of a Covenant Not to Sue (CNS) from the Ohio EPA VAP through the submission of a NFA Letter (No. 00NFA086) in June 2005. The Volunteer under the CNS was BP America, Inc. The current Volunteer is UTS Realty, LLC. The CNS and NFA outline the current obligations and requirements under the VAP with respect to the Property, as follows:

- An Environmental Covenant (EC) is in place, which includes a limitation for commercial or industrial land uses and a limitation prohibiting groundwater extraction and uses, except for investigation or remediation.

- An Operation and Maintenance Plan (O&M Plan) is in place to manage engineering controls consisting of a two (2) foot thick soil cover, sheet pile cut-off walls installed at down gradient boundaries that intersect the alignment of the former Kingsbury Run stream channel and groundwater flow paths to protect from off-Property migration of light non-aqueous phase liquids (LNAPL), and surface grading to direct storm water runoff to a new drainage network connected to the stormwater system managed by the Northeast Ohio Regional Sewer District (NEORSD).

- A Risk Mitigation Plan (RMP) is in place to protect construction and excavation workers at the Property from exposures to petroleum constituents in subsurface soil and groundwater. The RMP must be implemented whenever construction or excavation activities occur at or below two (2) feet in depth due to the presence of benzene, PAHs, TPH, and light non-aqueous phase liquids (LNAPL aka free product).

Previous work completed for the previous CNS included installing and sampling 48 soil borings, 34 groundwater monitoring wells, and 30 shallow soil samples. The investigations found soil impacts of total petroleum hydrocarbons (TPH) and polynuclear aromatic hydrocarbons (PAHs) and groundwater impacts of benzene and free-product.

A VAP Phase I Property Assessment was completed by Partners and identified three (3) Identified Areas (IAs) for the Property as detailed below.

Identified Area 1 (IA-1) – Historical Refinery Operations and Impacted Soil and Groundwater:

The Property has been industrially developed since 1863 when Standard Oil Company began refinery operations. Activities included crude oil distillation, reforming, cracking, alkylation, coking and asphalt production. Dismantling of the facility began in 1966 as operations were discontinued and portions of the facility remained in operation for production of asphalt. Asphalt production continued at parcels 122-27-001 and 007 until 1981. Most of the asphalt and refinery facilities were demolished by 1990 and the two (2) parcels were regraded in 1991. Impacts to soil and groundwater by petroleum compounds has been documented at the Property including pervasive crude oil (LNAPL). Chemicals of concern (COCs) for this IA include volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons (PAHs), total Petroleum hydrocarbons (TPH), and LNAPLs.

Identified Area 2 (IA-2) – Trucking Operations:

Parcel 122-27-013 has been used for trucking operations since at least 1975. COCs for this IA include VOCs and PAHs.

Identified Area 3 (IA-3) – Former 10,000-gallon Diesel USTs:

BUSTR records for UTS Realty LLC indicate in 2007 two (2) 10,000-gallon diesel USTs and associated dispensers and piping were removed. The age of the USTs was unknown. The USTs were located in a common cavity to the west of the building. Results of soil analysis showed no exceedances of benzene, toluene, ethylbenzene, and total xylene (BTEX) or PAHs. But TPH concentrations ranged from 1,730 to 187,000 mg/kg. A letter from BUSTR in 2008 required Tier 1 Source Investigation be conducted to assess the presence of soil contamination in excess of action levels. This release is currently in Tier 1 status and has not been resolved. In order to be eligible for the VAP, BUSTR obligations must be resolved, or a Class C determination must be sought from BUSTR.

CONCEPTUAL SITE MODEL

A conceptual site model (CSM) has been prepared to illustrate the relationships between COCs, transport media and receptors in connection with the Property. The CSM has been prepared in accordance with OAC 3745-300-07(C) and graphically illustrates relationships between COCs, transport media and receptors on the Property (**Figure 4**).

The Property has been industrially developed since 1863. The Property is bordered to the north by railroads including commercial rail and Cleveland RTA followed by a Cuyahoga County Department of Corrections facility. Industrial development and Boyas Excavating (aggregate material stockpiling facilities) adjoin the Property to the south. Broadway Avenue borders the Property to the east and industrial development including a bulk oil distribution facility and an aggregate material stockpiling facility

adjoin the Property to the east. Transport Road and Rockefeller Boulevard border the Property to the west along with Fortuna Aggregates (2727 Transport Road), a concrete aggregate recycler.

A limitation prohibiting groundwater extraction and uses is in place for the Property that stipulates groundwater cannot be extracted for any purposes, except for groundwater investigation, groundwater monitoring, remedial activities, or those in conjunction with construction and excavation activities or maintenance of subsurface utilities.

Receptors and Exposure Pathways:

Restricted Residential Receptors:

- Direct contact with soil via ingestion, dermal contact, and inhalation of volatile and particulate emissions within a point of compliance of 2-feet.
- Inhalation due to vapor intrusion of volatile emissions to indoor air.

Construction/Excavation Workers:

- Direct contact with soil via ingestion, dermal contact, and inhalation of volatile and particulate emissions within a point of compliance of 10-feet.
- Dermal contact with groundwater and inhalation of volatile emissions during trench excavation activities.

Off-Property Commercial/Industrial Receptors:

The potential off-Property exposure pathways are vapor intrusion from groundwater to indoor air for commercial use and construction/excavation exposures to vapor intrusion into a trench.

PHASE II SCOPE OF WORK

The methods described in this section pertain to all VAP sampling activities conducted by Partners in May and 2022. Partners sampling activities were conducted in general accordance with protocols outlined in Ohio EPA Technical Guidance Manual for Hydrogeologic Investigations and Groundwater Monitoring, the Ohio EPA document Sample Collection and Evaluation of Vapor Intrusion to Indoor Air for Remedial Response, RCRA and VAP, and with Partners' Field Standard Operating Procedures (FSOPs) located in the Data Quality Objectives Plan & Sampling and Analysis Plan (DQO/SAP). This section provides an overview of key aspects of the assessment methodology, but greater details is contained within the referenced documents. Partners scope of work included:

- Installing and sampling 21 soil borings
- Completing nine (9) of the soil borings as groundwater monitoring wells and sampling the wells,
- Installing and sampling three (3) sub-slab vapor samples and three (3) soil gas points.
- In addition to the VAP activities, Partners conducted methane monitoring at the monitoring well, soil gas, sub-slab vapor, and catch basin locations.

Two (2) soil borings and one (1) monitoring well planned in the western portion of the Property could not be completed due to the presence of fill and barricades. Additionally, three (3) soil gas samples could not be collected due to the shallow nature of groundwater. The Ohio EPA Vapor Intrusion Guidance requires that soil gas samples be obtained no less than five (5) feet below ground surface.

At this time one (1) round of groundwater and sub-slab/soil gas sampling has been conducted. Prior to completion of the VAP Phase II Property Assessment for submittal to the Ohio EPA, a second round of sampling will be required.

Notification to OUPS and OGPUPS

The Ohio Utilities Protection Service (OUPS) and the Oil Gas Producers Underground Protection Service (OGPUPS) were notified prior to completing subsurface activities. This notification was made a minimum of 48 hours prior to initiating intrusive activities on the Property. The notification allowed OUPS to contact various utilities to mark the location of their underground utility lines (if any) on the Property.

Soil Sampling, Field Screening and Analyses

Soil borings were advanced using direct-push technology (i.e., Geoprobe™) to depths ranging from 4.5 to 20 feet bgs. Borings were sampled continuously from the ground surface. The Geoprobe™ drives an approximately two (2)-inch outside diameter, stainless steel tube containing a new disposable acetate liner into the subsurface to continuously obtain soil samples. The soil is forced into the liner at continuous four (4)-foot intervals and is then retrieved to the surface. Each four (4)-foot interval was further divided into two (2)-foot soil sample intervals and were visually observed, sampled, logged, and classified according to the Unified Soil Classification System (USCS) by a member of Partners' field staff.

The samples were divided into two (2) portions. One (1) portion was collected in new two (2)-ounce or four (4)-ounce, pre-cleaned glass jars with Teflon® septums, and the second portion was placed in a new re-sealable plastic bag for field screening purposes. New disposable nitrile gloves were worn and changed after each sample to prevent possible cross-contamination. All soil samples were field screened for the presence of organic vapors using a MiniRAE 3000 Photoionization Detector (PID) manufactured by RAE Systems. The detector was calibrated prior to field activities using a known concentration of a gas standard in accordance with the manufacturers' specifications. PID readings are included on the soil boring logs. Samples collected in the glass jars were labeled and placed into a cooler containing ice, stored at approximately 4°C, and submitted under appropriate chain-of-custody control to Pace Analytical located in Mt. Juliet, Tennessee (VAP Certified Laboratory, CL0069).

Soil samples for analysis were selected based on the potential source of contaminants, visual observations, odors, staining, depth to groundwater, the specific area or depth interval being assessed, and evaluation of the point of compliance. Two (2) soil samples were submitted for each soil boring associated with BUSTR concerns. Soil samples were analyzed for the following:

- VOCs by the USEPA Method 8260,
- PAHs by USEPA Method 8270, and
- TPH (C_6-C_{10} and C_{10}-C_{34}) by USEPA Method 8015.

Groundwater Monitoring Well Construction and Development

Nine (9) soil borings were completed as groundwater monitoring wells and set to depths ranging from 9.5 to 18 feet bgs. Groundwater monitoring wells were constructed using two (2)-inch diameter polyvinyl chloride (PVC) riser and 10-slot well screen. The 10-foot well screen was positioned to span the groundwater interface. The annular space was filled with sand to approximately two (2) feet above the screen and the remaining annular space was filled with bentonite to the surface. The wells were completed at the surface with a steel flush-mount protective covers set in a concrete pad. The location of the monitoring wells is shown on **Figure 3**, and the well construction log and sampling forms are provided in **Attachment 3**.

The monitoring wells were developed with a Whaler pump to extract water using a surge and purge technique until the water ran clear, at least five (5) well volumes had been removed, or the wells were pumped dry. During development, the pump was gently lowered and raised through the water column in an effort to develop the entire sand filter pack. Following well development, the well was allowed to recover a minimum of 24 hours prior to purging and sampling.

Groundwater Monitoring Well Sampling and Analyses

Prior to purging and sampling, the groundwater level was measured in all the monitoring wells using a product-water interface probe to check for light non-aqueous phase liquids (LNAPL) and dense non-aqueous phase liquids (DNAPL). At least three (3) saturated casing volumes of water were purged from each well using a new HDPE disposable sampling bailer equipped with dual check valves and bottom sampling devices. During purging, the water was monitored for pH, temperature, and specific conductivity. Well sampling forms are included in **Attachment 3**.

The groundwater samples to be tested for VOCs were placed in two (2) 40-milliliter (ml) amber volatile organic analysis (VOA) vials containing hydrochloric acid as a preservative. Samples for PAH testing were placed into three (3) 40-milliliter (ml) amber vials without preservative. Sample containers and preservatives were provided by the laboratory. Samples were labeled, placed into a cooler containing ice, stored at approximately four (4) degrees Celsius, and submitted under chain-of-custody control to Pace Analytical. Groundwater was submitted for laboratory analyses of

- VOCs by the USEPA Method 8260, and
- PAHs by USEPA Method 8270.

Sub-Slab and Soil Gas Vapor Sampling and Analysis

Partners installed three (3) temporary sub-slab vapor monitoring points (Vapor Pin™) inside the existing building and one (1) soil gas samples in an exterior location.

The sub-slab Vapor Pins™ were installed into a ⅝-inch diameter hole drilled through the slab and approximately three (3) inches into the underlying base material. Leak testing was conducted with a water dam. The water level was observed during the duration of the vapor sampling activities to confirm that the Vapor Pin™ was seated correctly.

Direct push technology (Geoprobe™) was utilized to install shallow soil borings for the installation of soil gas sampling points. The soil gas sampling points were installed to six (6) feet. The soil vapor sampling points were installed with an expendable anchor point, a six (6)-inch screen made of double woven stainless steel, and 1¼ inch diameter steel drive rods. As the drill rods are retracted in the soil boring, sand was used to backfill around the screen and extended about two (2) inches above the screen. Hydrated bentonite, followed by grout, was used to seal the sampling points. The soil vapor sampling points were finished with protective covers.

Teflon tubing was used to connect the vapor points to a laboratory, certified clean, SUMMA® canister. The flow regulator on each SUMMA® canister will be used to collect a sample directly from the sampling point over a one (1) hour period. In addition, one (1) sample of ambient air (Background) was obtained during the sampling event in an area believed to be unimpacted by the concerns being assessed to evaluate ambient conditions.

Samples were shipped via overnight carrier under chain-of-custody protocol to a VAP Certified Laboratory for VOC analysis by USEPA Method 8260, Compendium TO-15.

Methane Monitoring

Methane was monitored in monitoring wells MW-101 through MW-110 and soil gas point SGP-02, sub-slab vapor point SSV-01, and 11 catch basins utilizing a Landtec GEM2000 Gas Analyzer. Measurements were obtained of the percent methane, oxygen, carbon dioxide, and air temperature.

COMPARISON STANDARDS

Ohio VAP Applicable Soil Standards

The planned land use of the Property is restricted residential as a new County Prison site. The VAP Generic Direct Contact Soil Standards (GDCS) for the Residential Land Use Category and the Construction/Excavation Activities Category (OAC rule 3745-300-08) were used for evaluation of the results of soil analyses. Constituents for which no GDCS have been derived were compared to the Ohio EPA VAP Chemical Information Database and Applicable Regulatory Standards (CIDARS), Supplemental Criteria.

Ohio VAP Groundwater Standards

Results of groundwater analyses were compared to standards for potable use and vapor intrusion discussed below.

Ohio VAP generic and risk-based Unrestricted Potable Use Standards (UPUS) (OAC rule 3745-300-08). UPUS is not an applicable standard for the Property, but comparison is required for groundwater response requirement and protection determinations under the VAP.

USEPA Vapor Intrusion Screening Levels (VISL) Target Groundwater Concentrations were determined for residential use with a carcinogenic risk of 1E-5, hazard quotient of 1, an attenuation factor (AF) of 0.001, and a groundwater temperature of 11 degrees Celsius in accordance with the Ohio EPA document Sample Collection and Evaluation of Vapor Intrusion to Indoor Air for Remedial Response, RCRA and VAP.

Ohio VAP Generic Indoor Air Standards Due to Vapor Intrusion

To evaluate sub-slab vapor and soil gas results, an attenuation factor is applied to the Ohio VAP generic indoor air standards due to vapor intrusion, commercial/industrial land use category (OAC rule 3745-300-08) to account for the reduction in concentration during vapor migration in the subsurface coupled with the dilution that occurs when the vapors enter a building and mix with indoor air. In accordance with Ohio EPA guidance, an attenuation factor of 0.03 was applied to the Indoor Air Standards.

Methane

Methane is not a hazardous substance under the VAP but it is a flammable, potentially explosive gas that is combustible only under specific conditions. Methane is explosive at concentrations that range from the lower explosive limit (LEL) of 5 percent to the upper explosive limit (UEL) of 17 percent per volume of air. At concentrations below the LEL, the methane/air mixture is too low to ignite. If a source of ignition is available any concentration between the LEL and the UEL will allow combustion. Methane concentrations above the UEL (> 17%) are too rich to support combustion.

Environmental Protection Agency's (EPA) Resource Conservation and Recovery Act (RCRA) Subtitle D, 40 CFR Parts 257 and 258 define criteria for methane as follows:

- Methane gas must not exceed 25 percent of LEL (1.25% by volume) in on-site structures and cannot exceed methane LEL (5% by volume) at the site boundary.

While these criteria only apply to Municipal Solid Waste Landfills, they serve as an Applicable or Relevant and Appropriate Requirement (ARAR) for the protection of human health and the environment.

FINDINGS

Subsurface Conditions

The subsurface profile generally consists of surface cover, (i.e., topsoil, asphalt, gravel) underlain by fill material consisting of sandy clay with gravel, brick, and slag which extend to depths ranging from six (6) feet to beyond the terminal depths of the borings at 18 feet. In several borings native soils beneath the fill were encountered and consisted of gray silty clay. Bedrock was not encountered in the borings. Depths to groundwater ranged from 2.3 to 12.7 feet.

Petroleum odors and staining was noted in the soil borings and groundwater monitoring wells. The results of field screening (PID) for organic vapors ranged from 1.8 to 809 parts per million (ppm). The PID readings are included on the soil boring logs in **Attachment 3**.

From 2000 to 2001 two (2) feet of clean fill cover was placed over the Property as part of remedial activities under the VAP. Previous investigations noted the subsurface as:

> Fill materials ranging from 5 to 25 feet thick located within the former Kingsbury Run channel as a result of re-routing the stream. The fill overlays alluvial deposits of silty to coarse sand in the area of former Kingsbury Run, and in turn is underlain by relatively impermeable layer of dense, lacustrine clay which extends up to 180 feet. The fill consists of industrial slag, sand, silt, and clay. Groundwater was measured ranging from 5 to 15 feet bgs and groundwater flow direction across the site is influenced controlled by the former Kingsbury Run channel.

Soil Analytical Results

A summary of results for soil analysis is presented on **Table 1**. The laboratory analytical report is provided in **Attachment 4**. Laboratory reporting limits were below applicable standards.

Results of soil sampling show no exceedances of VAP applicable standards for residential land use within a restricted residential point of compliance of two (2) feet. The concentrations of benzo(a)pyrene and dibenz(a,h)anthracene at three (3) sample locations (SB-101 (6-8'), SB-107 (4-6'), and MW-107 (2-4') exceed residential land use standards but are below the two (2) foot point of compliance.

Results of soil sampling show no exceedances of VAP applicable standards for construction/excavation activities within the associated point of compliance of 10 feet with the following exception. Concentrations of total petroleum hydrocarbons (TPH) exceed the applicable standards at three (3) locations, SB-107 (4-6'), SB-112 (8-10'), and MW-103 (6-8').

Groundwater Analytical Results

A summary of analytical results for groundwater samples is presented on **Table 2** and the laboratory report is provided in **Attachment 4**. Laboratory reporting limits were below applicable standards.

Results of groundwater analysis showed concentrations several compounds above the potable use standards, however, the potable use standards are not an applicable standard for the Property, as it is located in the City of Cleveland Urban Setting Designation in which it has been established that groundwater is not and will not likely be used as a drinking water source. The applicable standard for groundwater at the Property is the USEPA Vapor Intrusion Screening Level (VISL) for residential use. Detected compounds exceeding the VISL include benzene in MW-102 and MW-106.

It should be noted that biodegraded crude oil was noted in nine (9) of the 10 the monitoring wells at the Property. Depths to groundwater ranged from two (2) to 12 feet. The biodegraded crude oil exhibits

characteristics of bacterial biodegradation and does not register as LNAPL using the product-water interface probe.

Soil Gas Vapor Analytical Results

A summary of analytical results for soil gas is presented on **Table 3**. The laboratory analytical report is provided in **Attachment 4**. Laboratory reporting limits were below applicable standards.

Results of sub-slab and soil gas vapor analysis meets the Ohio VAP generic indoor air standards due to vapor intrusion, residential land use category (adjusted for evaluation of sub-slab vapor), with the exception of benzene in SSV-02.

Methane Monitoring

A summary of analytical results for methane monitoring is presented on **Table 4**. Methane exceeding the LEL of 5% was present in all of the monitoring wells (with the exception of MW-108), soil gas point SG-02, and sub-slab vapor point SSV-01. Monitoring of indoor air in the vicinity of SSV-01 and in the catch basins showed no detected methane.

PRELIMINARY PROPERTY SPECIFIC RISK ASSESSMENT (PSRA)

The Preliminary PSRA is included in **Attachment 3**. The preliminary PSRA was conducted to determine COCs that exceed acceptable risk goals and determine the appropriate remediation required. Prior to completion of the VAP Phase II Property Assessment for submittal to the Ohio EPA, the PSRA will need to be finalized incorporating the remedies.

As presented in the preliminary PSRA, cumulative risk for direct contact with soil meets applicable standards for residential land use. The cumulative risk for a residential receptor does not meet applicable standards due to vapor intrusion from benzene in groundwater and sub-slab vapor.

Cumulative risk for direct contact with soil for construction/excavation activities meets applicable standards. However, TPH exceedances are present in the point of compliance which are not evaluated as part of the PSRA. Cumulative risk for the construction/excavation receptor does not meet applicable standards due to trench related exposures to groundwater vapor inhalation attributable to concentrations of benzene in groundwater.

LIMITATIONS AND EXCEPTIONS TO THIS INVESTIGATION

The analytical results and conclusions presented in this letter report are based on the installation of a limited number of soil borings, monitoring wells, and soil gas vapor points and limited analysis. Although the results presented above provide a reasonable indication of subsurface conditions in the areas evaluated, they may not be indicative of conditions in areas of the Property not evaluated by Partners.

CONCLUSIONS

Based on the field conditions, sampling, and laboratory analyses, the following are the expected remedies which would be needed under the VAP for the planned redevelopment:

An Environmental Covenant will be needed to meet applicable standards, as detailed below:

- Concentrations of COCs in groundwater at the Property require Groundwater Use Restriction through an Environmental Covenant, such that, groundwater underlying the Property shall not be extracted or used for any purpose, potable or otherwise, except in conjunction with construction or excavation activities or maintenance of subsurface utilities as necessary.

- A land use restriction will be implemented to limit use of the Property to restricted residential use.

- A limitation on building occupancy will be implemented whereby, prior to any human occupancy of future buildings, a remedy that eliminates potential indoor air vapor intrusion exposure shall be installed and maintained as an engineering control or a demonstration will be made that the property complies with applicable standards for the vapor intrusion to indoor air exposure pathway without further implementation of remedial activity and documented in accordance VAP.

An Operation and Maintenance Plan (O&M Plan) will be needed to maintain engineering controls. Engineering controls will include the upper two (2) feet of soil, buildings and pavement, and vapor barriers installed in future buildings to protect from vapor intrusion of benzene and methane. Indoor air monitoring will also be required as part of O&M reporting.

A Risk Mitigation Plan (RMP) will be needed to protect construction/excavation workers from TPH in soil, benzene in groundwater, and methane vapor.

CLOSING

Thank you for the opportunity to serve your needs. Please call us at (800) 763-1363 if you have questions or if we can be of any further assistance.

Sincerely,
Partners

Valerie Weir, CPG
Senior Project Manager

John T Garvey, CP-118
Vice-President

Attachments:

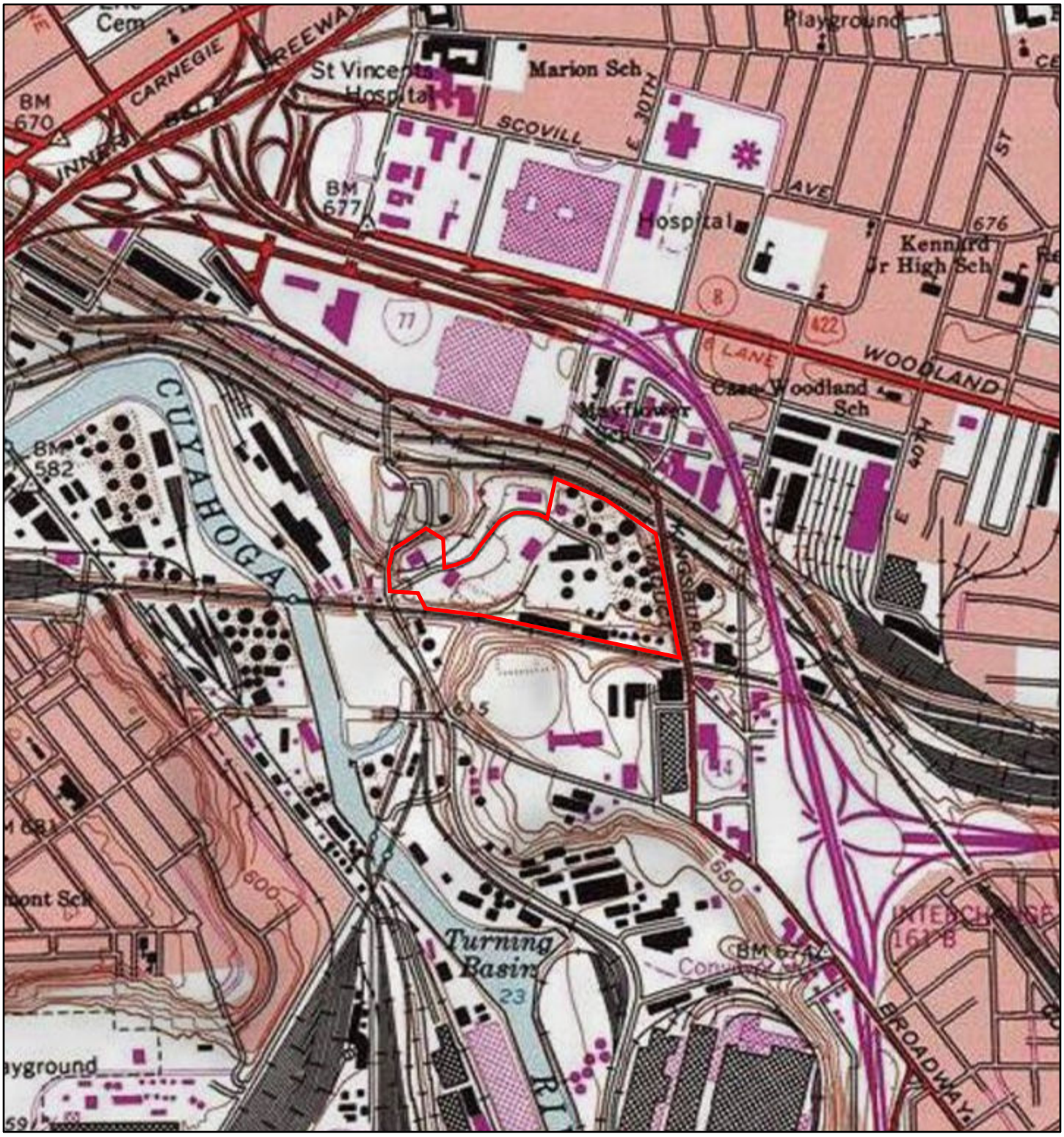
Figure 1 Property Location Map
Figure 2 Property Plan and Surrounding Sites Map
Figure 3 Identified Areas Map
Figure 4 Sample Location Map
Figure 5 Conceptual Site Model
Figure 6 COC Exceedances Map
Figure 7 Methane Monitoring Results

Table 1 Results of Soil Analysis
Table 2 Results of Groundwater Analysis
Table 3 Results of Sub-Slab Vapor and Soil Gas Vapor Analysis
Table 4 Results of Methane Monitoring

Attachment 1 Sampling Forms
Attachment 2 Laboratory Reports
Attachment 3 Preliminary Property Specific Risk Assessment

Figures

Figure 1: Property Location Map



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0 0.17 0.35 0.7 km

USGS
2021 USGS

RAILROAD TRACKS

ROCKEFELLER BOULEVARD

APPROXIMATE LOCATION OF KINGSBURY RUN FORMER

TRANSPORT ROAD

Former location of New and Used Oil USTs

Truck Repair Bays

Former location of 2-10,000-gallon diesel USTs

Gasoline and diesel ASTs

BROADWAY AVENUE

INTERSTATE-77

APPROXIMATE PROPERTY BOUNDARY

N

W E

S

PROPERTY PLAN AND SURROUNDING SITES MAP

UNIVERSAL SITE

2635-2730 TRANSPORT ROAD, CLEVELAND
CUYAHOGA COUNTY, OHIO

FOR: SINGERMAN, MILLS, DESBERG & KAUNTZ CO., L.P.A. (Privileged and Confidential)

2181.01

PARTNERS
31100 Solon Road, Suite G
Solon, Ohio 44139
800–763–1363

100 0 200

SCALE: 1" = 200"

FIGURE 2

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RAILROAD TRACKS

ROCKEFELLER BOULEVARD

APPROXIMATE LOCATION OF KINGSBURY RUN FORMER

TRANSPORT ROAD

Former location of New and Used Oil USTs

Gasoline and diesel ASTs

Truck Repair Bays

Former location of 2-10,000-gallon diesel USTs

IA-2: Trucking Operations

IA-3: Diesel USTs

IA-1: Historical Refinery Operations and Impacted Soil and Groundwater (Property-Wide)

BROADWAY AVENUE

INTERSTATE-77

APPROXIMATE PROPERTY BOUNDARY

Identified Areas Map

UNIVERSAL SITE

2635-2730 TRANSPORT ROAD, CLEVELAND
CUYAHOGA COUNTY, OHIO

FOR: SINGERMAN, MILLS, DESBERG & KAUNTZ CO., L.P.A. (Privileged and Confidential)

2181.01

PARTNERS
31100 Solon Road, Suite G
Solon, Ohio 44139
800–763–1363

100 0 200

SCALE: 1" = 200"

FIGURE 3

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P:\Project Files\2181 Singerman, Mills, Desberg & Kauntz Co., L.P.A\2181.01 Cleveland Area (4) Properties\CAD\Fortuna Universal.dwg 12/7/2021

RAILROAD TRACKS

ROCKEFELLER BOULEVARD

BROADWAY AVENUE

INTERSTATE-77

TRANSPORT ROAD

APPROXIMATE LOCATION OF KINGSBURY RUN FORMER

APPROXIMATE PROPERTY BOUNDARY

Former location of New and Used Oil USTs

Former location of 2-10,000-gallon diesel USTs

MW-101
MW-102
MW-103
MW-104
MW-106
MW-107
MW-108
MW-109
MW-110

SB-101
SB-102
SB-103
SB-104
SB-105
SB-106
SB-107
SB-110
SB-111
SB-112
SB-113
SB-114
SB-115

SGP-01
SGP-02
SGP-03
SSV-01
SSV-02
SSV-03

- Soil Boring
- Groundwater Monitor Well
- Sub-Slab Point
- Soil Gas Point

Sample Location Map

UNIVERSAL SITE

2700 Transport Road
Cleveland, Ohio

PARTNERS
31100 Solon Road, Suite G
Solon, Ohio 44139
800–763–1363

100 0 200
SCALE: 1" = 200"

FIGURE
4

Off-Property

Commercial/Industrial

On-Property

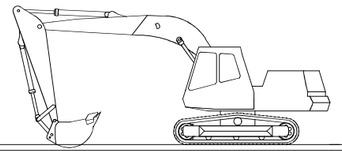
Restricted Residential

Off-Property

Commercial/Industrial

Restricted residential
Direct Contact with COCs
in soil 0-2 feet

Construction/Excavation
Direct Contact with COCs
in soil 0-**10** feet



VADOSE ZONE

Potential Vapors from Groundwater
in Future Buildings

GROUNDWATER
FLOW

LEGEND

— - - — – Property Line

NOT TO SCALE

PARTNERS ENVIRONMENTAL	*Date* **1/6/2022**	*CONCEPTUAL SITE MODEL*	*Figure* 5
	Project No. **2181.01A**	**2700 Transport Road Cleveland, Ohio**	

\\PARTNERSOLON1\Working Documents\Project Files\2123_55th Street LLC\2123.01A VAP & NFA\CAD\2123.01A – FIG 4 Conceptual Site Model

P:\Project Files\2181 Singerman, Mills, Desberg & Kauntz Co., L.P.A\2181.01 Cleveland Area (4) Properties\CAD\Fortuna Universal.dwg 12/7/2021

RAILROAD TRACKS

ROCKEFELLER BOULEVARD

BROADWAY AVENUE

INTERSTATE-77

TRANSPORT ROAD

Benzene in Groundwater

Benzene in Groundwater

TPH in Soil > 2 feet

TPH in Soil > 2 feet

TPH in Soil > 2 feet

Benzene in Sub-Slab Vapor

APPROXIMATE LOCATION OF KINGSBURY RUN FORMER

APPROXIMATE PROPERTY BOUNDARY

Former location of New and Used Oil USTs

Former location of 2-10,000-gallon diesel USTs

MW-102
MW-103
MW-104
MW-106
MW-107
MW-108
MW-109
MW-110
MW-101

SB-101
SB-102
SB-103
SB-104
SB-105
SB-106
SB-107
SB-110
SB-111
SB-112
SB-113
SB-114
SB-115

SGP-01
SGP-02
SGP-03

SSV-01
SSV-02
SSV-03

N
W
E
S

- Soil Boring
- Groundwater Monitor Well
- Sub-Slab Point
- Soil Gas Point

COC Exceedances Map

UNIVERSAL SITE

2700 Transport Road
Cleveland, Ohio

PARTNERS
31100 Solon Road, Suite G
Solon, Ohio 44139
800–763–1363

100 0 200
SCALE: 1" = 200"

FIGURE
6

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N
W E
S

RAILROAD TRACKS

ROCKEFELLER BOULEVARD

TRANSPORT ROAD

BROADWAY AVENUE

INTERSTATE-77

APPROXIMATE LOCATION OF KINGSBURY RUN FORMER

Former location of 2-10,000-gallon diesel USTs

APPROXIMATE PROPERTY BOUNDARY

SB-103
>75%
MW-102
MP-03 - 0%
MP-02 - 0%
MP-04 - 0%
SB-102
>75%
MW-106
SB-114
SB-115
73.9%
SGP-02
53.4%
MW-107
SB-110
SB-112
SSV-01
8.8% (MP-01)
MP-11 - 0%
SSV-02
SB-104
44.7%
SSV-03
SB-113
MW-110
48.5%
SB-111
MW-109
1.5%
MW-108
MP-12 - 0%
MP-10 - 0%
MP-09 - 0%
MW-104
11.7%
SB-107
SGP-01
MP-08 - 0%
6.8%
MW-103
SB-106
SB-105
MP-05 - 0%
60.1%
MW-101
SGP-03
MP-06 - 0%
MP-07 - 0%
SB-101

◐ Soil Boring
◓ Groundwater Monitor Well
◭ Sub-Slab Point
◭ Soil Gas Point
MP-Monitoring Point

Methane Monitoring Results

UNIVERSAL SITE

2700 Transport Road
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PARTNERS
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Solon, Ohio 44139
800-763-1363

100 0 200
SCALE: 1" = 200"

FIGURE
7

Table 1
Results of Soil Analysis
2700 Transport Road, Cleveland, Ohio

Sample ID	*Residential Land Use* [1]	*Construction/ Excavation Activities* [2]	*Maximum*	SB-101 (6-8FT)		SB-102 (2-4FT)	SB-103 (4-6FT)	SB-104 (0-2)	SB-105 (2-4)		SB-106 (0-2FT)	SB-107 (4-6)	SB-110 (4-6FT)	SB-111 (0-2FT)	SB-112 (8-10FT)	SB-113 (0-2FT)	SB-114 (0-2FT)
Date Collected				06/01/2022	06/01/2022	05/31/2022	05/31/2022	06/02/2022	06/02/2022	06/02/2022	06/01/2022	06/02/2022	05/27/2022	05/31/2022	05/31/2022	05/31/2022	05/31/2022
Analyte				Result	Duplicate	Result	Result	Result	Result	Duplicate	Result	Result	Result	Result	Result	Result	Result
ANTHRACENE	*36,000*	*1,000,000*	*1.280*	**0.943**	**0.00831**	**0.00428**	**0.0416**	**0.217**	**0.00915**	**0.00714**	**0.624**	**0.287**	<0.00658	**0.0325**	**0.189**	**0.493**	**0.0689**
ACENAPHTHENE	*7,200*	*290,000*	*0.535*	**0.535**	**0.00277**	**0.00342**	**0.0183**	**0.0852**	**0.0408**	**0.0146**	**0.277**	**0.246**	**0.384**	**0.0154**	**0.325**	**0.191**	**0.0232**
ACENAPHTHYLENE	*7,200*	*290,000*	*0.297*	**0.146**	<0.00719	<0.00689	**0.00404**	**0.0323**	<0.00685	**0.00742**	**0.0253**	**0.0979**	<0.00658	**0.0147**	<0.00717	**0.297**	**0.0184**
BENZO(A)ANTHRACENE	*23*	*9,600*	*8.60*	**8.6**	**0.0451**	**0.00615**	**0.145**	**0.519**	**0.0242**	**0.0236**	**1.35**	**1.64**	**0.159**	**0.186**	**0.317**	**1.7**	**0.318**
BENZO(A)PYRENE	*2.3*	*230*	*23.50*	**23.5**	**0.0485**	**0.00618**	**0.144**	**0.469**	**0.0329**	**0.0321**	**1.17**	**4.5**	**0.146**	**0.188**	**0.324**	**1.34**	**0.287**
BENZO(B)FLUORANTHENE	*23*	*10,000*	*11.00*	**11**	**0.0668**	**0.0045**	**0.186**	**0.549**	**0.0264**	**0.0276**	**1.52**	**2.15**	**0.163**	**0.271**	**0.33**	**1.67**	**0.381**
BENZO(G,H,I)PERYLENE	*3,600*	*430,000*	*28.10*	**28.1**	**0.0495**	**0.00947**	**0.0967**	**0.27**	**0.047**	**0.0537**	**0.733**	**8.32**	**0.131**	**0.142**	**0.284**	**0.77**	**0.191**
BENZO(K)FLUORANTHENE	*230*	*100,000*	*2.56*	**1.91**	**0.0206**	<0.00689	**0.0678**	**0.191**	**0.00611**	**0.00875**	**0.564**	**0.471**	**0.0503**	**0.0812**	**0.0977**	**0.58**	**0.136**
CHRYSENE	*2,300*	*1,000,000*	*6.84*	**6.84**	**0.047**	**0.00983**	**0.133**	**0.417**	**0.0313**	**0.0264**	**1.23**	**1.5**	**0.129**	**0.181**	**0.319**	**1.43**	**0.264**
DIBENZ(A,H)ANTHRACENE	*2.3*	*1,000*	*12.90*	**12.9**	**0.0119**	<0.00689	**0.0216**	**0.0638**	**0.0108**	**0.00862**	**0.171**	**3.29**	**0.0447**	**0.046**	**0.0878**	**0.198**	**0.0417**
FLUORANTHENE	*4,800*	*170,000*	*8.20*	**1.74**	**0.116**	**0.00533**	**0.335**	**1.12**	**0.0322**	**0.0365**	**2.92**	**1.32**	**0.396**	**0.294**	**0.635**	**3.55**	**0.624**
FLUORENE	*4,800*	*580,000*	*0.695*	**0.671**	**0.00302**	**0.00268**	**0.0178**	**0.099**	**0.0258**	**0.0113**	**0.279**	**0.337**	**0.557**	**0.0182**	**0.695**	**0.365**	**0.0227**
INDENO(1,2,3-CD)PYRENE	*23*	*10,000*	*11.4*	**11.4**	**0.0379**	**0.00243**	**0.107**	**0.304**	**0.02**	**0.0234**	**0.789**	**3.44**	**0.0944**	**0.124**	**0.184**	**0.824**	**0.191**
NAPHTHALENE	*96*	*560*	*1.310*	**0.581**	**0.0127**	**0.00739**	**0.0122**	**0.0956**	**0.299**	**0.0737**	**0.159**	**0.823**	**0.134**	**0.0287**	**0.432**	**0.356**	**0.149**
PHENANTHRENE	*36,000*	*1,000,000*	*4.21*	**1.12**	**0.0501**	**0.00954**	**0.192**	**0.797**	**0.101**	**0.0504**	**2.13**	**1.36**	**2.17**	**0.172**	**2.02**	**3.43**	**0.325**
PYRENE	*3,600*	*430,000*	*8.05*	**6.18**	**0.107**	**0.0398**	**0.298**	**0.833**	**0.0674**	**0.0697**	**2.54**	**2.01**	**0.466**	**0.301**	**0.626**	**3.49**	**0.626**
1-METHYLNAPHTHALENE	*350*	*390*	*3.91*	**0.68**	**0.0135**	**0.00863**	**0.012**	**0.0655**	**0.466**	**0.109**	**0.094**	**1.02**	**2.88**	**0.0313**	**1.95**	**0.41**	**0.136**
2-METHYLNAPHTHALENE	*480*	*5,800*	*3.67*	**0.813**	**0.0181**	**0.014**	**0.0148**	**0.0942**	**0.571**	**0.138**	**0.116**	**1.13**	**0.649**	**0.0375**	**0.984**	**0.448**	**0.193**
2-CHLORONAPHTHALENE	*13,000*	*1,000,000*	*0.026*	<0.233	<0.0240	<0.0230	<0.0220	<0.0225	<0.0228	<0.0234	<0.114	<0.0226	<0.0219	<0.0214	<0.0239	<0.0223	<0.0225
TPH (C6-C12)	*1,000*		*2,320*	**178**	**5**	**0.0883**	**0.187**	**0.103**	**0.683**	**0.555**	**0.185**	**1710**	**104**	**0.446**	**1350**	**0.283**	**0.0649**
TPH (C10-C20)	*2,000*		*2,080*	**1100**	**24.3**	**51.9**	**20.3**	**53.4**	**130**	**54.6**	**57.7**	**884**	**752**	**16.7**	**945**	**200**	**58.9**
TPH (C20-C34)	*5,000*		*7,970*	**2280**	**71.7**	**56.3**	**49.1**	**645**	**92.7**	**49.9**	**350**	**1310**	**831**	**45.5**	**812**	**446**	**155**
ACETONE	*110,000*	*110,000*	*0.456*	<0.0665	<0.0699	<0.0649	<0.0601	<0.0626	**0.123**	<0.0669	<0.0636	**0.456**	<0.0597	<0.0571	<0.556	<0.0616	<0.0626
ACRYLONITRILE	*6.1*	*62*	*0.000*	<0.0166	<0.0175	<0.0162	<0.0150	<0.0157	<0.0160	<0.0167	<0.0159	<0.0157	<0.0149	<0.0143	<0.139	<0.0154	<0.0157
BENZENE	*28*	*1,200*	*1.220*	**0.0012**	**0.001**	<0.00130	**0.0045**	<0.00125	**0.00259**	**0.00231**	**0.000699**	**0.0788**	**0.02**	**0.00779**	**0.264**	**0.029**	**0.00601**
BROMOBENZENE	*NE*	*NE*	*0.000*	<0.0166	<0.0175	<0.0162	<0.0150	<0.0157	<0.0160	<0.0167	<0.0159	<0.0157	<0.0149	<0.0143	<0.139	<0.0154	<0.0157
BROMODICHLOROMETHANE	*7.3*	*300*	*0.000*	<0.00332	<0.00350	<0.00324	<0.00301	<0.00313	<0.00321	<0.00334	<0.00318	<0.00315	<0.00298	<0.00285	<0.0278	<0.00308	<0.00313
BROMOFORM	*460*	*910*	*0.000*	<0.0332	<0.0350	<0.0324	<0.0301	<0.0313	<0.0321	<0.0334	<0.0318	<0.0315	<0.0298	<0.0285	<0.278	<0.0308	<0.0313
BROMOMETHANE	*17*	*550*	*0.000*	<0.0166	<0.0175	<0.0162	<0.0150	<0.0157	<0.0160	<0.0167	<0.0159	<0.0157	<0.0149	<0.0143	<0.139	<0.0154	<0.0157
N-BUTYLBENZENE	*110*	*110*	*1.760*	**0.0763**	**0.0571**	<0.0162	<0.0150	<0.0157	**0.00979**	**0.00849**	**0.0168**	**0.141**	**0.379**	<0.0143	**0.725**	<0.0154	<0.0157
SEC-BUTYLBENZENE	*140*	*140*	*2.250*	**0.0275**	**0.0173**	<0.0162	<0.0150	<0.0157	**0.00492**	<0.0167	<0.0159	**0.208**	**0.248**	**0.00432**	**0.75**	**0.00666**	<0.0157
TERT-BUTYLBENZENE	*180*	*180*	*0.218*	**0.00984**	**0.0101**	<0.00649	<0.00601	<0.00626	<0.00642	<0.00669	<0.00636	**0.0335**	**0.0138**	<0.00571	**0.0639**	<0.00616	<0.00626
CARBON TETRACHLORIDE	*16*	*460*	*0.000*	<0.00665	<0.00699	<0.00649	<0.00601	<0.00626	<0.00642	<0.00669	<0.00636	<0.00630	<0.00597	<0.00571	<0.0556	<0.00616	<0.00626
CHLOROBENZENE	*660*	*760*	*0.004*	<0.00332	<0.00350	<0.00324	<0.00301	<0.00313	<0.00321	<0.00334	<0.00318	<0.00315	<0.00298	**0.00387**	<0.0278	<0.00308	<0.00313
CHLORODIBROMOMETHANE	*130*	*800*	*0.000*	<0.00332	<0.00350	<0.00324	<0.00301	<0.00313	<0.00321	<0.00334	<0.00318	<0.00315	<0.00298	<0.00285	<0.0278	<0.00308	<0.00313
CHLOROETHANE	*2,100*	*2,100*	*0.000*	<0.00665	<0.00699	<0.00649	<0.00601	<0.00626	<0.00642	<0.00669	<0.00636	<0.00630	<0.00597	<0.00571	<0.0556	<0.00616	<0.00626
CHLOROFORM	*7.9*	*320*	*0.045*	<0.00332	<0.00350	<0.00324	<0.00301	<0.00313	<0.00321	<0.00334	<0.00318	<0.00315	<0.00298	<0.00285	<0.0278	<0.00308	<0.00313
CHLOROMETHANE	*280*	*1,300*	*0.000*	<0.0166	<0.0175	<0.0162	<0.0150	<0.0157	<0.0160	<0.0167	<0.0159	<0.0157	<0.0149	<0.0143	<0.139	<0.0154	<0.0157
2-CHLOROTOLUENE	*NE*	*NE*	*0.000*	<0.00332	<0.00350	<0.00324	<0.00301	<0.00313	<0.00321	<0.00334	<0.00318	<0.00315	<0.00298	<0.00285	<0.0278	<0.00308	<0.00313
4-CHLOROTOLUENE	*NE*	*NE*	*0.000*	<0.00665	<0.00699	<0.00649	<0.00601	<0.00626	<0.00642	<0.00669	<0.00636	<0.00630	<0.00597	<0.00571	<0.0556	<0.00616	<0.00626
1,2-DIBROMO-3-CHLOROPROPANE	*0.37*	*15*	*0.000*	<0.0332	<0.0350	<0.0324	<0.0301	<0.0313	<0.0321	<0.0334	<0.0318	<0.0315	<0.0298	<0.0285	<0.278	<0.0308	<0.0313
1,2-DIBROMOETHANE	*0.89*	*39*	*0.000*	<0.00332	<0.00350	<0.00324	<0.00301	<0.00313	<0.00321	<0.00334	<0.00318	<0.00315	<0.00298	<0.00285	<0.0278	<0.00308	<0.00313
DIBROMOMETHANE	*59*	*870*	*0.000*	<0.00665	<0.00699	<0.00649	<0.00601	<0.00626	<0.00642	<0.00669	<0.00636	<0.00630	<0.00597	<0.00571	<0.0556	<0.00616	<0.00626
1,2-DICHLOROBENZENE	*380*	*380*	*0.001*	<0.00665	<0.00699	<0.00649	<0.00601	<0.00626	<0.00642	<0.00669	<0.00636	<0.00630	<0.00597	**0.000904**	<0.0556	<0.00616	<0.00626
1,3-DICHLOROBENZENE	*NE*	*NE*	*0.000*	<0.00665	<0.00699	<0.00649	<0.00601	<0.00626	<0.00642	<0.00669	<0.00636	<0.00630	<0.00597	<0.00571	<0.0556	<0.00616	<0.00626
1,4-DICHLOROBENZENE	*65*	*2,600*	*0.003*	<0.00665	<0.00699	<0.00649	<0.00601	<0.00626	<0.00642	<0.00669	<0.00636	<0.00630	<0.00597	<0.00571	<0.0556	<0.00616	<0.00626
DICHLORODIFLUOROMETHANE	*850*	*850*	*0.000*	<0.00332	<0.00350	<0.00324	<0.00301	<0.00313	<0.00321	<0.00334	<0.00318	<0.00315	<0.00298	<0.00285	<0.0278	<0.00308	<0.00313
1,1-DICHLOROETHANE	*89*	*1,700*	*0.011*	<0.00332	<0.00350	<0.00324	<0.00301	<0.00313	<0.00321	<0.00334	<0.00318	<0.00315	**0.00477**	<0.00285	<0.0278	<0.00308	<0.00313
1,2-DICHLOROETHANE	*11*	*480*	*0.000*	<0.00332	<0.00350	<0.00324	<0.00301	<0.00313	<0.00321	<0.00334	<0.00318	<0.00315	<0.00298	<0.00285	<0.0278	<0.00308	<0.00313

Table 1
Results of Soil Analysis
2700 Transport Road, Cleveland, Ohio

Sample ID	*Residential Land Use* [1]	*Construction/ Excavation Activities* [2]	*Maximum*	SB-101 (6-8FT)		SB-102 (2-4FT)	SB-103 (4-6FT)	SB-104 (0-2)	SB-105 (2-4)		SB-106 (0-2FT)	SB-107 (4-6)	SB-110 (4-6FT)	SB-111 (0-2FT)	SB-112 (8-10FT)	SB-113 (0-2FT)	SB-114 (0-2FT)
Date Collected				06/01/2022	06/01/2022	05/31/2022	05/31/2022	06/02/2022	06/02/2022	06/02/2022	06/01/2022	06/02/2022	05/27/2022	05/31/2022	05/31/2022	05/31/2022	05/31/2022
Analyte				Result	Duplicate	Result	Result	Result	Result	Duplicate	Result	Result	Result	Result	Result	Result	Result
1,1-DICHLOROETHENE	*360*	*360*	*0.000*	<0.00332	<0.00350	<0.00324	<0.00301	<0.00313	<0.00321	<0.00334	<0.00318	<0.00315	<0.00298	<0.00285	<0.0278	<0.00308	<0.00313
CIS-1,2-DICHLOROETHENE	*310*	*2,400*	*0.083*	<0.00332	<0.00350	<0.00324	**0.00176**	<0.00313	<0.00321	<0.00334	<0.00318	<0.00315	**0.0029**	<0.00285	<0.0278	<0.00308	<0.00313
TRANS-1,2-DICHLOROETHENE	*1,900*	*1,900*	*0.010*	<0.00665	<0.00699	<0.00649	<0.00601	<0.00626	<0.00642	<0.00669	<0.00636	<0.00630	<0.00597	<0.00571	<0.0556	<0.00616	<0.00626
1,2-DICHLOROPROPANE	*39*	*180*	*0.000*	<0.00665	<0.00699	<0.00649	<0.00601	<0.00626	<0.00642	<0.00669	<0.00636	<0.00630	<0.00597	<0.00571	<0.0556	<0.00616	<0.00626
1,1-DICHLOROPROPENE	*NE*	*NE*	*0.000*	<0.00332	<0.00350	<0.00324	<0.00301	<0.00313	<0.00321	<0.00334	<0.00318	<0.00315	<0.00298	<0.00285	<0.0278	<0.00308	<0.00313
1,3-DICHLOROPROPANE	*1,500*	*1,500*	*0.000*	<0.00665	<0.00699	<0.00649	<0.00601	<0.00626	<0.00642	<0.00669	<0.00636	<0.00630	<0.00597	<0.00571	<0.0556	<0.00616	<0.00626
CIS-1,3-DICHLOROPROPENE	*NE*	*NE*	*0.000*	<0.00332	<0.00350	<0.00324	<0.00301	<0.00313	<0.00321	<0.00334	<0.00318	<0.00315	<0.00298	<0.00285	<0.0278	<0.00308	<0.00313
TRANS-1,3-DICHLOROPROPENE	*NE*	*NE*	*0.000*	<0.00665	<0.00699	<0.00649	<0.00601	<0.00626	<0.00642	<0.00669	<0.00636	<0.00630	<0.00597	<0.00571	<0.0556	<0.00616	<0.00626
2,2-DICHLOROPROPANE	*NE*	*NE*	*0.023*	<0.00332	<0.00350	<0.00324	<0.00301	<0.00313	<0.00321	<0.00334	<0.00318	<0.00315	<0.00298	<0.00285	<0.0278	<0.00308	<0.00313
ETHYLBENZENE	*140*	*480*	*3.94*	**0.00549**	**0.00443**	<0.00324	**0.00277**	<0.00313	**0.0336**	**0.0274**	<0.00318	**0.0147**	**0.0212**	**0.00471**	**0.0211**	**0.025**	**0.011**
HEXACHLORO-1,3-BUTADIENE	*17*	*17*	*0.00*	<0.0332	<0.0350	<0.0324	<0.0301	<0.0313	<0.0321	<0.0334	<0.0318	<0.0315	<0.0298	<0.0285	<0.278	<0.0308	<0.0313
N-HEXANE	*140*	*140*	*3.52*	**0.0838**	**0.0608**	<0.00649	**0.00616**	<0.00626	**0.171**	**0.159**	**0.0112**	<0.00630	**0.0467**	**0.00626**	<0.0556	<0.00616	<0.00626
ISOPROPYLBENZENE	*270*	*270*	*2.89*	**0.0108**	**0.00748**	<0.00324	**0.00416**	**0.000626**	**0.00944**	**0.00782**	**0.0022**	**0.191**	**0.0996**	**0.00745**	**0.886**	**0.0161**	**0.0063**
P-ISOPROPYLTOLUENE	*160*	*160*	*0.904*	**0.00366**	**0.0234**	<0.00649	<0.00601	<0.00626	**0.0101**	**0.00776**	<0.00636	**0.0559**	**0.0187**	<0.00571	<0.0556	**0.0033**	<0.00626
2-BUTANONE (MEK)	*28,000*	*28,000*	*0.120*	<0.133	<0.140	<0.130	<0.120	<0.125	<0.128	<0.134	<0.127	<0.126	<0.119	<0.114	<1.11	<0.123	<0.125
METHYLENE CHLORIDE	*740*	*3,300*	*0.208*	**0.021**	**0.0197**	**0.0178**	**0.0168**	<0.0313	<0.0321	<0.0334	**0.0177**	<0.0315	<0.0298	**0.0132**	<0.278	**0.0154**	**0.0174**
4-METHYL-2-PENTANONE (MIBK)	*3,400*	*3,400*	*1.020*	<0.0332	<0.0350	<0.0324	<0.0301	**0.00942**	**0.0237**	**0.0193**	<0.0318	**1.02**	<0.0298	<0.0285	<0.278	<0.0308	<0.0313
METHYL TERT-BUTYL ETHER	*1,100*	*8,900*	*0.004*	<0.00133	<0.00140	<0.00130	<0.00120	<0.00125	<0.00128	<0.00134	<0.00127	<0.00126	<0.00119	<0.00114	<0.0111	<0.00123	<0.00125
NAPHTHALENE	*96*	*560*	*4.250*	**0.0261**	**0.0264**	<0.0162	<0.0150	**0.0249**	**0.0254**	**0.0205**	**0.052**	**0.0574**	**0.0218**	**0.0276**	<0.139	**0.0525**	**0.0227**
N-PROPYLBENZENE	*260*	*260*	*4.220*	**0.00848**	**0.00948**	<0.00649	**0.00408**	**0.00146**	**0.0175**	**0.0133**	**0.00375**	**0.258**	**0.123**	**0.0162**	**1.69**	**0.02**	**0.00614**
STYRENE	*870*	*870*	*0.000*	<0.0166	<0.0175	<0.0162	<0.0150	<0.0157	<0.0160	<0.0167	<0.0159	<0.0157	<0.0149	<0.0143	<0.139	<0.0154	<0.0157
1,1,1,2-TETRACHLOROETHANE	*49*	*680*	*0.000*	<0.00332	<0.00350	<0.00324	<0.00301	<0.00313	<0.00321	<0.00334	<0.00318	<0.00315	<0.00298	<0.00285	<0.0278	<0.00308	<0.00313
1,1,2,2-TETRACHLOROETHANE	*15*	*670*	*0.000*	<0.00332	<0.00350	<0.00324	<0.00301	<0.00313	<0.00321	<0.00334	<0.00318	<0.00315	<0.00298	<0.00285	<0.0278	<0.00308	<0.00313
TETRACHLOROETHENE	*170*	*170*	*0.013*	<0.00332	<0.00350	<0.00324	**0.0125**	<0.00313	<0.00321	<0.00334	<0.00318	<0.00315	<0.00298	<0.00285	<0.0278	<0.00308	<0.00313
TOLUENE	*820*	*820*	*1.02*	**0.00366**	**0.00422**	<0.00649	**0.00321**	**0.00369**	**0.0585**	**0.0464**	**0.00207**	**0.0222**	**0.0302**	**0.00992**	<0.0556	**0.0791**	**0.0306**
1,2,3-TRICHLOROBENZENE	*NE*	*NE*	*0.000*	<0.0166	<0.0175	<0.0162	<0.0150	<0.0157	<0.0160	<0.0167	<0.0159	<0.0157	<0.0149	<0.0143	<0.139	<0.0154	<0.0157
1,2,4-TRICHLOROBENZENE	*140*	*400*	*0.000*	<0.0166	<0.0175	<0.0162	<0.0150	<0.0157	<0.0160	<0.0167	<0.0159	<0.0157	<0.0149	<0.0143	<0.139	<0.0154	<0.0157
1,1,1-TRICHLOROETHANE	*640*	*640*	*0.004*	<0.00332	<0.00350	<0.00324	<0.00301	<0.00313	<0.00321	<0.00334	<0.00318	<0.00315	<0.00298	<0.00285	<0.0278	<0.00308	<0.00313
1,1,2-TRICHLOROETHANE	*28*	*1,200*	*0.000*	<0.00332	<0.00350	<0.00324	<0.00301	<0.00313	<0.00321	<0.00334	<0.00318	<0.00315	<0.00298	<0.00285	<0.0278	<0.00308	<0.00313
TRICHLOROETHENE	*10*	*17*	*0.027*	<0.00133	<0.00140	<0.00130	**0.00236**	<0.00125	<0.00128	<0.00134	<0.00127	<0.00126	**0.00218**	<0.00114	<0.0111	<0.00123	<0.00125
TRICHLOROFLUOROMETHANE	*1,200*	*1,200*	*0.000*	<0.00332	<0.00350	<0.00324	<0.00301	<0.00313	<0.00321	<0.00334	<0.00318	<0.00315	<0.00298	<0.00285	<0.0278	<0.00308	<0.00313
1,2,3-TRICHLOROPROPANE	*0.1*	*19*	*0.000*	<0.0166	<0.0175	<0.0162	<0.0150	<0.0157	<0.0160	<0.0167	<0.0159	<0.0157	<0.0149	<0.0143	<0.139	<0.0154	<0.0157
1,2,4-TRIMETHYLBENZENE	*220*	*220*	*17.1*	**0.0136**	**0.0147**	<0.00649	**0.0044**	**0.00682**	**0.0867**	**0.0647**	**0.0101**	**0.0383**	**0.0853**	**0.00799**	<0.0556	**0.0276**	**0.0212**
1,3,5-TRIMETHYLBENZENE	*180*	*180*	*0.338*	**0.00308**	**0.00359**	<0.00649	<0.00601	<0.00626	**0.013**	**0.00903**	**0.00353**	**0.0218**	**0.0184**	**0.00232**	**0.0406**	**0.00622**	**0.00457**
VINYL CHLORIDE	*1.3*	*280*	*0.000*	<0.00332	<0.00350	<0.00324	<0.00301	<0.00313	<0.00321	<0.00334	<0.00318	<0.00315	<0.00298	<0.00285	<0.0278	<0.00308	<0.00313
XYLENES, TOTAL	*260*	*260*	*3.35*	**0.0173**	**0.0206**	<0.00843	**0.0104**	**0.00714**	**0.166**	**0.127**	**0.00675**	**0.0846**	**0.0636**	**0.0208**	**0.115**	**0.107**	**0.0639**

Notes:

1. Ohio VAP GDCS Commercial/Industrial Land Use
2. Ohio VAP GDCS Construction/Excavation Activities

TPH Action Levels defined in OAC 1301: 7-9-13, Soil Class 1.

NE: no GDCS has been developed by the Ohio EPA.

Bold numbers = concentration above detection limits.

Bold and shaded = concentration above a comparison standard.

Table 1
Results of Soil Analysis
2700 Transport Road, Cleveland, Ohio

Sample ID	*Residential Land Use* [1]	*Construction/ Excavation Activities* [2]	SB-115 (2-4FT)	MW-101 (2-4FT)	MW-102 (0-2)	MW-103 (0-2FT)	MW-103 (6-8FT)	MW-104 (6-8)	MW-106 (8-10FT)	MW-107 (2-4FT)	MW-108 (2-4FT)	MW-108 (8-10FT)	MW-109 (0-2FT)	MW-109 (4-6FT)	MW-110 (0-2FT)	MW-110 (2-4FT)
Date Collected			05/31/2022	06/01/2022	06/02/2022	06/01/2022	06/01/2022	06/02/2022	05/27/2022	05/27/2022	05/26/2022	05/26/2022	05/26/2022	05/26/2022	05/27/2022	05/27/2022
Analyte			Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
ANTHRACENE	*36,000*	*1,000,000*	**0.0457**	**0.268**	**0.524**	**0.0387**	**0.557**	**0.0407**	**0.0339**	**1.28**	**0.224**	<0.00706	<0.0670	<0.00696	<0.00671	**0.183**
ACENAPHTHENE	*7,200*	*290,000*	**0.0272**	**0.136**	**0.168**	**0.0128**	**0.339**	**0.0386**	**0.106**	**0.427**	**0.17**	**0.00335**	**0.487**	**0.00485**	**0.53**	**0.144**
ACENAPHTHYLENE	*7,200*	*290,000*	**0.0132**	**0.152**	**0.0238**	**0.0102**	**0.116**	**0.015**	<0.00719	**0.149**	<0.00672	<0.00706	<0.0670	<0.00696	<0.00671	**0.0305**
BENZO(A)ANTHRACENE	*23*	*9,600*	**0.143**	**1.01**	**1.41**	**0.178**	**1.15**	**0.182**	**0.0162**	**6.22**	**0.943**	**0.00426**	**1.7**	**0.00268**	**0.419**	**0.614**
BENZO(A)PYRENE	*2.3*	*230*	**0.118**	**1.34**	**1.18**	**0.179**	**1.2**	**0.236**	**0.00819**	**10.2**	**0.673**	**0.00364**	**1.62**	**0.0032**	**0.524**	**0.658**
BENZO(B)FLUORANTHENE	*23*	*10,000*	**0.167**	**1.11**	**1.32**	**0.257**	**0.762**	**0.185**	**0.00931**	**8.26**	**0.587**	**0.00548**	**1.23**	**0.00354**	**0.297**	**0.616**
BENZO(G,H,I)PERYLENE	*3,600*	*430,000*	**0.0798**	**1.75**	**0.6**	**0.163**	**1.51**	**0.25**	**0.00842**	**13.1**	**0.535**	<0.00706	**1.42**	**0.00592**	**0.504**	**0.743**
BENZO(K)FLUORANTHENE	*230*	*100,000*	**0.0621**	**0.283**	**0.446**	**0.0854**	**0.188**	**0.0625**	<0.00719	**2.56**	**0.16**	<0.00706	**0.307**	<0.00696	**0.0583**	**0.179**
CHRYSENE	*2,300*	*1,000,000*	**0.125**	**1.04**	**1.12**	**0.163**	**1**	**0.164**	**0.0194**	**4.86**	**0.737**	**0.00591**	**1.71**	**0.00358**	**0.699**	**0.529**
DIBENZ(A,H)ANTHRACENE	*2.3*	*1,000*	**0.0189**	**0.659**	**0.165**	**0.0324**	**0.274**	**0.0932**	**0.00414**	**6.79**	**0.271**	<0.00706	**0.383**	<0.00696	**0.13**	**0.263**
FLUORANTHENE	*4,800*	*170,000*	**0.266**	**1.07**	**2.54**	**0.337**	**1**	**0.252**	**0.0367**	**8.2**	**0.899**	**0.00922**	**1.36**	**0.00584**	**0.353**	**0.964**
FLUORENE	*4,800*	*580,000*	**0.0349**	**0.21**	**0.192**	**0.00986**	**0.632**	**0.0509**	**0.161**	**0.311**	**0.212**	**0.00291**	**0.613**	**0.00543**	**0.657**	**0.166**
INDENO(1,2,3-CD)PYRENE	*23*	*10,000*	**0.0818**	**0.884**	**0.725**	**0.144**	**0.526**	**0.15**	**0.00433**	**7.03**	**0.366**	**0.00307**	**0.823**	**0.00305**	**0.134**	**0.421**
NAPHTHALENE	*96*	*560*	**0.724**	**0.651**	**0.261**	**0.023**	**0.577**	**0.0982**	<0.0240	**0.934**	**0.721**	**0.00669**	**0.635**	**0.0157**	**1.31**	**0.251**
PHENANTHRENE	*36,000*	*1,000,000*	**0.372**	**1.31**	**1.71**	**0.182**	**3.74**	**0.236**	**0.369**	**4.21**	**1.53**	**0.0107**	**3.74**	**0.0138**	**2.69**	**0.953**
PYRENE	*3,600*	*430,000*	**0.275**	**1.82**	**2.05**	**0.331**	**4.81**	**0.336**	**0.058**	**8.05**	**1.37**	**0.0104**	**3.93**	**0.00804**	**1.1**	**1.14**
1-METHYLNAPHTHALENE	*350*	*390*	**0.62**	**0.7**	**0.11**	**0.0223**	**2.74**	**0.132**	**3.07**	**0.693**	**1.11**	**0.00829**	**1.14**	**0.0147**	**3.91**	**0.245**
2-METHYLNAPHTHALENE	*480*	*5,800*	**0.863**	**0.832**	**0.166**	**0.0326**	**2.94**	**0.171**	**0.189**	**1.23**	**1.32**	**0.00864**	**0.739**	**0.0158**	**3.67**	**0.252**
2-CHLORONAPHTHALENE	*13,000*	*1,000,000*	<0.0242	<0.0243	<0.0224	<0.0236	<0.123	<0.0234	<0.0240	<0.0227	**0.0262**	<0.0235	<0.223	<0.0232	<0.0224	<0.0233
TPH (C6-C12)	*1,000*		**0.213**	**257**	**0.0974**	**0.107**	**5.83**	**0.954**	**2320**	**464**	**119**	**0.152**	**4.89**	**2.91**	**434**	**10.4**
TPH (C10-C20)	*2,000*		**20.1**	**301**	**36.2**	**15**	**2080**	**33.7**	**1730**	**1780**	**1210**	**9.04**	**322**	**18.3**	**1590**	**386**
TPH (C20-C34)	*5,000*		**22.9**	**583**	**267**	**129**	**7970**	**52.4**	**165**	**2200**	**1440**	**11.9**	**658**	**15.8**	**1000**	**1100**
ACETONE	*110,000*	*110,000*	<0.0712	<0.0715	<0.0622	<0.0681	<0.0730	<0.0672	<1.40	<0.127	<0.0620	<0.0677	**0.195**	<0.0660	<0.124	<0.0667
ACRYLONITRILE	*6.1*	*62*	<0.0178	<0.0179	<0.0155	<0.0170	<0.0182	<0.0168	<0.350	<0.0318	<0.0155	<0.0169	<0.0154	<0.0165	<0.0309	<0.0167
BENZENE	*28*	*1,200*	**0.00883**	**0.00247**	<0.00124	<0.00136	**0.00851**	**0.000699**	<0.0280	**1.06**	**0.0513**	<0.00135	**0.0712**	<0.00132	**1.22**	**0.304**
BROMOBENZENE	*NE*	*NE*	<0.0178	<0.0179	<0.0155	<0.0170	<0.0182	<0.0168	<0.350	<0.0318	<0.0155	<0.0169	<0.0154	<0.0165	<0.0309	<0.0167
BROMODICHLOROMETHANE	*7.3*	*300*	<0.00356	<0.00357	<0.00311	<0.00341	<0.00365	<0.00336	<0.0699	<0.00636	<0.00310	<0.00338	<0.00308	<0.00330	<0.00618	<0.00334
BROMOFORM	*460*	*910*	<0.0356	<0.0357	<0.0311	<0.0341	<0.0365	<0.0336	<0.699	<0.0636	<0.0310	<0.0338	<0.0308	<0.0330	<0.0618	<0.0334
BROMOMETHANE	*17*	*550*	<0.0178	<0.0179	<0.0155	<0.0170	<0.0182	<0.0168	<0.350	<0.0318	<0.0155	<0.0169	<0.0154	<0.0165	<0.0309	<0.0167
N-BUTYLBENZENE	*110*	*110*	<0.0178	**0.0916**	<0.0155	<0.0170	**0.677**	<0.0168	**1.76**	**0.177**	**0.201**	<0.0169	**0.0371**	**0.0516**	**1.47**	**0.127**
SEC-BUTYLBENZENE	*140*	*140*	**0.00439**	**0.0443**	<0.0155	<0.0170	**0.141**	<0.0168	**2.25**	**0.254**	**0.113**	<0.0169	**0.0262**	**0.0593**	**0.871**	**0.141**
TERT-BUTYLBENZENE	*180*	*180*	<0.00712	**0.0103**	<0.00622	<0.00681	**0.0136**	<0.00672	**0.218**	**0.0629**	**0.00847**	<0.00677	**0.00617**	**0.0116**	**0.0786**	**0.0203**
CARBON TETRACHLORIDE	*16*	*460*	<0.00712	<0.00715	<0.00622	<0.00681	<0.00730	<0.00672	<0.140	<0.0127	<0.00620	<0.00677	<0.00617	<0.00660	<0.0124	<0.00667
CHLOROBENZENE	*660*	*760*	<0.00356	<0.00357	<0.00311	<0.00341	<0.00365	<0.00336	<0.0699	<0.00636	<0.00310	<0.00338	<0.00308	<0.00330	<0.00618	<0.00334
CHLORODIBROMOMETHANE	*130*	*800*	<0.00356	<0.00357	<0.00311	<0.00341	<0.00365	<0.00336	<0.0699	<0.00636	<0.00310	<0.00338	<0.00308	<0.00330	<0.00618	<0.00334
CHLOROETHANE	*2,100*	*2,100*	<0.00712	<0.00715	<0.00622	<0.00681	<0.00730	<0.00672	<0.140	<0.0127	<0.00620	<0.00677	<0.00617	<0.00660	<0.0124	<0.00667
CHLOROFORM	*7.9*	*320*	<0.00356	<0.00357	<0.00311	<0.00341	<0.00365	<0.00336	<0.0699	<0.00636	<0.00310	<0.00338	<0.00308	<0.00330	<0.00618	**0.0447**
CHLOROMETHANE	*280*	*1,300*	<0.0178	<0.0179	<0.0155	<0.0170	<0.0182	<0.0168	<0.350	<0.0318	<0.0155	<0.0169	<0.0154	<0.0165	<0.0309	<0.0167
2-CHLOROTOLUENE	*NE*	*NE*	<0.00356	<0.00357	<0.00311	<0.00341	<0.00365	<0.00336	<0.0699	<0.00636	<0.00310	<0.00338	<0.00308	<0.00330	<0.00618	<0.00334
4-CHLOROTOLUENE	*NE*	*NE*	<0.00712	<0.00715	<0.00622	<0.00681	<0.00730	<0.00672	<0.140	<0.0127	<0.00620	<0.00677	<0.00617	<0.00660	<0.0124	<0.00667
1,2-DIBROMO-3-CHLOROPROPANE	*0.37*	*15*	<0.0356	<0.0357	<0.0311	<0.0341	<0.0365	<0.0336	<0.699	<0.0636	<0.0310	<0.0338	<0.0308	<0.0330	<0.0618	<0.0334
1,2-DIBROMOETHANE	*0.89*	*39*	<0.00356	<0.00357	<0.00311	<0.00341	<0.00365	<0.00336	<0.0699	<0.00636	<0.00310	<0.00338	<0.00308	<0.00330	<0.00618	<0.00334
DIBROMOMETHANE	*59*	*870*	<0.00712	<0.00715	<0.00622	<0.00681	<0.00730	<0.00672	<0.140	<0.0127	<0.00620	<0.00677	<0.00617	<0.00660	<0.0124	<0.00667
1,2-DICHLOROBENZENE	*380*	*380*	<0.00712	<0.00715	<0.00622	<0.00681	<0.00730	<0.00672	<0.140	<0.0127	<0.00620	<0.00677	<0.00617	<0.00660	<0.0124	<0.00667
1,3-DICHLOROBENZENE	*NE*	*NE*	<0.00712	<0.00715	<0.00622	<0.00681	<0.00730	<0.00672	<0.140	<0.0127	<0.00620	<0.00677	<0.00617	<0.00660	<0.0124	<0.00667
1,4-DICHLOROBENZENE	*65*	*2,600*	<0.00712	<0.00715	<0.00622	<0.00681	<0.00730	<0.00672	<0.140	<0.0127	<0.00620	<0.00677	**0.00104**	<0.00660	**0.00266**	<0.00667
DICHLORODIFLUOROMETHANE	*850*	*850*	<0.00356	<0.00357	<0.00311	<0.00341	<0.00365	<0.00336	<0.0699	<0.00636	<0.00310	<0.00338	<0.00308	<0.00330	<0.00618	<0.00334
1,1-DICHLOROETHANE	*89*	*1,700*	**0.0111**	<0.00357	<0.00311	<0.00341	<0.00365	<0.00336	<0.0699	<0.00636	<0.00310	<0.00338	<0.00308	<0.00330	<0.00618	<0.00334
1,2-DICHLOROETHANE	*11*	*480*	<0.00356	<0.00357	<0.00311	<0.00341	<0.00365	<0.00336	<0.0699	<0.00636	<0.00310	<0.00338	<0.00308	<0.00330	<0.00618	<0.00334

Table 1
Results of Soil Analysis
2700 Transport Road, Cleveland, Ohio

Sample ID	*Residential Land Use* [1]	*Construction/ Excavation Activities* [2]	SB-115 (2-4FT)	MW-101 (2-4FT)	MW-102 (0-2)	MW-103 (0-2FT)	MW-103 (6-8FT)	MW-104 (6-8)	MW-106 (8-10FT)	MW-107 (2-4FT)	MW-108 (2-4FT)	MW-108 (8-10FT)	MW-109 (0-2FT)	MW-109 (4-6FT)	MW-110 (0-2FT)	MW-110 (2-4FT)
Date Collected			05/31/2022	06/01/2022	06/02/2022	06/01/2022	06/01/2022	06/02/2022	05/27/2022	05/27/2022	05/26/2022	05/26/2022	05/26/2022	05/26/2022	05/27/2022	05/27/2022
Analyte			Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
1,1-DICHLOROETHENE	*360*	*360*	<0.00356	<0.00357	<0.00311	<0.00341	<0.00365	<0.00336	<0.0699	<0.00636	<0.00310	<0.00338	<0.00308	<0.00330	<0.00618	<0.00334
CIS-1,2-DICHLOROETHENE	*310*	*2,400*	<0.00356	<0.00357	<0.00311	<0.00341	<0.00365	<0.00336	<0.0699	<0.00636	<0.00310	<0.00338	**0.00681**	<0.00330	**0.0826**	**0.0194**
TRANS-1,2-DICHLOROETHENE	*1,900*	*1,900*	<0.00712	<0.00715	<0.00622	<0.00681	<0.00730	<0.00672	<0.140	<0.0127	<0.00620	<0.00677	<0.00617	<0.00660	**0.00958**	**0.00204**
1,2-DICHLOROPROPANE	*39*	*180*	<0.00712	<0.00715	<0.00622	<0.00681	<0.00730	<0.00672	<0.140	<0.0127	<0.00620	<0.00677	<0.00617	<0.00660	<0.0124	<0.00667
1,1-DICHLOROPROPENE	*NE*	*NE*	<0.00356	<0.00357	<0.00311	<0.00341	<0.00365	<0.00336	<0.0699	<0.00636	<0.00310	<0.00338	<0.00308	<0.00330	<0.00618	<0.00334
1,3-DICHLOROPROPANE	*1,500*	*1,500*	<0.00712	<0.00715	<0.00622	<0.00681	<0.00730	<0.00672	<0.140	<0.0127	<0.00620	<0.00677	<0.00617	<0.00660	<0.0124	<0.00667
CIS-1,3-DICHLOROPROPENE	*NE*	*NE*	<0.00356	<0.00357	<0.00311	<0.00341	<0.00365	<0.00336	<0.0699	<0.00636	<0.00310	<0.00338	<0.00308	<0.00330	<0.00618	<0.00334
TRANS-1,3-DICHLOROPROPENE	*NE*	*NE*	<0.00712	<0.00715	<0.00622	<0.00681	<0.00730	<0.00672	<0.140	<0.0127	<0.00620	<0.00677	<0.00617	<0.00660	<0.0124	<0.00667
2,2-DICHLOROPROPANE	*NE*	*NE*	<0.00356	<0.00357	<0.00311	<0.00341	**0.0226**	<0.00336	<0.0699	<0.00636	<0.00310	<0.00338	<0.00308	<0.00330	<0.00618	<0.00334
ETHYLBENZENE	*140*	*480*	**0.0147**	**0.00623**	<0.00311	<0.00341	**0.0649**	<0.00336	**0.0336**	**0.321**	**0.134**	**0.00157**	**0.0912**	**0.00222**	**3.94**	**0.87**
HEXACHLORO-1,3-BUTADIENE	*17*	*17*	<0.0356	<0.0357	<0.0311	<0.0341	<0.0365	<0.0336	<0.699	<0.0636	<0.0310	<0.0338	<0.0308	<0.0330	<0.0618	<0.0334
N-HEXANE	*140*	*140*	**0.0797**	**0.033**	<0.00622	**0.00384**	**0.884**	<0.00672	<0.140	**0.645**	**0.0905**	**0.0102**	**0.105**	<0.00660	**3.52**	**1.06**
ISOPROPYLBENZENE	*270*	*270*	**0.0114**	**0.0167**	<0.00311	<0.00341	**0.206**	**0.00194**	**2.89**	**0.256**	**0.0752**	**0.000972**	**0.0284**	**0.0227**	**0.846**	**0.266**
P-ISOPROPYLTOLUENE	*160*	*160*	<0.00712	**0.655**	**0.00601**	<0.00681	**0.11**	<0.00672	**0.192**	**0.115**	**0.154**	<0.00677	**0.0305**	<0.00660	**0.904**	**0.104**
2-BUTANONE (MEK)	*28,000*	*28,000*	<0.142	<0.143	<0.124	<0.136	<0.146	<0.134	<2.80	<0.254	<0.124	<0.135	**0.12**	<0.132	<0.247	<0.133
METHYLENE CHLORIDE	*740*	*3,300*	**0.019**	**0.0202**	<0.0311	**0.0183**	<0.0365	<0.0336	**0.208**	<0.0636	<0.0310	<0.0338	<0.0308	<0.0330	<0.0618	<0.0334
4-METHYL-2-PENTANONE (MIBK)	*3,400*	*3,400*	<0.0356	<0.0357	<0.0311	<0.0341	<0.0365	**0.0344**	<0.699	<0.0636	**0.424**	<0.0338	<0.0308	<0.0330	<0.0618	<0.0334
METHYL TERT-BUTYL ETHER	*1,100*	*8,900*	<0.00142	<0.00143	<0.00124	<0.00136	<0.00146	<0.00134	<0.0280	<0.00254	<0.00124	**0.00355**	<0.00123	<0.00132	<0.00247	<0.00133
NAPHTHALENE	*96*	*560*	**0.0306**	**0.0249**	**0.0396**	<0.0170	**1.55**	**0.0194**	**0.55**	**0.714**	**0.513**	**0.0173**	**0.312**	**0.0133**	**4.25**	**0.159**
N-PROPYLBENZENE	*260*	*260*	**0.0125**	**0.0246**	<0.00622	<0.00681	**0.241**	**0.00343**	**4.22**	**0.42**	**0.149**	**0.00245**	**0.0464**	**0.0074**	**2.39**	**0.338**
STYRENE	*870*	*870*	<0.0178	<0.0179	<0.0155	<0.0170	<0.0182	<0.0168	<0.350	<0.0318	<0.0155	<0.0169	<0.0154	<0.0165	<0.0309	<0.0167
1,1,1,2-TETRACHLOROETHANE	*49*	*680*	<0.00356	<0.00357	<0.00311	<0.00341	<0.00365	<0.00336	<0.0699	<0.00636	<0.00310	<0.00338	<0.00308	<0.00330	<0.00618	<0.00334
1,1,2,2-TETRACHLOROETHANE	*15*	*670*	<0.00356	<0.00357	<0.00311	<0.00341	<0.00365	<0.00336	<0.0699	<0.00636	<0.00310	<0.00338	<0.00308	<0.00330	<0.00618	<0.00334
TETRACHLOROETHENE	*170*	*170*	<0.00356	<0.00357	<0.00311	<0.00341	<0.00365	<0.00336	<0.0699	<0.00636	<0.00310	<0.00338	<0.00308	<0.00330	<0.00618	**0.00141**
TOLUENE	*820*	*820*	**0.0405**	**0.00602**	**0.0034**	<0.00681	**0.0181**	**0.00303**	**0.0545**	**0.22**	**0.106**	**0.00302**	**0.141**	**0.0037**	**1.02**	**0.234**
1,2,3-TRICHLOROBENZENE	*NE*	*NE*	<0.0178	<0.0179	<0.0155	<0.0170	<0.0182	<0.0168	<0.350	<0.0318	<0.0155	<0.0169	<0.0154	<0.0165	<0.0309	<0.0167
1,2,4-TRICHLOROBENZENE	*140*	*400*	<0.0178	<0.0179	<0.0155	<0.0170	<0.0182	<0.0168	<0.350	<0.0318	<0.0155	<0.0169	<0.0154	<0.0165	<0.0309	<0.0167
1,1,1-TRICHLOROETHANE	*640*	*640*	**0.00396**	<0.00357	<0.00311	<0.00341	<0.00365	<0.00336	<0.0699	<0.00636	<0.00310	<0.00338	<0.00308	<0.00330	<0.00618	<0.00334
1,1,2-TRICHLOROETHANE	*28*	*1,200*	<0.00356	<0.00357	<0.00311	<0.00341	<0.00365	<0.00336	<0.0699	<0.00636	<0.00310	<0.00338	<0.00308	<0.00330	<0.00618	<0.00334
TRICHLOROETHENE	*10*	*17*	<0.00142	<0.00143	<0.00124	<0.00136	<0.00146	<0.00134	<0.0280	<0.00254	<0.00124	<0.00135	**0.00458**	<0.00132	**0.0267**	**0.00509**
TRICHLOROFLUOROMETHANE	*1,200*	*1,200*	<0.00356	<0.00357	<0.00311	<0.00341	<0.00365	<0.00336	<0.0699	<0.00636	<0.00310	<0.00338	<0.00308	<0.00330	<0.00618	<0.00334
1,2,3-TRICHLOROPROPANE	*0.1*	*19*	<0.0178	<0.0179	<0.0155	<0.0170	<0.0182	<0.0168	<0.350	<0.0318	<0.0155	<0.0169	<0.0154	<0.0165	<0.0309	<0.0167
1,2,4-TRIMETHYLBENZENE	*220*	*220*	**0.0184**	**0.0793**	**0.00626**	<0.00681	**0.606**	**0.00379**	**0.336**	**1.19**	**0.936**	**0.012**	**0.162**	**0.00493**	**17.1**	**2.14**
1,3,5-TRIMETHYLBENZENE	*180*	*180*	**0.00368**	**0.0222**	<0.00622	<0.00681	**0.169**	<0.00672	<0.140	**0.186**	**0.338**	**0.00456**	**0.05**	<0.00660	**0.231**	**0.0713**
VINYL CHLORIDE	*1.3*	*280*	<0.00356	<0.00357	<0.00311	<0.00341	<0.00365	<0.00336	<0.0699	<0.00636	<0.00310	<0.00338	<0.00308	<0.00330	<0.00618	<0.00334
XYLENES, TOTAL	*260*	*260*	**0.0668**	**0.0202**	**0.00775**	<0.00885	**0.286**	**0.00463**	**0.215**	**0.948**	**0.714**	**0.00913**	**0.308**	**0.00766**	**3.35**	**0.799**

Notes:
1. Ohio VAP GDCS Commercial/Industrial Land Use
2. Ohio VAP GDCS Construction/Excavation Activities
TPH Action Levels defined in OAC 1301: 7-9-13, Soil Class 1.
NE: no GDCS has been developed by the Ohio EPA.
Bold numbers = concentration above detection limits.
Bold and shaded = concentration above a comparison standard.

Table 2
Results of Groundwater Analysis
2700 Transport Road, Cleveland, Ohio

Sample ID		***Applicable Standards***		MW-101	MW-102	MW-103	MW-104	MW-106	MW-107	MW-108		MW-109	MW-110
Date Collected		***UPUS*** [1]	***VISL*** [2]	06/08/2022	06/08/2022	06/08/2022	06/08/2022	06/09/2022	06/09/2022	06/09/2022	06/09/2022	06/09/2022	06/09/2022
Analyte	Units			Result	Result	Result	Result	Result	Result	Result	Dupilcate	Result	Result
ACETONE	mg/l	*14*	*40,200*	**0.0135**	<0.0500	**0.0261**	<0.0500	<1.00	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500
ACROLEIN	mg/l	*0.000042*	*0.007*	<0.0500	<0.0500	<0.0500	<0.0500	<1.00	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500
ACRYLONITRILE	mg/l	*0.00052*	*0.144*	<0.0100	<0.0100	<0.0100	<0.0100	<0.200	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
BENZENE	mg/l	*0.005*	*0.03*	**0.000437**	**0.0333**	<0.00100	**0.00321**	**1.23**	**0.0209**	**0.000202**	**0.000158**	**0.000305**	**0.00164**
BROMOBENZENE	mg/l	*NE*	*1.68*	<0.00100	<0.00100	<0.00100	<0.00100	<0.0200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
BROMODICHLOROMETHANE	mg/l	*0.08*	*0.017*	<0.00100	<0.00100	<0.00100	<0.00100	<0.0200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
BROMOFORM	mg/l	*0.08*	*2.77*	<0.00100	<0.00100	<0.00100	<0.00100	<0.0200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
BROMOMETHANE	mg/l	*0.0075*	*0.027*	<0.00500	<0.00500	<0.00500	<0.00500	<0.100	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
N-BUTYLBENZENE	mg/l	*1*	*NIT*	<0.00100	**0.0023**	<0.00100	<0.00100	**0.00822**	**0.000267**	<0.00100	<0.00100	**0.000486**	**0.00116**
SEC-BUTYLBENZENE	mg/l	*2*	*NIT*	**0.000185**	**0.00143**	<0.00100	**0.000342**	**0.014**	**0.000466**	**0.000358**	**0.000318**	**0.00301**	**0.00252**
TERT-BUTYLBENZENE	mg/l	*0.69*	*NIT*	**0.00065**	**0.000158**	<0.00100	**0.00114**	<0.0200	<0.00100	**0.000269**	**0.000232**	**0.00138**	**0.000604**
CARBON TETRACHLORIDE	mg/l	*0.005*	*0.008*	<0.00100	<0.00100	<0.00100	<0.00100	<0.0200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
CHLOROBENZENE	mg/l	*0.1*	*0.883*	<0.00100	<0.00100	<0.00100	<0.00100	<0.0200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
CHLORODIBROMOMETHANE	mg/l	*0.08*	*NIT*	<0.00100	<0.00100	<0.00100	<0.00100	<0.0200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
CHLOROETHANE	mg/l	*21*	*NIT*	<0.00500	<0.00500	<0.00500	<0.00500	<0.100	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
CHLOROFORM	mg/l	*0.08*	*0.015*	<0.00500	<0.00500	<0.00500	<0.00500	<0.100	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
CHLOROMETHANE	mg/l	*0.19*	*0.368*	<0.00250	<0.00250	<0.00250	<0.00250	<0.0500	<0.00250	<0.00250	<0.00250	<0.00250	<0.00250
2-CHLOROTOLUENE	mg/l	*NE*	*NIT*	<0.00100	<0.00100	<0.00100	<0.00100	<0.0200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
4-CHLOROTOLUENE	mg/l	*NE*	*NIT*	<0.00100	<0.00100	<0.00100	<0.00100	<0.0200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
1,2-DIBROMO-3-CHLOROPROPANE	mg/l	*0.0002*	*0.001*	<0.00500	<0.00500	<0.00500	<0.00500	<0.100	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
1,2-DIBROMOETHANE	mg/l	*0.00005*	*0.004*	<0.00100	<0.00100	<0.00100	<0.00100	<0.0200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
DIBROMOMETHANE	mg/l	*0.0083*	*0.244*	<0.00100	<0.00100	<0.00100	<0.00100	<0.0200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
1,2-DICHLOROBENZENE	mg/l	*0.6*	*6.54*	<0.00100	<0.00100	<0.00100	<0.00100	<0.0200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
1,3-DICHLOROBENZENE	mg/l	*NE*	*NIT*	<0.00100	<0.00100	<0.00100	<0.00100	<0.0200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
1,4-DICHLOROBENZENE	mg/l	*0.075*	*0.064*	<0.00100	<0.00100	<0.00100	<0.00100	<0.0200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
DICHLORODIFLUOROMETHANE	mg/l	*3.6*	*0.01*	<0.00500	<0.00500	<0.00500	<0.00500	<0.100	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
1,1-DICHLOROETHANE	mg/l	*0.028*	*0.135*	<0.00100	<0.00100	<0.00100	<0.00100	<0.0200	**0.000441**	<0.00100	<0.00100	<0.00100	<0.00100
1,2-DICHLOROETHANE	mg/l	*0.005*	*0.043*	<0.00100	<0.00100	<0.00100	<0.00100	<0.0200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
1,1-DICHLOROETHENE	mg/l	*0.007*	*0.32*	<0.00100	<0.00100	<0.00100	<0.00100	<0.0200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
CIS-1,2-DICHLOROETHENE	mg/l	*0.07*	*NIT*	<0.00100	<0.00100	<0.00100	**0.000288**	<0.0200	**0.000148**	<0.00100	<0.00100	<0.00100	<0.00100
TRANS-1,2-DICHLOROETHENE	mg/l	*0.1*	*0.191*	<0.00100	<0.00100	<0.00100	<0.00100	<0.0200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
1,2-DICHLOROPROPANE	mg/l	*0.005*	*0.071*	<0.00100	<0.00100	<0.00100	<0.00100	<0.0200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
1,1-DICHLOROPROPENE	mg/l	*NE*	*NIT*	<0.00100	<0.00100	<0.00100	<0.00100	<0.0200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
1,3-DICHLOROPROPANE	mg/l	*0.37*	*NIT*	<0.00100	<0.00100	<0.00100	<0.00100	<0.0200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
CIS-1,3-DICHLOROPROPENE	mg/l	*NE*	*0.1*	<0.00100	<0.00100	<0.00100	<0.00100	<0.0200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
TRANS-1,3-DICHLOROPROPENE	mg/l	*NE*	*0.1*	<0.00100	<0.00100	<0.00100	<0.00100	<0.0200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
2,2-DICHLOROPROPANE	mg/l	*NE*	*NIT*	<0.00100	<0.00100	<0.00100	<0.00100	<0.0200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
ETHYLBENZENE	mg/l	*0.7*	*0.077*	<0.00100	**0.00192**	<0.00100	<0.00100	**0.0201**	**0.00496**	<0.00100	<0.00100	<0.00100	<0.00100
HEXACHLORO-1,3-BUTADIENE	mg/l	*0.0014*	*0.008*	<0.00100	<0.00100	<0.00100	<0.00100	<0.0200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
N-HEXANE	mg/l	*1.5*	*0.018*	<0.0100	**0.0121**	<0.0100	<0.0100	<0.200	**0.0117**	<0.0100	<0.0100	<0.0100	<0.0100
ISOPROPYLBENZENE	mg/l	*0.45*	*2.42*	<0.00100	**0.0129**	<0.00100	<0.00100	**0.0915**	**0.00299**	**0.000493**	**0.000422**	**0.00147**	**0.0149**
P-ISOPROPYLTOLUENE	mg/l	*0.18*	*NIT*	<0.00100	**0.000431**	**0.00356**	<0.00100	**0.00819**	**0.000258**	**0.000646**	**0.000612**	**0.000203**	**0.00114**
2-BUTANONE (MEK)	mg/l	*5.6*	*4,300*	<0.0100	<0.0100	<0.0100	<0.0100	<0.200	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
METHYLENE CHLORIDE	mg/l	*0.005*	*8.1*	<0.00500	<0.00500	<0.00500	<0.00500	<0.100	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
4-METHYL-2-PENTANONE (MIBK)	mg/l	*6.3*	*1,190*	<0.0100	<0.0100	<0.0100	<0.0100	<0.200	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
METHYL TERT-BUTYL ETHER	mg/l	*0.14*	*7.86*	<0.00100	<0.00100	<0.00100	**0.000247**	<0.0200	**0.00384**	**0.00284**	**0.00275**	**0.0014**	<0.00100

Table 2
Results of Groundwater Analysis
2700 Transport Road, Cleveland, Ohio

Sample ID		***Applicable Standards***		MW-101	MW-102	MW-103	MW-104	MW-106	MW-107	MW-108		MW-109	MW-110
Date Collected		***UPUS*** [1]	***VISL*** [2]	06/08/2022	06/08/2022	06/08/2022	06/08/2022	06/09/2022	06/09/2022	06/09/2022	06/09/2022	06/09/2022	06/09/2022
Analyte	Units			Result	Result	Result	Result	Result	Result	Result	Dupilcate	Result	Result
NAPHTHALENE	mg/l	*0.0017*	*0.127*	<0.00500	**0.00274**	<0.00500	<0.00500	<0.100	**0.0161**	<0.00500	<0.00500	<0.00500	<0.00500
N-PROPYLBENZENE	mg/l	*0.66*	*5.9*	<0.00100	**0.0193**	<0.00100	<0.00100	**0.0969**	**0.00367**	**0.000133**	<0.00100	**0.000492**	**0.000408**
STYRENE	mg/l	*0.1*	*22.2*	<0.00100	<0.00100	<0.00100	<0.00100	<0.0200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
1,1,1,2-TETRACHLOROETHANE	mg/l	*0.0057*	*0.092*	<0.00100	<0.00100	<0.00100	<0.00100	<0.0200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
1,1,2,2-TETRACHLOROETHANE	mg/l	*0.00076*	*0.075*	<0.00100	<0.00100	<0.00100	<0.00100	<0.0200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
TETRACHLOROETHENE	mg/l	*0.005*	*0.122*	<0.00100	<0.00100	<0.00100	<0.00100	<0.0200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
TOLUENE	mg/l	*1*	*39.2*	**0.000517**	**0.00535**	<0.00100	<0.00100	**0.0518**	**0.00304**	<0.00100	<0.00100	<0.00100	<0.00100
1,2,3-TRICHLOROBENZENE	mg/l	*NE*	*NIT*	<0.00100	<0.00100	<0.00100	<0.00100	<0.0200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
1,2,4-TRICHLOROBENZENE	mg/l	*0.07*	*0.103*	<0.00100	<0.00100	<0.00100	<0.00100	<0.0200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
1,1,1-TRICHLOROETHANE	mg/l	*0.2*	*0.0773*	<0.00100	<0.00100	<0.00100	<0.00100	<0.0200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
1,1,2-TRICHLOROETHANE	mg/l	*0.005*	*0.013*	<0.00100	<0.00100	<0.00100	<0.00100	<0.0200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
TRICHLOROETHENE	mg/l	*0.005*	*0.010*	<0.00100	<0.00100	<0.00100	<0.00100	<0.0200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
TRICHLOROFLUOROMETHANE	mg/l	*5.2*	*NIT*	<0.00500	<0.00500	<0.00500	<0.00500	<0.100	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
1,2,3-TRICHLOROPROPANE	mg/l	*0.0000075*	*0.052*	<0.00250	<0.00250	<0.00250	<0.00250	<0.0500	<0.00250	<0.00250	<0.00250	<0.00250	<0.00250
1,2,4-TRIMETHYLBENZENE	mg/l	*0.056*	*0.626*	<0.00100	**0.011**	<0.00100	<0.00100	<0.0200	**0.00693**	<0.00100	<0.00100	**0.0052**	**0.0022**
1,3,5-TRIMETHYLBENZENE	mg/l	*0.06*	*0.439*	<0.00100	**0.00441**	<0.00100	<0.00100	**0.00755**	**0.00154**	**0.000182**	**0.000134**	**0.000316**	**0.000647**
VINYL CHLORIDE	mg/l	*0.002*	*0.002*	<0.00100	<0.00100	<0.00100	**0.000662**	<0.0200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
XYLENES, TOTAL	mg/l	*10*	*0.856*	**0.000898**	**0.0263**	<0.00300	**0.000276**	**0.0882**	**0.0175**	**0.000588**	**0.000464**	**0.00109**	**0.00297**
ANTHRACENE	mg/l	*1.8*	*NIT*	**0.000577**	**0.000462**	**0.0000434**	<0.000500	**0.0000782**	**0.0000636**	<0.0000500	<0.0000500	**0.000203**	**0.000334**
ACENAPHTHENE	mg/l	*0.53*	*NIT*	**0.00113**	**0.000997**	**0.000269**	**0.00622**	**0.000587**	**0.00121**	**0.000365**	**0.000364**	**0.00128**	**0.00168**
ACENAPHTHYLENE	mg/l	*0.52*	*NIT*	<0.0000500	<0.0000500	<0.0000500	<0.000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500
BENZO(A)ANTHRACENE	mg/l	*0.0003*	*NSV*	**0.00013**	**0.000411**	<0.0000500	**0.000515**	<0.0000500	**0.000027**	<0.0000500	<0.0000500	**0.000345**	**0.0000699**
BENZO(A)PYRENE	mg/l	*0.0002*	*NSV*	**0.0000781**	**0.000345**	<0.0000500	**0.000522**	<0.0000500	<0.0000500	<0.0000500	<0.0000500	**0.00022**	**0.0000462**
BENZO(B)FLUORANTHENE	mg/l	*0.0025*	*NSV*	**0.0000449**	**0.000179**	<0.0000500	**0.000465**	<0.0000500	**0.0000179**	<0.0000500	<0.0000500	**0.000164**	**0.0000347**
BENZO(G,H,I)PERYLENE	mg/l	*0.6*	*NSV*	**0.0000908**	**0.00022**	<0.0000500	**0.00105**	<0.0000500	<0.0000500	<0.0000500	<0.0000500	**0.000145**	**0.0000407**
BENZO(K)FLUORANTHENE	mg/l	*0.025*	*NSV*	<0.0000500	**0.0000444**	<0.0000500	<0.000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	**0.0000471**	<0.0000500
CHRYSENE	mg/l	*0.25*	*NSV*	**0.000126**	**0.000455**	<0.0000500	**0.000456**	<0.0000500	<0.0000500	<0.0000500	<0.0000500	**0.000282**	**0.0000544**
DIBENZ(A,H)ANTHRACENE	mg/l	*0.00025*	*NSV*	**0.0000277**	**0.000126**	<0.0000500	**0.00037**	<0.0000500	<0.0000500	<0.0000500	<0.0000500	**0.0000746**	**0.0000207**
FLUORANTHENE	mg/l	*0.8*	*NSV*	**0.000133**	**0.000354**	**0.0000945**	**0.000751**	**0.000036**	**0.000157**	**0.0000298**	**0.0000331**	**0.000372**	**0.000128**
FLUORENE	mg/l	*0.29*	*NSV*	**0.000187**	**0.00127**	**0.000125**	**0.00336**	**0.000645**	**0.00151**	**0.000141**	**0.000152**	**0.0015**	**0.00139**
INDENO(1,2,3-CD)PYRENE	mg/l	*0.00025*	*NSV*	**0.0000295**	**0.00009**	<0.0000500	**0.000554**	<0.0000500	<0.0000500	<0.0000500	<0.0000500	**0.0000694**	**0.0000226**
NAPHTHALENE	mg/l	*0.0017*	*0.127*	**0.000107**	**0.00299**	<0.000250	<0.000250	**0.00357**	**0.0121**	<0.000250	<0.000250	**0.000302**	**0.000946**
PHENANTHRENE	mg/l	*4.8*	*NIT*	**0.0000861**	**0.0023**	**0.000149**	**0.000661**	**0.000711**	**0.00105**	<0.0000500	<0.0000500	**0.000454**	**0.00193**
PYRENE	mg/l	*0.12*	*NIT*	**0.00102**	**0.000638**	**0.000195**	**0.00104**	**0.0000585**	**0.000106**	**0.0000434**	**0.0000487**	**0.000667**	**0.00037**
1-METHYLNAPHTHALENE	mg/l	*0.011*	*NIT*	**0.00016**	**0.0109**	<0.000250	**0.00462**	**0.0472**	**0.0032**	<0.000250	**0.000071**	**0.000429**	**0.00609**
2-METHYLNAPHTHALENE	mg/l	*0.036*	*NIT*	**0.0000989**	**0.00329**	<0.000250	<0.00250	**0.00126**	**0.00329**	<0.000250	<0.000250	**0.000138**	**0.000612**
2-CHLORONAPHTHALENE	mg/l	0.75	*NIT*	<0.000250	**0.000257**	<0.000250	<0.00250	<0.000250	<0.000250	<0.000250	<0.000250	<0.000250	<0.000250

Notes
mg/l = Milligrams per liter
1. Ohio EPA Generic Unrestricted Potable Use Standards (UPUS)
2. USEPA VISL for Residential Land Use
NE: No Established Regulatory Limits / NIT: No Inhalation Toxicity/ NSV: Not sufficiently volatile
Bolded numbers = concentration above detection limits.
Bold and shaded = concentration above a comparison standard.

Table 3
Summary of COCs in Sub-Slab Vapor and Soil Gas
2700 Transport Road, Cleveland, Ohio

Client Sample ID		***Indoor Air Standards - Residential Land Use*** [1]	SGP-02	SSV-01	SSV-02	SSV-03	BG-01
Date Collected			06/10/2022	06/10/2022	06/10/2022	06/10/2022	06/10/2022
Analyte	Units	***AF = 0.03***	Result	Result	Result	Result	Result
ACETONE	ug/m3	*1,066,667*	**644**	**314**	<59.4	<59.4	**4.51**
ALLYL CHLORIDE	ug/m3	*33*	<0.626	<0.626	<12.5	<12.5	<0.626
BENZENE	ug/m3	*120*	**39**	**37.1**	**569**	**43.1**	<0.639
BENZYL CHLORIDE	ug/m3	*19*	<1.04	<1.04	<20.8	<20.8	<1.04
BROMODICHLOROMETHANE	ug/m3	*25*	<1.34	<1.34	<26.8	<26.8	<1.34
BROMOFORM	ug/m3	*867*	<6.21	<6.21	<124	<124	<6.21
BROMOMETHANE	ug/m3	*173*	<0.776	<0.776	<15.5	<15.5	<0.776
CARBON DISULFIDE	ug/m3	*24,333*	**149**	**11.6**	<12.4	**140**	<0.622
CARBON TETRACHLORIDE	ug/m3	*160.0*	<1.26	<1.26	<25.2	<25.2	<1.26
CHLOROBENZENE	ug/m3	*1,733*	<0.924	<0.924	<18.5	<18.5	<0.924
CHLOROETHANE	ug/m3	*333,333*	<0.528	**1.45**	<10.6	<10.6	<0.528
CHLOROFORM	ug/m3	*41*	<0.973	<0.973	<19.5	<19.5	<0.973
CHLOROMETHANE	ug/m3	*3,133*	<0.413	**0.911**	<8.26	<8.26	**1.16**
CHLORODIBROMOMETHANE	ug/m3	*NE*	<1.70	<1.70	<34.0	<34.0	<1.70
1,2-DIBROMOETHANE	ug/m3	*1.57*	<1.54	<1.54	<30.8	<30.8	<1.54
1,2-DICHLOROBENZENE	ug/m3	*7,000*	<1.20	**52.7**	<24.0	<24.0	<1.20
1,3-DICHLOROBENZENE	ug/m3	*NE*	<1.20	<1.20	<24.0	<24.0	<1.20
1,4-DICHLOROBENZENE	ug/m3	*86.7*	<1.20	<1.20	<24.0	<24.0	<1.20
1,2-DICHLOROETHANE	ug/m3	*36*	<0.810	<0.810	<16.2	<16.2	<0.810
1,1-DICHLOROETHANE	ug/m3	*600*	<0.802	**105**	<16.0	<16.0	<0.802
1,1-DICHLOROETHENE	ug/m3	*7,000*	<0.793	<0.793	<15.9	<15.9	<0.793
CIS-1,2-DICHLOROETHENE	ug/m3	*NE*	<0.793	**4.68**	<15.9	<15.9	<0.793
TRANS-1,2-DICHLOROETHENE	ug/m3	*NE*	<0.793	**1.75**	<15.9	<15.9	<0.793
1,2-DICHLOROPROPANE	ug/m3	*140*	<0.924	<0.924	<18.5	<18.5	<0.924
CIS-1,3-DICHLOROPROPENE	ug/m3	*NE*	<0.908	<0.908	<18.2	<18.2	<0.908
TRANS-1,3-DICHLOROPROPENE	ug/m3	*NE*	<0.908	<0.908	<18.2	<18.2	<0.908
1,4-DIOXANE	ug/m3	*186*	<0.721	<0.721	<14.4	<14.4	<0.721
ETHANOL	ug/m3	*NE*	**13.7**	**75.8**	<47.1	<47.1	**4.11**
ETHYL ACETATE	ug/m3	*2,433*	<0.720	<0.720	<14.4	<14.4	<0.720
ETHYLBENZENE	ug/m3	*366*	**14.3**	**89.7**	<17.3	<17.3	<0.867
TRICHLOROFLUOROMETHANE	ug/m3	*NE*	<1.12	**1.26**	<22.5	<22.5	**1.33**
DICHLORODIFLUOROMETHANE	ug/m3	*NE*	<0.989	**2.39**	<19.8	<19.8	**2.29**
HEXACHLORO-1,3-BUTADIENE	ug/m3	*43.3*	<6.73	<6.73	<135	<135	<6.73
N-HEXANE	ug/m3	*24,333*	**340**	**210**	**2240**	**374**	<2.22
ISOPROPYLBENZENE	ug/m3	*14,000*	<0.983	**14**	<19.7	<19.7	<0.983
METHYLENE CHLORIDE	ug/m3	*21,000*	<0.694	**222**	<13.9	<13.9	<0.694
METHYL BUTYL KETONE	ug/m3	*NE*	<5.11	<5.11	<102	<102	<5.11
2-BUTANONE (MEK)	ug/m3	*173,333*	**10.4**	**54.6**	<73.7	<73.7	<3.69
4-METHYL-2-PENTANONE (MIBK)	ug/m3	*103,333*	<5.12	<5.12	<102	<102	<5.12
METHYL METHACRYLATE	ug/m3	*24,333*	<0.819	<0.819	<16.4	<16.4	<0.819
METHYL TERT-BUTYL ETHER	ug/m3	*3,666*	<0.721	<0.721	<14.4	<14.4	<0.721
NAPHTHALENE	ug/m3	*28.0*	**5.44**	**11.5**	<66.0	<66.0	<3.30
STYRENE	ug/m3	*33,333*	<0.851	<0.851	<17.0	<17.0	<0.851
1,1,2,2-TETRACHLOROETHANE	ug/m3	*16*	<1.37	<1.37	<27.5	<27.5	<1.37
TETRACHLOROETHENE	ug/m3	*1,400*	<1.36	<1.36	<27.2	<27.2	<1.36
TOLUENE	ug/m3	*173,333*	**59.5**	**133**	**256**	**69.7**	<1.88
1,2,4-TRICHLOROBENZENE	ug/m3	*70*	<4.66	<4.66	<93.3	<93.3	<4.66
1,1,1-TRICHLOROETHANE	ug/m3	*173,333*	<1.09	<1.09	<21.8	<21.8	<1.09
1,1,2-TRICHLOROETHANE	ug/m3	*60*	<1.09	<1.09	<21.8	<21.8	<1.09
TRICHLOROETHENE	ug/m3	*70*	<1.07	<1.07	<21.4	<21.4	<1.07
VINYL ACETATE	ug/m3	*7,000*	<0.704	<0.704	<14.1	<14.1	<0.704
VINYL CHLORIDE	ug/m3	*56*	<0.511	**2.21**	**307**	<10.2	<0.511
M&P-XYLENE	ug/m3	*3,333*	**38**	**169**	<34.7	**39.3**	<1.73
O-XYLENE	ug/m3	*3,333*	**28.1**	**73.7**	<17.3	**30**	<0.867
1,2,4-TRIMETHYLBENZENE	ug/m3	*2,100*	**11.9**	**65.3**	**82.9**	<19.6	<0.982
1,3,5-TRIMETHYLBENZENE	ug/m3	*2,100*	**6.67**	**20.5**	**35**	<19.6	<0.982

Notes

µg/m3 = micrograms per cubic meter.

1. Ohio VAP Generic Indoor Air Standards due to Vapor Intrusion (Residential Land Use Category) with applied Attenuation Factor of 0.03

NE: No established regulatory limits

Bolded numbers = concentration above detection limits.

Bold and shaded = concentration above a comparison standard.

Table 3
Summary of COCs in Sub-Slab Vapor and Soil Gas
2700 Transport Road, Cleveland, Ohio

Client Sample ID		***Indoor Air Standards - Residential Land Use*** [1]	SGP-02	SSV-01	SSV-02	SSV-03	BG-01
Date Collected			06/10/2022	06/10/2022	06/10/2022	06/10/2022	06/10/2022
Analyte	Units	***AF = 0.03***	Result	Result	Result	Result	Result
ACETONE	ug/m3	*1,066,667*	**644**	**314**	<59.4	<59.4	**4.51**
ALLYL CHLORIDE	ug/m3	*33*	<0.626	<0.626	<12.5	<12.5	<0.626
BENZENE	ug/m3	*120*	**39**	**37.1**	**569**	**43.1**	<0.639
BENZYL CHLORIDE	ug/m3	*19*	<1.04	<1.04	<20.8	<20.8	<1.04
BROMODICHLOROMETHANE	ug/m3	*25*	<1.34	<1.34	<26.8	<26.8	<1.34
BROMOFORM	ug/m3	*867*	<6.21	<6.21	<124	<124	<6.21
BROMOMETHANE	ug/m3	*173*	<0.776	<0.776	<15.5	<15.5	<0.776
CARBON DISULFIDE	ug/m3	*24,333*	**149**	**11.6**	<12.4	**140**	<0.622
CARBON TETRACHLORIDE	ug/m3	*160.0*	<1.26	<1.26	<25.2	<25.2	<1.26
CHLOROBENZENE	ug/m3	*1,733*	<0.924	<0.924	<18.5	<18.5	<0.924
CHLOROETHANE	ug/m3	*333,333*	<0.528	**1.45**	<10.6	<10.6	<0.528
CHLOROFORM	ug/m3	*41*	<0.973	<0.973	<19.5	<19.5	<0.973
CHLOROMETHANE	ug/m3	*3,133*	<0.413	**0.911**	<8.26	<8.26	**1.16**
CHLORODIBROMOMETHANE	ug/m3	*NE*	<1.70	<1.70	<34.0	<34.0	<1.70
1,2-DIBROMOETHANE	ug/m3	*1.57*	<1.54	<1.54	<30.8	<30.8	<1.54
1,2-DICHLOROBENZENE	ug/m3	*7,000*	<1.20	**52.7**	<24.0	<24.0	<1.20
1,3-DICHLOROBENZENE	ug/m3	*NE*	<1.20	<1.20	<24.0	<24.0	<1.20
1,4-DICHLOROBENZENE	ug/m3	*86.7*	<1.20	<1.20	<24.0	<24.0	<1.20
1,2-DICHLOROETHANE	ug/m3	*36*	<0.810	<0.810	<16.2	<16.2	<0.810
1,1-DICHLOROETHANE	ug/m3	*600*	<0.802	**105**	<16.0	<16.0	<0.802
1,1-DICHLOROETHENE	ug/m3	*7,000*	<0.793	<0.793	<15.9	<15.9	<0.793
CIS-1,2-DICHLOROETHENE	ug/m3	*NE*	<0.793	**4.68**	<15.9	<15.9	<0.793
TRANS-1,2-DICHLOROETHENE	ug/m3	*NE*	<0.793	**1.75**	<15.9	<15.9	<0.793
1,2-DICHLOROPROPANE	ug/m3	*140*	<0.924	<0.924	<18.5	<18.5	<0.924
CIS-1,3-DICHLOROPROPENE	ug/m3	*NE*	<0.908	<0.908	<18.2	<18.2	<0.908
TRANS-1,3-DICHLOROPROPENE	ug/m3	*NE*	<0.908	<0.908	<18.2	<18.2	<0.908
1,4-DIOXANE	ug/m3	*186*	<0.721	<0.721	<14.4	<14.4	<0.721
ETHANOL	ug/m3	*NE*	**13.7**	**75.8**	<47.1	<47.1	**4.11**
ETHYL ACETATE	ug/m3	*2,433*	<0.720	<0.720	<14.4	<14.4	<0.720
ETHYLBENZENE	ug/m3	*366*	**14.3**	**89.7**	<17.3	<17.3	<0.867
TRICHLOROFLUOROMETHANE	ug/m3	*NE*	<1.12	**1.26**	<22.5	<22.5	**1.33**
DICHLORODIFLUOROMETHANE	ug/m3	*NE*	<0.989	**2.39**	<19.8	<19.8	**2.29**
HEXACHLORO-1,3-BUTADIENE	ug/m3	*43.3*	<6.73	<6.73	<135	<135	<6.73
N-HEXANE	ug/m3	*24,333*	**340**	**210**	**2240**	**374**	<2.22
ISOPROPYLBENZENE	ug/m3	*14,000*	<0.983	**14**	<19.7	<19.7	<0.983
METHYLENE CHLORIDE	ug/m3	*21,000*	<0.694	**222**	<13.9	<13.9	<0.694
METHYL BUTYL KETONE	ug/m3	*NE*	<5.11	<5.11	<102	<102	<5.11
2-BUTANONE (MEK)	ug/m3	*173,333*	**10.4**	**54.6**	<73.7	<73.7	<3.69
4-METHYL-2-PENTANONE (MIBK)	ug/m3	*103,333*	<5.12	<5.12	<102	<102	<5.12
METHYL METHACRYLATE	ug/m3	*24,333*	<0.819	<0.819	<16.4	<16.4	<0.819
METHYL TERT-BUTYL ETHER	ug/m3	*3,666*	<0.721	<0.721	<14.4	<14.4	<0.721
NAPHTHALENE	ug/m3	*28.0*	**5.44**	**11.5**	<66.0	<66.0	<3.30
STYRENE	ug/m3	*33,333*	<0.851	<0.851	<17.0	<17.0	<0.851
1,1,2,2-TETRACHLOROETHANE	ug/m3	*16*	<1.37	<1.37	<27.5	<27.5	<1.37
TETRACHLOROETHENE	ug/m3	*1,400*	<1.36	<1.36	<27.2	<27.2	<1.36
TOLUENE	ug/m3	*173,333*	**59.5**	**133**	**256**	**69.7**	<1.88
1,2,4-TRICHLOROBENZENE	ug/m3	*70*	<4.66	<4.66	<93.3	<93.3	<4.66
1,1,1-TRICHLOROETHANE	ug/m3	*173,333*	<1.09	<1.09	<21.8	<21.8	<1.09
1,1,2-TRICHLOROETHANE	ug/m3	*60*	<1.09	<1.09	<21.8	<21.8	<1.09
TRICHLOROETHENE	ug/m3	*70*	<1.07	<1.07	<21.4	<21.4	<1.07
VINYL ACETATE	ug/m3	*7,000*	<0.704	<0.704	<14.1	<14.1	<0.704
VINYL CHLORIDE	ug/m3	*56*	<0.511	**2.21**	**307**	<10.2	<0.511
M&P-XYLENE	ug/m3	*3,333*	**38**	**169**	<34.7	**39.3**	<1.73
O-XYLENE	ug/m3	*3,333*	**28.1**	**73.7**	<17.3	**30**	<0.867
1,2,4-TRIMETHYLBENZENE	ug/m3	*2,100*	**11.9**	**65.3**	**82.9**	<19.6	<0.982
1,3,5-TRIMETHYLBENZENE	ug/m3	*2,100*	**6.67**	**20.5**	**35**	<19.6	<0.982

Notes

µg/m3 = micrograms per cubic meter.

1. Ohio VAP Generic Indoor Air Standards due to Vapor Intrusion (Residential Land Use Category) with applied Attenuation Factor of 0.03

NE: No established regulatory limits

Bolded numbers = concentration above detection limits.

Bold and shaded = concentration above a comparison standard.

Table 4
Summary of Methane Monitoring
2700 Transport Road, Cleveland, Ohio

Parameter		*Methane LEL*	Methane
Date Collected			7/1/2022
	Units		Result
MW-101	%	*5%*	**60.1**
MW-102	%		**>75**
MW-103	%		**6.8**
MW-104	%		**11.7**
MW-106	%		**>75**
MW-107	%		**53.4**
MW-108	%		1.5
MW-109	%		**48.5**
MW-110	%		**44.7**
SGP-02	%		**73.9**
SSV-01	%		**8.8**
Indoor Air (SSV-01)	%		0
Catch Basins	%		0

% Gas by volume readings exceeding the MCL are in Bold

Attachment 1
Sampling Forms

PARTNERS ENVIRONMENTAL CONSULTING, INC.
MONITORING WELL SAMPLING FORM

PARTNERS

Project Name: TRANSPORT ROAD	**Project Number:** 2093.07		
Monitoring Well ID: MW-101	Date: 6/8/22	Start Time:	Field Personnel: TAW
Weather Conditions: SUNNY 70'S		End Time:	
Comments:			

INITIAL MEASUREMENTS

Measured Well Bottom (ft) 14.6'		Well Casing Diameter : 2 -inches	
Measured Depth to Water (ft) 3.51		Conversion Factor (gal/lineal foot)	
Calculated Water Column (ft) 11.09		1.25" = 0.08	2" = 0.17 (circled) 3" = 0.38
One Well Volume (gal) 1.9	Three Well Volumes (gal) 5.7	4" = 0.66	6" = 1.50 8" = 2.60
Notes: Measurements from Top of Casing (TOC)			

WELL CONDITIONS

Casing Condition	OK (circled)	Not OK	Cap Condition	OK (circled)	Not OK	**Well Riser**
Paint Condition	OK (circled)	Not OK	Lock Condition	OK	Not OK	Stainless Steel
Inner Casing Condition	OK (circled)	Not OK	Surface Seal Condition	OK (circled)	Not OK	Steel
						PVC (circled)

Notes: (1228) HIGH PRESSURE IN WELL /(1240) 6.39' /(1245) 5.70/(1250) 4.86/(1300) 3.95/1310 3.52

- FIRST ½ BAILER ON TOP - CLOUDY - NO FP
- PURGE WATER GRAY/BLACK WITH SHEEN & PETROLEUM ODOR - NO FP

PURGE INFORMATION

Purge Method — Stainless Steel Bailer; Teflon Bailer; Peristaltic Pump; Polyethylene Bailer (circled); Grundfos Pump; Bladder Pump; Other:

Time	~~Liters~~ Gal Purged	Flow Rate (ml/min)	Temperature (°C)	PH (S.U.)	Specific Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Depth to Water Measurement
Stabilization Criteria (3 Consecutive Readings):			+/- 0.5 °C	+/- 0.1	+/- 3.0%	+/- 10% under 50	+/- 0.3 mg/L	+/-10 mV	
1325	1	~	18.97	7.84	3.95	407	6.00	-41	8.45
1329	2	~	16.71	7.83	4.00	606	5.37	-40	13.95
	3	WELL DRY AT 2.4 GALLONS (1331)							
	4								
	5								
	6								

TDS N/A
2.53
2.56

SAMPLING INFORMATION

Sample Method — Stainless Steel Bailer; Teflon Bailer; Peristaltic Pump; Polyethylene Bailer (circled); Grundfos Pump; Bladder Pump; Other:

Comments:

SAMPLE 1525 WATER GRAB

Sample Containers	Number of Containers:	Test Methods/Analyte Groups:	Preservative:	Filter (y/n)
40 ml	2	VOC	HCL	-
40 ml	2	PAH	-	-

Sampler (Print Name) TOM WEIR | Sampler's Signature

PARTNERS ENVIRONMENTAL CONSULTING, INC.
MONITORING WELL SAMPLING FORM

PARTNERS

Project Name: TRANSPORT ROAD		**Project Number:** 2093.07			
Monitoring Well ID: MW-102	Date: 6/8/22	Start Time:	Field Personnel	TAW	
Weather Conditions: SUNNY 70S		End Time:			
Comments:					

INITIAL MEASUREMENTS

Measured Well Bottom (ft) 14.70		Well Casing Diameter : 2 -inches		
Measured Depth to Water (ft) 2.17		Conversion Factor (gal/lineal foot)		
Calculated Water Column (ft) 12.53		1.25" = 0.08	2" = 0.17	3" = 0.38
One Well Volume (gal) 2.1	Three Well Volumes (gal) 6.3	4" = 0.66	6" = 1.50	8" = 2.60
Notes: Measurements from Top of Casing (TOC)				

WELL CONDITIONS

Casing Condition	OK	Not OK	Cap Condition	OK	Not OK	**Well Riser**	
Paint Condition	OK	Not OK	Lock Condition	OK	Not OK	Stainless Steel	
Inner Casing Condition	OK	Not OK	Surface Seal Condition	OK	Not OK	Steel	
Notes: FIRST ½ BAILER AT TOP - WATER CLEAR						PVC	

- PURGE WATER THICK SHEEN WITH BLACK - OIL SHEEN / STRONG ODOR
- WELL STARTED BAILING ONCE AGITATED BUT STOPPED BY 6-GALLONS

PURGE INFORMATION

Purge Method Stainless Steel Bailer; Teflon Bailer; Peristaltic Pump; Polyethylene Bailer; Grundfos Pump; Bladder Pump; Other:

Time	Liters Purged	Flow Rate (ml/min)	Temperature (°C)	PH (S.U.)	Specific Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Depth to Water Measurement	TDS
Stabilization Criteria (3 Consecutive Readings):			+/- 0.5 °C	+/- 0.1	+/- 3.0%	+/- 10% under 50	+/- 0.3 mg/L	+/-10 mV		
1407	1	—	17.87	7.72	3.20	794	16.42	-35	2.15	2.04
1410	2	—	15.74	7.57	3.23	+1000	1.07	-25	2.17	2.07
1413	3	—	15.25	7.44	3.25	+1000	13.19	-19	2.18	2.08
1415	4	—	15.67	7.33	3.26	+1000	12.21	-14	2.15	2.09
1419	5	—	15.11	7.29	3.25	+1000	3.21	-12	2.20	2.09
1422	6	—	14.95	7.24	3.25	+1000	0.60	-10	2.18	2.08
1425	7	—	14.82	7.18	3.30	+1000	2.32	-6	2.21	2.11

SAMPLING INFORMATION

Sample Method Stainless Steel Bailer; Teflon Bailer; Peristaltic Pump; Polyethylene Bailer; Grundfos Pump; Bladder Pump; Other:

Comments:
1540 SAMPLE -

Sample Containers	Number of Containers:	Test Methods/Analyte Groups:	Preservative:	Filter (y/n)
40 ml	2	VOC	HCL	—
40 ml	2	PAH	—	—

Sampler (Print Name) TOM WOLF

Sampler's Signature

PARTNERS ENVIRONMENTAL CONSULTING, INC.
MONITORING WELL SAMPLING FORM

PARTNERS

Project Name: TRANSPORT ROAD	**Project Number:** 2093.07		
Monitoring Well ID: MW-103	Date: 6/8/22	Start Time:	Field Personnel: TAW
Weather Conditions: SUNNY 70S		End Time:	
Comments:			

INITIAL MEASUREMENTS

Measured Well Bottom (ft) 17.50		Well Casing Diameter : 2 -inches		
Measured Depth to Water (ft) 12.41 NO FP		Conversion Factor (gal/lineal foot)		
Calculated Water Column (ft) 5.09		1.25" = 0.08	(2" = 0.17)	3" = 0.38
One Well Volume (gal) 0.9	Three Well Volumes (gal) 2.7	4" = 0.66	6" = 1.50	8" = 2.60

Notes: Measurements from Top of Casing (TOC)

WELL CONDITIONS

Casing Condition	(OK)	Not OK	Cap Condition	(OK)	Not OK	**Well Riser**
Paint Condition	(OK)	Not OK	Lock Condition	OK	Not OK	Stainless Steel
Inner Casing Condition	(OK)	Not OK	Surface Seal Condition	(OK)	Not OK	Steel
						(PVC)

Notes: PULLED ½ BAILER FROM TOP - WATER CLEAR / NO FP
- NO SHEEN / NO FP / WATER CLOUDY BROWN WITH SOME SUSPENDED SOLIDS

PURGE INFORMATION

Purge Method Stainless Steel Bailer; Teflon Bailer; Peristaltic Pump; (Polyethylene Bailer); Grundfos Pump; Bladder Pump; Other:

Time	Liters Purged	Flow Rate (ml/min)	Temperature (°C)	PH (S.U.)	Specific Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Depth to Water Measurement	TDS g/L
Stabilization Criteria (3 Consecutive Readings):			+/- 0.5 °C	+/- 0.1	+/- 3.0%	+/- 10% under 50	+/- 0.3 mg/L	+/-10 mV		
1201	1	-	16.42	7.91	0.917	339	10.84	-44	13.22	0.587
1207	2	-	15.06	7.66	0.866	146	9.48	-31	14.35	0.554
1210	3	-	14.29	7.54	0.863	247	9.53	-25	15.9	0.553
	4	-	GOING DRY - STOPPED PURGING							

SAMPLING INFORMATION

Sample Method Stainless Steel Bailer; Teflon Bailer; Peristaltic Pump; (Polyethylene Bailer); Grundfos Pump; Bladder Pump; Other:

Comments:
SAMPLE ISD WATER CLEAR

Sample Containers	Number of Containers:	Test Methods/Analyte Groups:	Preservative:	Filter (y/n)
40ml	2	VOCs	HCL	-
40 ml	2	PAHs	-	-

Sampler (Print Name) TOM WEIR | Sampler's Signature

PARTNERS ENVIRONMENTAL CONSULTING, INC.
MONITORING WELL SAMPLING FORM

PARTNERS

Project Name: TRANSPORT RD.	**Project Number:** 2093.07		
Monitoring Well ID: MW-104	Date: 6/8/22	Start Time:	Field Personnel: TAW
Weather Conditions: SUNNY 70S		End Time:	
Comments:			

INITIAL MEASUREMENTS

Measured Well Bottom (ft) 16.8		Well Casing Diameter: 2 -inches		
Measured Depth to Water (ft) 8.43 NO FP		Conversion Factor (gal/lineal foot)		
Calculated Water Column (ft) 8.37		1.25" = 0.08	2" = 0.17	3" = 0.38
One Well Volume (gal) 1.4 gal	Three Well Volumes (gal) 4.2 gal	4" = 0.66	6" = 1.50	8" = 2.60

Notes: Measurements from Top of Casing (TOC)

WELL CONDITIONS

Casing Condition	OK	Not OK	Cap Condition	OK	Not OK
Paint Condition	OK	Not OK	Lock Condition	OK	Not OK
Inner Casing Condition	OK	Not OK	Surface Seal Condition	OK	Not OK

Notes:
WATER HAS PETROLEUM ODOR!
GRAY/BLACK W/ SEDIMENTS

Well Riser
Stainless Steel
Steel
PVC

PURGE INFORMATION

Purge Method Stainless Steel Bailer; Teflon Bailer; Peristaltic Pump; Polyethylene Bailer; Grundfos Pump; Bladder Pump; Other:

Time	~~Liters~~ GAL Purged	Flow Rate (ml/min)	Temperature (°C)	PH (S.U.)	Specific Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Depth to Water Measurement	TDS
Stabilization Criteria (3 Consecutive Readings):			+/- 0.5 °C	+/- 0.1	+/- 3.0%	+/- 10% under 50	+/- 0.3 mg/L	+/-10 mV		
1059	1 gal	–	17.42	7.50	1.81	+1000	18.37	-20	8.49	1.29 g/L
1104	2	–	16.03	7.17	1.94	+1000	17.25	-7	8.47	1.27
1109	3	–	15.79	7.05	2.06	+1000	16.68	0	8.45	1.32
1112	4	–	15.63	6.99	2.11	+1000	5.41	3	8.44	1.35
1115	5	–	15.49	7.01	2.19	+1000	16.70	2	8.46	1.40

SAMPLING INFORMATION

Sample Method Stainless Steel Bailer; Teflon Bailer; Peristaltic Pump; Polyethylene Bailer; Grundfos Pump; Bladder Pump; Other:

Comments:
SAMPLE: 1500 WATER GRAY

Sample Containers	Number of Containers:	Test Methods/Analyte Groups:	Preservative:	Filter (y/n)
40 ml vial	2	VOCs	HCL	N
40 ml vial	2	PAHs	–	–

Sampler (Print Name) TAYLOR

Sampler's Signature

PARTNERS ENVIRONMENTAL CONSULTING, INC.
MONITORING WELL SAMPLING FORM

PARTNERS

Project Name: TRANSPOR- ROAD	**Project Number:**		
Monitoring Well ID: MW-106	Date: 6/9/22	Start Time:	Field Personnel: TAW
Weather Conditions: Sunny 60s		End Time:	
Comments:			

INITIAL MEASUREMENTS

Measured Well Bottom (ft) 13.44		Well Casing Diameter : 2 -inches	
Measured Depth to Water (ft) 5.38		Conversion Factor (gal/lineal foot)	
Calculated Water Column (ft) 8.02		1.25" = 0.08	2" = 0.17 (circled)	3" = 0.38
One Well Volume (gal) 1.4	Three Well Volumes (gal) 4.2	4" = 0.66	6" = 1.50	8" = 2.60

Notes: Measurements from Top of Casing (TOC)

WELL CONDITIONS

Casing Condition	OK (circled)	Not OK	Cap Condition	OK (circled)	Not OK	**Well Riser**
Paint Condition	OK (circled)	Not OK	Lock Condition	OK	Not OK	Stainless Steel
Inner Casing Condition	OK (circled)	Not OK	Surface Seal Condition	OK (circled)	Not OK	Steel
						PVC (circled)

Notes: FIRST GW ENCOUNTER AT TOP - SLIGHTLY YELLOW NO FP

- DURING PURGING - WATER THICK GRAY W/ SHEEN & PETROL ODOR

PURGE INFORMATION

Purge Method Stainless Steel Bailer; Teflon Bailer; Peristaltic Pump; Polyethylene Bailer; Grundfos Pump; Bladder Pump; Other:

Time	~~Liters~~ (Gal) Purged	Flow Rate (ml/min)	Temperature (°C)	PH (S.U.)	Specific Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Depth to Water Measurement	TDS
Stabilization Criteria (3 Consecutive Readings):			+/- 0.5 °C	+/- 0.1	+/- 3.0%	+/- 10% under 50	+/- 0.3 mg/L	+/-10 mV		
1140	1	-	17.54	7.86	6.12	+1000	14.96	-51	7.20	3.86
1143	2	-	16.71	7.56	6.02	+1000	0.79	-57	8.37	3.79
1147	3	-	16.53	7.41	5.87	+1000	2.70	-61	9.65	3.69
1151	4	-	16.44	7.35	5.83	+1000	14.74	-62	9.97	3.67
1154	5	-	16.20	7.35	5.86	+1000	14.52	-63	10.05	3.68

SAMPLING INFORMATION

Sample Method Stainless Steel Bailer; Teflon Bailer; Peristaltic Pump; Polyethylene Bailer; Grundfos Pump; Bladder Pump; Other:

Comments:

SAMPLE 1320 EQP 1350

Sample Containers	Number of Containers:	Test Methods/Analyte Groups:	Preservative:	Filter (y/n)
40 ml	2	VOC	HCl	-
40 ml	2	PAH	-	-

Sampler (Print Name) Tom Weir

Sampler's Signature

PARTNERS ENVIRONMENTAL CONSULTING, INC.
MONITORING WELL SAMPLING FORM

PARTNERS

Project Name: TRANSPORT Rd.	**Project Number:** 2093.07		
Monitoring Well ID: MW-107	Date: 6/9/22	Start Time:	Field Personnel: TAW
Weather Conditions: SUNNY 60's		End Time:	
Comments:			

INITIAL MEASUREMENTS

Measured Well Bottom (ft) 9.50		Well Casing Diameter : 2 -inches	
Measured Depth to Water (ft) 5.42		Conversion Factor (gal/lineal foot)	
Calculated Water Column (ft) 4.08		1.25" = 0.08	2" = 0.17 (circled)	3" = 0.38
One Well Volume (gal) 0.7	Three Well Volumes (gal) 2.1	4" = 0.66	6" = 1.50	8" = 2.60

Notes: Measurements from Top of Casing (TOC)

WELL CONDITIONS

Casing Condition	OK (circled)	Not OK	Cap Condition	OK (circled)	Not OK	**Well Riser**
Paint Condition	OK (circled)	Not OK	Lock Condition	OK	Not OK	Stainless Steel
Inner Casing Condition	OK (circled)	Not OK	Surface Seal Condition	OK (circled)	Not OK	Steel
						PVC (circled)

Notes: FIRST BAILER AT TOP - WATER YELLOWISH - NO FP

* DURING PURGING, TUBING THICK SPRAY W/ SHEEN / PETROLEUM - SULFIDE ODOR

PURGE INFORMATION

Purge Method: Stainless Steel Bailer; Teflon Bailer; Peristaltic Pump; Polyethylene Bailer (circled); Grundfos Pump; Bladder Pump; Other:

Time	~~Liters~~ GAL Purged	Flow Rate (ml/min)	Temperature (°C)	PH (S.U.)	Specific Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Depth to Water Measurement	TDS
Stabilization Criteria (3 Consecutive Readings):			+/- 0.5 °C	+/- 0.1	+/- 3.0%	+/- 10% under 50	+/- 0.3 mg/L	+/-10 mV		
1110	0	-	19.29	9.10	3.65	401	2.02	-58	6.22	2.33
1114	1	-	18.69	9.25	3.66	+1000	2.66	-74	6.82	2.34
1117	2	-	18.67	9.08	3.70	+1000	0.59	-82	5.95	2.37
1120	3	-	18.67	8.98	3.71	+1000	1.27	-77	6.04	2.37

SAMPLING INFORMATION

Sample Method: Stainless Steel Bailer; Teflon Bailer; Peristaltic Pump; Polyethylene Bailer (circled); Grundfos Pump; Bladder Pump; Other:

Comments:

SAMPLE 1305

Sample Containers	Number of Containers:	Test Methods/Analyte Groups:	Preservative:	Filter (y/n)
40 ml	2	VOC	HCl	-
40 ml	2	PAH	-	-

Sampler (Print Name): TAW WEIR

Sampler's Signature: [signature]

PARTNERS ENVIRONMENTAL CONSULTING, INC.
MONITORING WELL SAMPLING FORM

PARTNERS

Project Name: TRANSFER ROAD	**Project Number:** 2093.07		
Monitoring Well ID: MW-10B	Date: 6/9/22	Start Time:	Field Personnel: TAW
Weather Conditions: Cloudy 50's		End Time:	
Comments:			

INITIAL MEASUREMENTS

Measured Well Bottom (ft) 16.7		Well Casing Diameter : 2 -inches	
Measured Depth to Water (ft) 4.57 NO FP		Conversion Factor (gal/lineal foot)	
Calculated Water Column (ft) 12.13		1.25" = 0.08	2" = 0.17 (circled) 3" = 0.38
One Well Volume (gal) 2.1	Three Well Volumes (gal) 6.3	4" = 0.66	6" = 1.50 8" = 2.60

Notes: Measurements from Top of Casing (TOC)

WELL CONDITIONS

Casing Condition	OK (circled)	Not OK	Cap Condition	OK (circled)	Not OK
Paint Condition	OK (circled)	Not OK	Lock Condition	OK	Not OK
Inner Casing Condition	OK (circled)	Not OK	Surface Seal Condition	OK (circled)	Not OK

Notes: FIRST ½ BAILER AT TOP - WATER CLEAR - NO FP

- DURING PURGING TURNED GRAY W/ PETROLEUM ODOR / SLIGHT SHEEN

Well Riser
Stainless Steel
Steel
PVC (circled)

PURGE INFORMATION

Purge Method — Stainless Steel Bailer; Teflon Bailer; Peristaltic Pump; Polyethylene Bailer (circled); Grundfos Pump; Bladder Pump; Other:

Time	Liters (gal) Purged	Flow Rate (ml/min)	Temperature (°C)	PH (S.U.)	Specific Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Depth to Water Measurement	TDS
Stabilization Criteria (3 Consecutive Readings):			+/- 0.5 °C	+/- 0.1	+/- 3.0%	+/- 10% under 50	+/- 0.3 mg/L	+/-10 mV		
0918	1	-	16.49	7.80	3.15	49.8	9.14	104	7.15	2.02
0922	2	-	16.50	7.66	3.29	165	11.01	99	7.14	2.10
0926	3	-	16.41	7.62	3.31	144	16.55	101	8.31	2.12
0929	4	-	15.99	7.62	3.19	115	16.55	52	10.41	2.04
0934	5	-	15.47	7.61	3.13	107	2.51	25	11.43	2.00
0937	6	-	15.13	7.55	3.07	110	13.52	42	12.72	1.97
0940	7	-	14.84	7.50	3.07	162	16.78	60	13.33	1.96

SAMPLING INFORMATION

Sample Method — Stainless Steel Bailer; Teflon Bailer; Peristaltic Pump; Polyethylene Bailer (circled); Grundfos Pump; Bladder Pump; Other:

Comments:

SAMPLE - 1230 FULL DUPLICATE

Sample Containers	Number of Containers:	Test Methods/Analyte Groups:	Preservative:	Filter (y/n)
40 ml	2	VOC	HCl	—
40 ml	2	PAH	—	—

Sampler (Print Name) TOM WEIR

Sampler's Signature

PARTNERS ENVIRONMENTAL CONSULTING, INC.
MONITORING WELL SAMPLING FORM

PARTNERS

Project Name: TRANSPORT Rd.	**Project Number:** 2093.07		
Monitoring Well ID: MW-109	Date: 6/9/22	Start Time:	Field Personnel: TAW
Weather Conditions: SUNNY 50s		End Time:	
Comments:			

INITIAL MEASUREMENTS

Measured Well Bottom (ft) 14.1'		Well Casing Diameter : 2 -inches	
Measured Depth to Water (ft) 4.79		Conversion Factor (gal/lineal foot)	
Calculated Water Column (ft) 9.31		1.25" = 0.08	2" = 0.17 (circled) 3" = 0.38
One Well Volume (gal) 1.6	Three Well Volumes (gal) 4.8	4" = 0.66	6" = 1.50 8" = 2.60
Notes: Measurements from Top of Casing (TOC)			

WELL CONDITIONS

Casing Condition	OK (circled)	Not OK	Cap Condition	OK (circled)	Not OK	**Well Riser**
Paint Condition	OK (circled)	Not OK	Lock Condition	OK	Not OK	Stainless Steel
Inner Casing Condition	OK (circled)	Not OK	Surface Seal Condition	OK (circled)	Not OK	Steel
Notes: FIRST HALF BAILER AT TOP - DARK/SLIGHTLY GRAY - NO FP						PVC (circled)
· IMMEDIATELY TURNED DARK GRAY W/ SHEEN / PETROL ODOR						

PURGE INFORMATION

Purge Method — Stainless Steel Bailer; Teflon Bailer; Peristaltic Pump; Polyethylene Bailer (circled); Grundfos Pump; Bladder Pump; Other:

Time	Liters Purged	Flow Rate (ml/min)	Temperature (°C)	PH (S.U.)	Specific Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Depth to Water Measurement	
Stabilization Criteria (3 Consecutive Readings):			+/- 0.5 °C	+/- 0.1	+/- 3.0%	+/- 10% under 50	+/- 0.3 mg/L	+/-10 mV		TDS
0958	1	-	16.88	7.57	4.07	+1000	15.57	-62	4.78	2.60
1002	2	-	15.84	7.52	4.05	+1000	0.01	-66	5.39	2.59
1005	3	-	15.66	7.51	4.00	+1000	0.05	-66	6.02	2.56
1008	4	-	15.46	7.49	4.00	+1000	0	-69	6.37	2.56
1011	5	-	15.26	7.47	4.00	+1000	0.43	-70	6.42	2.56

SAMPLING INFORMATION

Sample Method — Stainless Steel Bailer; Teflon Bailer; Peristaltic Pump; Polyethylene Bailer (circled); Grundfos Pump; Bladder Pump; Other:

Comments:
SAMPLE 1245

Sample Containers	Number of Containers:	Test Methods/Analyte Groups:	Preservative:	Filter (y/n)
40 ml	2	VOC	HCl	-
40 ml	2	PAH	-	-

Sampler (Print Name) Tom Weir

Sampler's Signature Thomas W

PARTNERS ENVIRONMENTAL CONSULTING, INC.
MONITORING WELL SAMPLING FORM

PARTNERS

Project Name: TRANSPORT Rd.	**Project Number:** 2093.07		
Monitoring Well ID: MW-110	Date: 6/9/22	Start Time:	Field Personnel: TAW
Weather Conditions:		End Time:	
Comments:			

INITIAL MEASUREMENTS

Measured Well Bottom (ft) 13.3	Well Casing Diameter : 2 -inches
Measured Depth to Water (ft) 3.95	Conversion Factor (gal/lineal foot)
Calculated Water Column (ft) 9.35	1.25" = 0.08 / (2") = 0.17 / 3" = 0.38
One Well Volume (gal) 1.6 Three Well Volumes (gal) 4.8	4" = 0.66 / 6" = 1.50 / 8" = 2.60

Notes: Measurements from Top of Casing (TOC)

WELL CONDITIONS

Casing Condition	(OK)	Not OK	Cap Condition	(OK)	Not OK	**Well Riser**
Paint Condition	(OK)	Not OK	Lock Condition	OK	Not OK	Stainless Steel
Inner Casing Condition	(OK)	Not OK	Surface Seal Condition	(OK)	Not OK	Steel
						(PVC)

Notes: FIRST BAILER AT TOP mostly clear- TURNED DARK GRAY w/ SHEEN / PETROLEUM ODOR (NOD)

PURGE INFORMATION

Purge Method — Stainless Steel Bailer / Teflon Bailer — Peristaltic Pump — (Polyethylene Bailer) — Grundfos Pump / Bladder Pump — Other:

Time	Liters Purged	Flow Rate (ml/min)	Temperature (°C)	PH (S.U.)	Specific Conductivity (mS/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	ORP (mV)	Depth to Water Measurement	TDS
Stabilization Criteria (3 Consecutive Readings):			+/- 0.5 °C	+/- 0.1	+/- 3.0%	+/- 10% under 50	+/- 0.3 mg/L	+/-10 mV		
1027	1	-	17.03	7.58	2.60	785	3.66	-75	4.30	1.66
1031	2	-	16.73	7.33	2.65	+1000	1.75	-80	4.62	1.70
1035	3	-	16.65	7.25	3.04	+1000	0.62	-80	4.95	1.95
1038	4	-	16.55	7.23	3.43	+1000	0.14	-77	5.17	2.19
1041	5	-	16.38	7.24	3.60	+1000	0.25	-74	5.23	2.30

SAMPLING INFORMATION

Sample Method — Stainless Steel Bailer / Teflon Bailer — Peristaltic Pump — (Polyethylene Bailer) — Grundfos Pump / Bladder Pump — Other:

Comments:

SAMPLE 1255

Sample Containers	Number of Containers:	Test Methods/Analyte Groups:	Preservative:	Filter (y/n)
40 ml	2	VOC	HCl	-
40 ml	2	PAH	-	-

Sampler (Print Name) TOM WEIR — Sampler's Signature

Soil Gas/Sub-Slab Vapor Sampling Form

PARTNERS

Site Name: TRANSPORT ROAD
PN: 2093.07
Date: 6-10-22

Technician:
Weather:
Sampling Equipment:

Sample ID	Probe Depth (ft)	Probe Volume (l)	Purge Rate (lpm)	Volume Purged (l)	Canister ID	Regulator ID	Sample Start Time	Initial Pressure (Hg)	Sample End Time	Final Pressure (Hg)	Notes
SGP-02	5.5		0.150	±250	011987	7587	1040	-30	1118	-4	
SSV-01	PiN	-	-	-	006076	7583	1243	-30	1320	-5	
SSV-02	PiN	-	-	-	012364	12136	1245	-29	1321	-3	
SSV-03	PiN	-	-	-	021075	7711	1247	-29	1330	-5	
BG-01	AMBIENT	-	-	-	010668	21215	1250	-29	1396	-5	

Comments:

SSV-01 = OPEN OFFICE / BREAK ROOM

SSV-02 = SOUTH-CENTRAL PORTION OF SERVICE GARAGE

SSV-03 = WEST-CENTRAL PORTION OF SERVICE GARAGE - NO RESTROOM

SGP-01: MAINTAINED -15 PRESSURE WITH HAND PUMP FOR 22 MINUTES - NOT SAMPLED

SGP-03 = PULLED WATER IMMEDIATELY WITH HAND PUMP - NOT SAMPLED

PARTNERS
ENVIRONMENTAL

Date: 6/10/22

Client: _____

Project Name / Project #: TRANSPORT ROAD - SOIL GAS

Page # _____ **of** _____

- SGP-01 = HOLDING A VACUUM WITH HAND PUMP (-15) FOR 22 MINUTES - NO WATER OBSERVED
  - ↳ SOUTHWEST LOT
- SGP-03 = SUCKED UP WATER IMMEDIATELY WITH HAND PUMP
  - ↳ EASTERN PORTION OF LOT NEAR MW-101
- SGP-02 = NO VACUUM W/ HAND PUMP - SOME WATER DROPLETS OBSERVED
  - 4 GAS METER PURGE

SECONDS	O2 %	H2S ppm	CO ppm	LEL %
0	20.9	0	0	0
30	4.8	0	4	99
60	4.4	0	4	99
90	4.2	0	4	99

Attachment 2
Laboratory Reports

ANALYTICAL REPORT

June 10, 2022

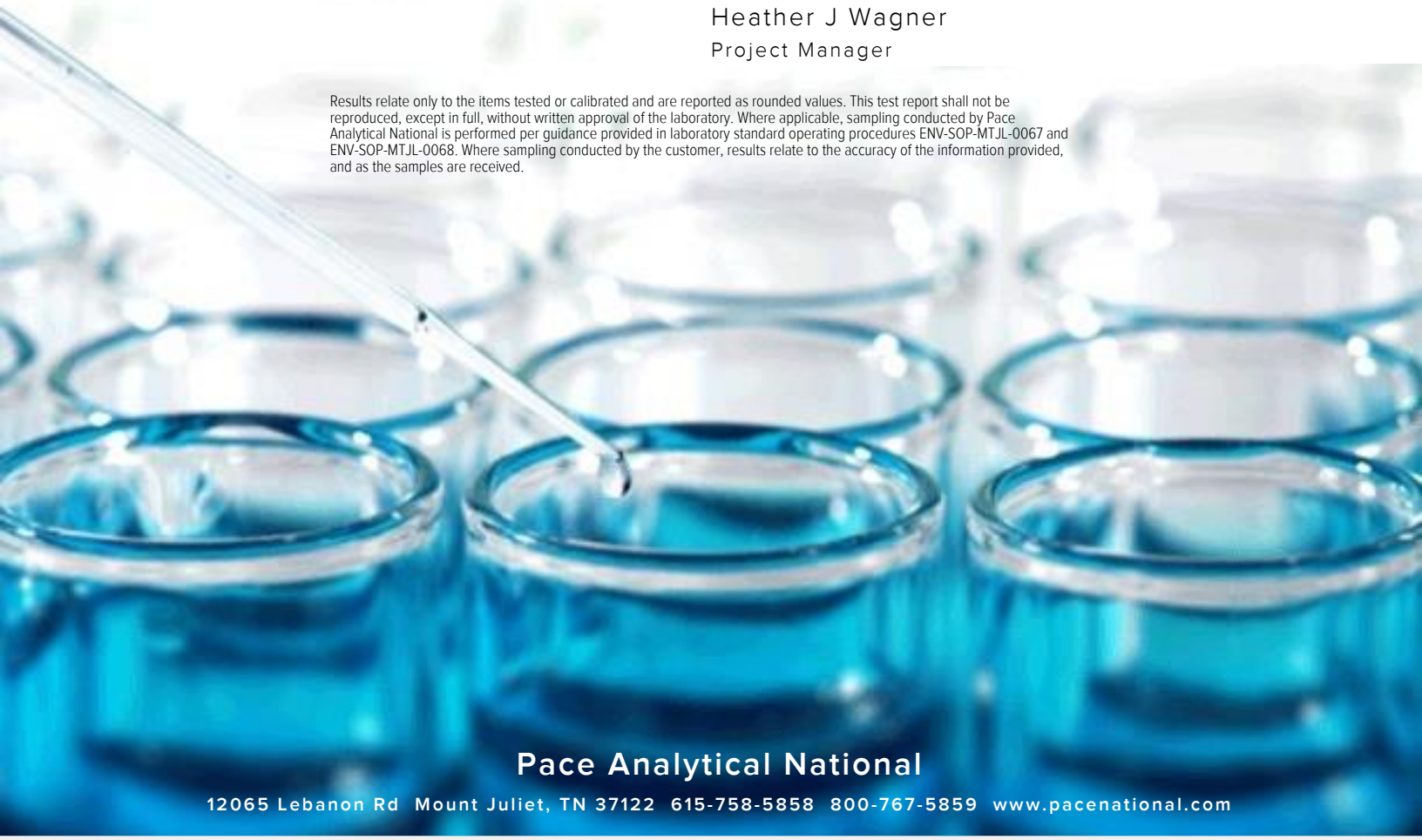
Partners Env. Consulting - Solon, OH

Sample Delivery Group:	L1499430
Samples Received:	05/28/2022
Project Number:	2093.07
Description:	2700 Transport Road

Report To: Valerie Weir
31100 Solon Road, Ste. G
Solon, OH 44139

Entire Report Reviewed By:

Heather J Wagner
Project Manager



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

TABLE OF CONTENTS

MW-108 (2-4FT) L1499430-01 Solid

Collected by: Tom Weir | Collected date/time: 05/26/22 10:30 | Received date/time: 05/28/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1874749	1	06/06/22 14:03	06/06/22 14:08	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015B	WG1874920	25	06/02/22 19:42	06/06/22 14:18	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1875265	1	06/02/22 19:42	06/07/22 17:31	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015B	WG1874699	20	06/06/22 03:17	06/07/22 00:03	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1876352	1	06/09/22 02:54	06/09/22 21:22	AMM	Mt. Juliet, TN

MW-108 (8-10FT) L1499430-02 Solid

Collected by: Tom Weir | Collected date/time: 05/26/22 11:10 | Received date/time: 05/28/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1874749	1	06/06/22 14:03	06/06/22 14:08	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015B	WG1874918	1	06/02/22 19:42	06/06/22 14:56	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1875265	1	06/02/22 19:42	06/07/22 17:50	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015B	WG1874699	1	06/06/22 03:17	06/06/22 21:36	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1876352	1	06/09/22 02:54	06/09/22 18:22	AMM	Mt. Juliet, TN

MW-109 (0-2FT) L1499430-03 Solid

Collected by: Tom Weir | Collected date/time: 05/26/22 13:40 | Received date/time: 05/28/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1874749	1	06/06/22 14:03	06/06/22 14:08	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015B	WG1873726	1	06/02/22 19:42	06/04/22 12:31	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1875265	1	06/02/22 19:42	06/07/22 18:09	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015B	WG1874699	40	06/06/22 03:17	06/07/22 01:08	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1876352	10	06/09/22 02:54	06/09/22 22:02	AMM	Mt. Juliet, TN

MW-109 (4-6FT) L1499430-04 Solid

Collected by: Tom Weir | Collected date/time: 05/26/22 14:00 | Received date/time: 05/28/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1874749	1	06/06/22 14:03	06/06/22 14:08	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015B	WG1873726	1	06/02/22 19:42	06/04/22 12:53	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1875265	1	06/02/22 19:42	06/07/22 18:28	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015B	WG1874699	1	06/06/22 03:17	06/07/22 09:50	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1876352	1	06/09/22 02:54	06/09/22 18:42	AMM	Mt. Juliet, TN

MW-110 (0-2FT) L1499430-05 Solid

Collected by: Tom Weir | Collected date/time: 05/27/22 08:30 | Received date/time: 05/28/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1874749	1	06/06/22 14:03	06/06/22 14:08	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015B	WG1874920	50	06/02/22 19:42	06/06/22 14:40	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1875817	2	06/02/22 19:42	06/07/22 20:14	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1876160	20	06/02/22 19:42	06/08/22 23:32	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015B	WG1874699	40	06/06/22 03:17	06/06/22 23:46	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1876959	1	06/09/22 16:28	06/10/22 13:18	JNJ	Mt. Juliet, TN

MW-110 (2-4FT) L1499430-06 Solid

Collected by: Tom Weir | Collected date/time: 05/27/22 08:35 | Received date/time: 05/28/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1874749	1	06/06/22 14:03	06/06/22 14:08	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015B	WG1873726	1	06/02/22 19:42	06/04/22 13:36	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1875265	1	06/02/22 19:42	06/07/22 18:47	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1876233	1	06/02/22 19:42	06/07/22 07:27	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015B	WG1874699	50	06/06/22 03:17	06/07/22 10:16	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1876959	1	06/09/22 16:28	06/10/22 13:53	JNJ	Mt. Juliet, TN

MW-107 (2-4FT) L1499430-07 Solid

Collected by: Tom Weir | Collected date/time: 05/27/22 10:30 | Received date/time: 05/28/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1874749	1	06/06/22 14:03	06/06/22 14:08	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015B	WG1874920	50	06/02/22 19:42	06/06/22 15:01	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1875817	2	06/02/22 19:42	06/07/22 20:33	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015B	WG1874699	40	06/06/22 03:17	06/07/22 00:42	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1876959	1	06/09/22 16:28	06/10/22 13:35	JNJ	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1876959	10	06/09/22 16:28	06/10/22 15:04	JNJ	Mt. Juliet, TN

MW-106 (8-10FT) L1499430-08 Solid

Collected by: Tom Weir | Collected date/time: 05/27/22 12:45 | Received date/time: 05/28/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1874749	1	06/06/22 14:03	06/06/22 14:08	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015B	WG1874508	1000	06/02/22 19:42	06/06/22 02:38	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1875817	20	06/02/22 19:42	06/07/22 20:52	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015B	WG1874699	1	06/06/22 03:17	06/06/22 21:49	JAS	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015B	WG1874699	20	06/06/22 03:17	06/07/22 13:02	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1876959	1	06/09/22 16:28	06/10/22 12:25	JNJ	Mt. Juliet, TN

SB-110 (4-6FT) L1499430-09 Solid

Collected by: Tom Weir | Collected date/time: 05/27/22 14:10 | Received date/time: 05/28/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1874749	1	06/06/22 14:03	06/06/22 14:08	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015B	WG1874920	25	06/02/22 19:42	06/06/22 15:23	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1875265	1	06/02/22 19:42	06/07/22 19:06	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1876233	1	06/02/22 19:42	06/07/22 07:46	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015B	WG1874699	10	06/06/22 03:17	06/07/22 10:42	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1876959	1	06/09/22 16:28	06/10/22 13:00	JNJ	Mt. Juliet, TN

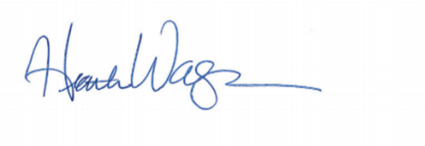
TRIP BLANK-01 L1499430-10 GW

Collected by: Tom Weir | Collected date/time: 05/26/22 09:30 | Received date/time: 05/28/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1875267	1	06/07/22 09:14	06/07/22 09:14	JHH	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Heather J Wagner
Project Manager

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.3		1	06/06/2022 14:08	WG1874749

Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C6 - C12	119		1.05	3.10	25	06/06/2022 14:18	WG1874920
(S) a,a,a-Trifluorotoluene(FID)	*103*			*77.0-120*		*06/06/2022 14:18*	WG1874920

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0452	0.0620	1	06/07/2022 17:31	WG1875265
Acrylonitrile	U		0.00448	0.0155	1	06/07/2022 17:31	WG1875265
Benzene	0.0513		0.000579	0.00124	1	06/07/2022 17:31	WG1875265
Bromobenzene	U		0.00112	0.0155	1	06/07/2022 17:31	WG1875265
Bromodichloromethane	U		0.000899	0.00310	1	06/07/2022 17:31	WG1875265
Bromoform	U		0.00145	0.0310	1	06/07/2022 17:31	WG1875265
Bromomethane	U		0.00244	0.0155	1	06/07/2022 17:31	WG1875265
n-Butylbenzene	0.201		0.00651	0.0155	1	06/07/2022 17:31	WG1875265
sec-Butylbenzene	0.113		0.00357	0.0155	1	06/07/2022 17:31	WG1875265
tert-Butylbenzene	0.00847		0.00242	0.00620	1	06/07/2022 17:31	WG1875265
Carbon tetrachloride	U		0.00111	0.00620	1	06/07/2022 17:31	WG1875265
Chlorobenzene	U		0.000260	0.00310	1	06/07/2022 17:31	WG1875265
Chlorodibromomethane	U		0.000759	0.00310	1	06/07/2022 17:31	WG1875265
Chloroethane	U		0.00211	0.00620	1	06/07/2022 17:31	WG1875265
Chloroform	U		0.00128	0.00310	1	06/07/2022 17:31	WG1875265
Chloromethane	U		0.00539	0.0155	1	06/07/2022 17:31	WG1875265
2-Chlorotoluene	U		0.00107	0.00310	1	06/07/2022 17:31	WG1875265
4-Chlorotoluene	U		0.000558	0.00620	1	06/07/2022 17:31	WG1875265
1,2-Dibromo-3-Chloropropane	U		0.00483	0.0310	1	06/07/2022 17:31	WG1875265
1,2-Dibromoethane	U		0.000803	0.00310	1	06/07/2022 17:31	WG1875265
Dibromomethane	U		0.000930	0.00620	1	06/07/2022 17:31	WG1875265
1,2-Dichlorobenzene	U		0.000527	0.00620	1	06/07/2022 17:31	WG1875265
1,3-Dichlorobenzene	U		0.000744	0.00620	1	06/07/2022 17:31	WG1875265
1,4-Dichlorobenzene	U		0.000868	0.00620	1	06/07/2022 17:31	WG1875265
Dichlorodifluoromethane	U		0.00200	0.00310	1	06/07/2022 17:31	WG1875265
1,1-Dichloroethane	U		0.000609	0.00310	1	06/07/2022 17:31	WG1875265
1,2-Dichloroethane	U		0.000805	0.00310	1	06/07/2022 17:31	WG1875265
1,1-Dichloroethene	U		0.000751	0.00310	1	06/07/2022 17:31	WG1875265
cis-1,2-Dichloroethene	U		0.000910	0.00310	1	06/07/2022 17:31	WG1875265
trans-1,2-Dichloroethene	U		0.00129	0.00620	1	06/07/2022 17:31	WG1875265
1,2-Dichloropropane	U		0.00176	0.00620	1	06/07/2022 17:31	WG1875265
1,1-Dichloropropene	U		0.00100	0.00310	1	06/07/2022 17:31	WG1875265
1,3-Dichloropropane	U		0.000621	0.00620	1	06/07/2022 17:31	WG1875265
cis-1,3-Dichloropropene	U		0.000938	0.00310	1	06/07/2022 17:31	WG1875265
trans-1,3-Dichloropropene	U		0.00141	0.00620	1	06/07/2022 17:31	WG1875265
2,2-Dichloropropane	U		0.00171	0.00310	1	06/07/2022 17:31	WG1875265
Ethylbenzene	0.134		0.000914	0.00310	1	06/07/2022 17:31	WG1875265
Hexachloro-1,3-butadiene	U		0.00744	0.0310	1	06/07/2022 17:31	WG1875265
n-Hexane	0.0905		0.00280	0.00620	1	06/07/2022 17:31	WG1875265
Isopropylbenzene	0.0752		0.000527	0.00310	1	06/07/2022 17:31	WG1875265
p-Isopropyltoluene	0.154		0.00316	0.00620	1	06/07/2022 17:31	WG1875265
2-Butanone (MEK)	U		0.0787	0.124	1	06/07/2022 17:31	WG1875265
Methylene Chloride	U		0.00823	0.0310	1	06/07/2022 17:31	WG1875265

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	0.424		0.00283	0.0310	1	06/07/2022 17:31	WG1875265
Methyl tert-butyl ether	U		0.000434	0.00124	1	06/07/2022 17:31	WG1875265
Naphthalene	0.513		0.00605	0.0155	1	06/07/2022 17:31	WG1875265
n-Propylbenzene	0.149		0.00118	0.00620	1	06/07/2022 17:31	WG1875265
Styrene	U		0.000284	0.0155	1	06/07/2022 17:31	WG1875265
1,1,1,2-Tetrachloroethane	U		0.00118	0.00310	1	06/07/2022 17:31	WG1875265
1,1,2,2-Tetrachloroethane	U		0.000862	0.00310	1	06/07/2022 17:31	WG1875265
Tetrachloroethene	U		0.00111	0.00310	1	06/07/2022 17:31	WG1875265
Toluene	0.106		0.00161	0.00620	1	06/07/2022 17:31	WG1875265
1,2,3-Trichlorobenzene	U		0.00909	0.0155	1	06/07/2022 17:31	WG1875265
1,2,4-Trichlorobenzene	U	J+	0.00545	0.0155	1	06/07/2022 17:31	WG1875265
1,1,1-Trichloroethane	U		0.00114	0.00310	1	06/07/2022 17:31	WG1875265
1,1,2-Trichloroethane	U		0.000740	0.00310	1	06/07/2022 17:31	WG1875265
Trichloroethene	U		0.000724	0.00124	1	06/07/2022 17:31	WG1875265
Trichlorofluoromethane	U		0.00103	0.00310	1	06/07/2022 17:31	WG1875265
1,2,3-Trichloropropane	U		0.00201	0.0155	1	06/07/2022 17:31	WG1875265
1,2,4-Trimethylbenzene	0.936		0.00196	0.00620	1	06/07/2022 17:31	WG1875265
1,3,5-Trimethylbenzene	0.338		0.00248	0.00620	1	06/07/2022 17:31	WG1875265
Vinyl chloride	U		0.00144	0.00310	1	06/07/2022 17:31	WG1875265
Xylenes, Total	0.714		0.00109	0.00806	1	06/07/2022 17:31	WG1875265
(S) Toluene-d8	*93.6*			*75.0-131*		*06/07/2022 17:31*	WG1875265
(S) 4-Bromofluorobenzene	*120*			*67.0-138*		*06/07/2022 17:31*	WG1875265
(S) 1,2-Dichloroethane-d4	*92.7*			*70.0-130*		*06/07/2022 17:31*	WG1875265

Semi-Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C20 Hydrocarbons	1210		13.7	89.6	20	06/07/2022 00:03	WG1874699
C20-C34 Hydrocarbons	1440		13.7	89.6	20	06/07/2022 00:03	WG1874699
(S) o-Terphenyl	*0.000*	J7		*18.0-148*		*06/07/2022 00:03*	WG1874699

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.224		0.00257	0.00672	1	06/09/2022 21:22	WG1876352
Acenaphthene	0.170		0.00234	0.00672	1	06/09/2022 21:22	WG1876352
Acenaphthylene	U		0.00242	0.00672	1	06/09/2022 21:22	WG1876352
Benzo(a)anthracene	0.943		0.00194	0.00672	1	06/09/2022 21:22	WG1876352
Benzo(a)pyrene	0.673		0.00200	0.00672	1	06/09/2022 21:22	WG1876352
Benzo(b)fluoranthene	0.587		0.00171	0.00672	1	06/09/2022 21:22	WG1876352
Benzo(g,h,i)perylene	0.535		0.00198	0.00672	1	06/09/2022 21:22	WG1876352
Benzo(k)fluoranthene	0.160		0.00241	0.00672	1	06/09/2022 21:22	WG1876352
Chrysene	0.737		0.00260	0.00672	1	06/09/2022 21:22	WG1876352
Dibenz(a,h)anthracene	0.271		0.00193	0.00672	1	06/09/2022 21:22	WG1876352
Fluoranthene	0.899		0.00254	0.00672	1	06/09/2022 21:22	WG1876352
Fluorene	0.212		0.00229	0.00672	1	06/09/2022 21:22	WG1876352
Indeno(1,2,3-cd)pyrene	0.366		0.00203	0.00672	1	06/09/2022 21:22	WG1876352
Naphthalene	0.721		0.00457	0.0224	1	06/09/2022 21:22	WG1876352
Phenanthrene	1.53		0.00259	0.00672	1	06/09/2022 21:22	WG1876352
Pyrene	1.37		0.00224	0.00672	1	06/09/2022 21:22	WG1876352
1-Methylnaphthalene	1.11		0.00503	0.0224	1	06/09/2022 21:22	WG1876352
2-Methylnaphthalene	1.32		0.00478	0.0224	1	06/09/2022 21:22	WG1876352
2-Chloronaphthalene	0.0262		0.00522	0.0224	1	06/09/2022 21:22	WG1876352
(S) Nitrobenzene-d5	*257*	J1		*14.0-149*		*06/09/2022 21:22*	WG1876352
(S) 2-Fluorobiphenyl	*56.8*			*34.0-125*		*06/09/2022 21:22*	WG1876352

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
(S) p-Terphenyl-d14	*84.3*			*23.0-120*		*06/09/2022 21:22*	WG1876352

Sample Narrative:

L1499430-01 WG1876352: Surrogate failure due to matrix interference

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	85.0		1	06/06/2022 14:08	WG1874749

Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C6 - C12	0.152		0.0399	0.118	1	06/06/2022 14:56	WG1874918
(S) a,a,a-Trifluorotoluene(FID)	*97.4*			*77.0-120*		*06/06/2022 14:56*	WG1874918

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0494	0.0677	1	06/07/2022 17:50	WG1875265
Acrylonitrile	U		0.00489	0.0169	1	06/07/2022 17:50	WG1875265
Benzene	U		0.000632	0.00135	1	06/07/2022 17:50	WG1875265
Bromobenzene	U		0.00122	0.0169	1	06/07/2022 17:50	WG1875265
Bromodichloromethane	U		0.000982	0.00338	1	06/07/2022 17:50	WG1875265
Bromoform	U		0.00158	0.0338	1	06/07/2022 17:50	WG1875265
Bromomethane	U		0.00267	0.0169	1	06/07/2022 17:50	WG1875265
n-Butylbenzene	U		0.00711	0.0169	1	06/07/2022 17:50	WG1875265
sec-Butylbenzene	U		0.00390	0.0169	1	06/07/2022 17:50	WG1875265
tert-Butylbenzene	U		0.00264	0.00677	1	06/07/2022 17:50	WG1875265
Carbon tetrachloride	U		0.00122	0.00677	1	06/07/2022 17:50	WG1875265
Chlorobenzene	U		0.000284	0.00338	1	06/07/2022 17:50	WG1875265
Chlorodibromomethane	U		0.000829	0.00338	1	06/07/2022 17:50	WG1875265
Chloroethane	U		0.00230	0.00677	1	06/07/2022 17:50	WG1875265
Chloroform	U		0.00139	0.00338	1	06/07/2022 17:50	WG1875265
Chloromethane	U		0.00589	0.0169	1	06/07/2022 17:50	WG1875265
2-Chlorotoluene	U		0.00117	0.00338	1	06/07/2022 17:50	WG1875265
4-Chlorotoluene	U		0.000609	0.00677	1	06/07/2022 17:50	WG1875265
1,2-Dibromo-3-Chloropropane	U		0.00528	0.0338	1	06/07/2022 17:50	WG1875265
1,2-Dibromoethane	U		0.000877	0.00338	1	06/07/2022 17:50	WG1875265
Dibromomethane	U		0.00102	0.00677	1	06/07/2022 17:50	WG1875265
1,2-Dichlorobenzene	U		0.000575	0.00677	1	06/07/2022 17:50	WG1875265
1,3-Dichlorobenzene	U		0.000812	0.00677	1	06/07/2022 17:50	WG1875265
1,4-Dichlorobenzene	U		0.000948	0.00677	1	06/07/2022 17:50	WG1875265
Dichlorodifluoromethane	U		0.00218	0.00338	1	06/07/2022 17:50	WG1875265
1,1-Dichloroethane	U		0.000665	0.00338	1	06/07/2022 17:50	WG1875265
1,2-Dichloroethane	U		0.000879	0.00338	1	06/07/2022 17:50	WG1875265
1,1-Dichloroethene	U		0.000821	0.00338	1	06/07/2022 17:50	WG1875265
cis-1,2-Dichloroethene	U		0.000994	0.00338	1	06/07/2022 17:50	WG1875265
trans-1,2-Dichloroethene	U		0.00141	0.00677	1	06/07/2022 17:50	WG1875265
1,2-Dichloropropane	U		0.00192	0.00677	1	06/07/2022 17:50	WG1875265
1,1-Dichloropropene	U		0.00110	0.00338	1	06/07/2022 17:50	WG1875265
1,3-Dichloropropane	U		0.000678	0.00677	1	06/07/2022 17:50	WG1875265
cis-1,3-Dichloropropene	U		0.00102	0.00338	1	06/07/2022 17:50	WG1875265
trans-1,3-Dichloropropene	U		0.00154	0.00677	1	06/07/2022 17:50	WG1875265
2,2-Dichloropropane	U		0.00187	0.00338	1	06/07/2022 17:50	WG1875265
Ethylbenzene	0.00157	J	0.000998	0.00338	1	06/07/2022 17:50	WG1875265
Hexachloro-1,3-butadiene	U		0.00812	0.0338	1	06/07/2022 17:50	WG1875265
n-Hexane	0.0102		0.00306	0.00677	1	06/07/2022 17:50	WG1875265
Isopropylbenzene	0.000972	J	0.000575	0.00338	1	06/07/2022 17:50	WG1875265
p-Isopropyltoluene	U		0.00345	0.00677	1	06/07/2022 17:50	WG1875265
2-Butanone (MEK)	U		0.0860	0.135	1	06/07/2022 17:50	WG1875265
Methylene Chloride	U		0.00899	0.0338	1	06/07/2022 17:50	WG1875265

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	U		0.00309	0.0338	1	06/07/2022 17:50	WG1875265
Methyl tert-butyl ether	0.00355		0.000474	0.00135	1	06/07/2022 17:50	WG1875265
Naphthalene	0.0173		0.00661	0.0169	1	06/07/2022 17:50	WG1875265
n-Propylbenzene	0.00245	J	0.00129	0.00677	1	06/07/2022 17:50	WG1875265
Styrene	U		0.000310	0.0169	1	06/07/2022 17:50	WG1875265
1,1,1,2-Tetrachloroethane	U		0.00128	0.00338	1	06/07/2022 17:50	WG1875265
1,1,2,2-Tetrachloroethane	U		0.000941	0.00338	1	06/07/2022 17:50	WG1875265
Tetrachloroethene	U		0.00121	0.00338	1	06/07/2022 17:50	WG1875265
Toluene	0.00302	J	0.00176	0.00677	1	06/07/2022 17:50	WG1875265
1,2,3-Trichlorobenzene	U		0.00992	0.0169	1	06/07/2022 17:50	WG1875265
1,2,4-Trichlorobenzene	U	J+	0.00596	0.0169	1	06/07/2022 17:50	WG1875265
1,1,1-Trichloroethane	U		0.00125	0.00338	1	06/07/2022 17:50	WG1875265
1,1,2-Trichloroethane	U		0.000808	0.00338	1	06/07/2022 17:50	WG1875265
Trichloroethene	U		0.000791	0.00135	1	06/07/2022 17:50	WG1875265
Trichlorofluoromethane	U		0.00112	0.00338	1	06/07/2022 17:50	WG1875265
1,2,3-Trichloropropane	U		0.00219	0.0169	1	06/07/2022 17:50	WG1875265
1,2,4-Trimethylbenzene	0.0120		0.00214	0.00677	1	06/07/2022 17:50	WG1875265
1,3,5-Trimethylbenzene	0.00456	J	0.00271	0.00677	1	06/07/2022 17:50	WG1875265
Vinyl chloride	U		0.00157	0.00338	1	06/07/2022 17:50	WG1875265
Xylenes, Total	0.00913		0.00119	0.00880	1	06/07/2022 17:50	WG1875265
(S) Toluene-d8	*101*			*75.0-131*		*06/07/2022 17:50*	WG1875265
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*06/07/2022 17:50*	WG1875265
(S) 1,2-Dichloroethane-d4	*90.8*			*70.0-130*		*06/07/2022 17:50*	WG1875265

Semi-Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C20 Hydrocarbons	9.04		0.718	4.71	1	06/06/2022 21:36	WG1874699
C20-C34 Hydrocarbons	11.9		0.719	4.71	1	06/06/2022 21:36	WG1874699
(S) o-Terphenyl	*49.2*			*18.0-148*		*06/06/2022 21:36*	WG1874699

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.00271	0.00706	1	06/09/2022 18:22	WG1876352
Acenaphthene	0.00335	J	0.00246	0.00706	1	06/09/2022 18:22	WG1876352
Acenaphthylene	U		0.00254	0.00706	1	06/09/2022 18:22	WG1876352
Benzo(a)anthracene	0.00426	J	0.00204	0.00706	1	06/09/2022 18:22	WG1876352
Benzo(a)pyrene	0.00364	J	0.00211	0.00706	1	06/09/2022 18:22	WG1876352
Benzo(b)fluoranthene	0.00548	J	0.00180	0.00706	1	06/09/2022 18:22	WG1876352
Benzo(g,h,i)perylene	U		0.00208	0.00706	1	06/09/2022 18:22	WG1876352
Benzo(k)fluoranthene	U		0.00253	0.00706	1	06/09/2022 18:22	WG1876352
Chrysene	0.00591	J	0.00273	0.00706	1	06/09/2022 18:22	WG1876352
Dibenz(a,h)anthracene	U		0.00202	0.00706	1	06/09/2022 18:22	WG1876352
Fluoranthene	0.00922		0.00267	0.00706	1	06/09/2022 18:22	WG1876352
Fluorene	0.00291	J	0.00241	0.00706	1	06/09/2022 18:22	WG1876352
Indeno(1,2,3-cd)pyrene	0.00307	J	0.00213	0.00706	1	06/09/2022 18:22	WG1876352
Naphthalene	0.00669	J	0.00480	0.0235	1	06/09/2022 18:22	WG1876352
Phenanthrene	0.0107		0.00272	0.00706	1	06/09/2022 18:22	WG1876352
Pyrene	0.0104		0.00235	0.00706	1	06/09/2022 18:22	WG1876352
1-Methylnaphthalene	0.00829	J	0.00528	0.0235	1	06/09/2022 18:22	WG1876352
2-Methylnaphthalene	0.00864	J	0.00502	0.0235	1	06/09/2022 18:22	WG1876352
2-Chloronaphthalene	U		0.00548	0.0235	1	06/09/2022 18:22	WG1876352
(S) Nitrobenzene-d5	*51.8*			*14.0-149*		*06/09/2022 18:22*	WG1876352
(S) 2-Fluorobiphenyl	*51.5*			*34.0-125*		*06/09/2022 18:22*	WG1876352

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
(S) p-Terphenyl-d14	*51.8*			*23.0-120*		*06/09/2022 18:22*	WG1876352

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.6		1	06/06/2022 14:08	WG1874749

Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C6 - C12	4.89		0.0378	0.112	1	06/04/2022 12:31	WG1873726
(S) a,a,a-Trifluorotoluene(FID)	*95.4*			*77.0-120*		*06/04/2022 12:31*	WG1873726

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.195		0.0450	0.0617	1	06/07/2022 18:09	WG1875265
Acrylonitrile	U		0.00445	0.0154	1	06/07/2022 18:09	WG1875265
Benzene	0.0712		0.000576	0.00123	1	06/07/2022 18:09	WG1875265
Bromobenzene	U		0.00111	0.0154	1	06/07/2022 18:09	WG1875265
Bromodichloromethane	U		0.000894	0.00308	1	06/07/2022 18:09	WG1875265
Bromoform	U		0.00144	0.0308	1	06/07/2022 18:09	WG1875265
Bromomethane	U		0.00243	0.0154	1	06/07/2022 18:09	WG1875265
n-Butylbenzene	0.0371		0.00648	0.0154	1	06/07/2022 18:09	WG1875265
sec-Butylbenzene	0.0262		0.00355	0.0154	1	06/07/2022 18:09	WG1875265
tert-Butylbenzene	0.00617	J	0.00241	0.00617	1	06/07/2022 18:09	WG1875265
Carbon tetrachloride	U		0.00111	0.00617	1	06/07/2022 18:09	WG1875265
Chlorobenzene	U		0.000259	0.00308	1	06/07/2022 18:09	WG1875265
Chlorodibromomethane	U		0.000755	0.00308	1	06/07/2022 18:09	WG1875265
Chloroethane	U		0.00210	0.00617	1	06/07/2022 18:09	WG1875265
Chloroform	U		0.00127	0.00308	1	06/07/2022 18:09	WG1875265
Chloromethane	U		0.00537	0.0154	1	06/07/2022 18:09	WG1875265
2-Chlorotoluene	U		0.00107	0.00308	1	06/07/2022 18:09	WG1875265
4-Chlorotoluene	U		0.000555	0.00617	1	06/07/2022 18:09	WG1875265
1,2-Dibromo-3-Chloropropane	U		0.00481	0.0308	1	06/07/2022 18:09	WG1875265
1,2-Dibromoethane	U		0.000799	0.00308	1	06/07/2022 18:09	WG1875265
Dibromomethane	U		0.000925	0.00617	1	06/07/2022 18:09	WG1875265
1,2-Dichlorobenzene	U		0.000524	0.00617	1	06/07/2022 18:09	WG1875265
1,3-Dichlorobenzene	U		0.000740	0.00617	1	06/07/2022 18:09	WG1875265
1,4-Dichlorobenzene	0.00104	J	0.000864	0.00617	1	06/07/2022 18:09	WG1875265
Dichlorodifluoromethane	U		0.00199	0.00308	1	06/07/2022 18:09	WG1875265
1,1-Dichloroethane	U		0.000606	0.00308	1	06/07/2022 18:09	WG1875265
1,2-Dichloroethane	U		0.000801	0.00308	1	06/07/2022 18:09	WG1875265
1,1-Dichloroethene	U		0.000748	0.00308	1	06/07/2022 18:09	WG1875265
cis-1,2-Dichloroethene	0.00681		0.000906	0.00308	1	06/07/2022 18:09	WG1875265
trans-1,2-Dichloroethene	U		0.00128	0.00617	1	06/07/2022 18:09	WG1875265
1,2-Dichloropropane	U		0.00175	0.00617	1	06/07/2022 18:09	WG1875265
1,1-Dichloropropene	U		0.000998	0.00308	1	06/07/2022 18:09	WG1875265
1,3-Dichloropropane	U		0.000618	0.00617	1	06/07/2022 18:09	WG1875265
cis-1,3-Dichloropropene	U		0.000934	0.00308	1	06/07/2022 18:09	WG1875265
trans-1,3-Dichloropropene	U		0.00141	0.00617	1	06/07/2022 18:09	WG1875265
2,2-Dichloropropane	U		0.00170	0.00308	1	06/07/2022 18:09	WG1875265
Ethylbenzene	0.0912		0.000909	0.00308	1	06/07/2022 18:09	WG1875265
Hexachloro-1,3-butadiene	U		0.00740	0.0308	1	06/07/2022 18:09	WG1875265
n-Hexane	0.105		0.00279	0.00617	1	06/07/2022 18:09	WG1875265
Isopropylbenzene	0.0284		0.000524	0.00308	1	06/07/2022 18:09	WG1875265
p-Isopropyltoluene	0.0305		0.00315	0.00617	1	06/07/2022 18:09	WG1875265
2-Butanone (MEK)	0.120	J	0.0783	0.123	1	06/07/2022 18:09	WG1875265
Methylene Chloride	U		0.00819	0.0308	1	06/07/2022 18:09	WG1875265

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	U		0.00281	0.0308	1	06/07/2022 18:09	WG1875265
Methyl tert-butyl ether	U		0.000432	0.00123	1	06/07/2022 18:09	WG1875265
Naphthalene	0.312		0.00602	0.0154	1	06/07/2022 18:09	WG1875265
n-Propylbenzene	0.0464		0.00117	0.00617	1	06/07/2022 18:09	WG1875265
Styrene	U		0.000283	0.0154	1	06/07/2022 18:09	WG1875265
1,1,1,2-Tetrachloroethane	U		0.00117	0.00308	1	06/07/2022 18:09	WG1875265
1,1,2,2-Tetrachloroethane	U		0.000857	0.00308	1	06/07/2022 18:09	WG1875265
Tetrachloroethene	U		0.00111	0.00308	1	06/07/2022 18:09	WG1875265
Toluene	0.141		0.00160	0.00617	1	06/07/2022 18:09	WG1875265
1,2,3-Trichlorobenzene	U		0.00904	0.0154	1	06/07/2022 18:09	WG1875265
1,2,4-Trichlorobenzene	U	J+	0.00543	0.0154	1	06/07/2022 18:09	WG1875265
1,1,1-Trichloroethane	U		0.00114	0.00308	1	06/07/2022 18:09	WG1875265
1,1,2-Trichloroethane	U		0.000737	0.00308	1	06/07/2022 18:09	WG1875265
Trichloroethene	0.00458		0.000720	0.00123	1	06/07/2022 18:09	WG1875265
Trichlorofluoromethane	U		0.00102	0.00308	1	06/07/2022 18:09	WG1875265
1,2,3-Trichloropropane	U		0.00200	0.0154	1	06/07/2022 18:09	WG1875265
1,2,4-Trimethylbenzene	0.162		0.00195	0.00617	1	06/07/2022 18:09	WG1875265
1,3,5-Trimethylbenzene	0.0500		0.00247	0.00617	1	06/07/2022 18:09	WG1875265
Vinyl chloride	U		0.00143	0.00308	1	06/07/2022 18:09	WG1875265
Xylenes, Total	0.308		0.00109	0.00802	1	06/07/2022 18:09	WG1875265
(S) Toluene-d8	*103*			*75.0-131*		*06/07/2022 18:09*	WG1875265
(S) 4-Bromofluorobenzene	*114*			*67.0-138*		*06/07/2022 18:09*	WG1875265
(S) 1,2-Dichloroethane-d4	*92.8*			*70.0-130*		*06/07/2022 18:09*	WG1875265

Semi-Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C20 Hydrocarbons	322		27.2	179	40	06/07/2022 01:08	WG1874699
C20-C34 Hydrocarbons	658		27.2	179	40	06/07/2022 01:08	WG1874699
(S) o-Terphenyl	*0.000*	J7		*18.0-148*		*06/07/2022 01:08*	WG1874699

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.0257	0.0670	10	06/09/2022 22:02	WG1876352
Acenaphthene	0.487		0.0233	0.0670	10	06/09/2022 22:02	WG1876352
Acenaphthylene	U		0.0241	0.0670	10	06/09/2022 22:02	WG1876352
Benzo(a)anthracene	1.70		0.0193	0.0670	10	06/09/2022 22:02	WG1876352
Benzo(a)pyrene	1.62		0.0200	0.0670	10	06/09/2022 22:02	WG1876352
Benzo(b)fluoranthene	1.23		0.0171	0.0670	10	06/09/2022 22:02	WG1876352
Benzo(g,h,i)perylene	1.42		0.0198	0.0670	10	06/09/2022 22:02	WG1876352
Benzo(k)fluoranthene	0.307		0.0240	0.0670	10	06/09/2022 22:02	WG1876352
Chrysene	1.71		0.0259	0.0670	10	06/09/2022 22:02	WG1876352
Dibenz(a,h)anthracene	0.383		0.0192	0.0670	10	06/09/2022 22:02	WG1876352
Fluoranthene	1.36		0.0253	0.0670	10	06/09/2022 22:02	WG1876352
Fluorene	0.613		0.0229	0.0670	10	06/09/2022 22:02	WG1876352
Indeno(1,2,3-cd)pyrene	0.823		0.0202	0.0670	10	06/09/2022 22:02	WG1876352
Naphthalene	0.635		0.0456	0.223	10	06/09/2022 22:02	WG1876352
Phenanthrene	3.74		0.0258	0.0670	10	06/09/2022 22:02	WG1876352
Pyrene	3.93		0.0223	0.0670	10	06/09/2022 22:02	WG1876352
1-Methylnaphthalene	1.14		0.0501	0.223	10	06/09/2022 22:02	WG1876352
2-Methylnaphthalene	0.739		0.0477	0.223	10	06/09/2022 22:02	WG1876352
2-Chloronaphthalene	U		0.0520	0.223	10	06/09/2022 22:02	WG1876352
(S) Nitrobenzene-d5	*370*	J1		*14.0-149*		*06/09/2022 22:02*	WG1876352
(S) 2-Fluorobiphenyl	*84.7*			*34.0-125*		*06/09/2022 22:02*	WG1876352

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
(S) p-Terphenyl-d14	*107*			*23.0-120*		*06/09/2022 22:02*	WG1876352

Sample Narrative:

L1499430-03 WG1876352: Surrogate failure due to matrix interference

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	86.2		1	06/06/2022 14:08	WG1874749

Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C6 - C12	2.91		0.0393	0.116	1	06/04/2022 12:53	WG1873726
(S) a,a,a-Trifluorotoluene(FID)	*91.4*			*77.0-120*		*06/04/2022 12:53*	WG1873726

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0482	0.0660	1	06/07/2022 18:28	WG1875265
Acrylonitrile	U		0.00477	0.0165	1	06/07/2022 18:28	WG1875265
Benzene	U		0.000617	0.00132	1	06/07/2022 18:28	WG1875265
Bromobenzene	U		0.00119	0.0165	1	06/07/2022 18:28	WG1875265
Bromodichloromethane	U		0.000957	0.00330	1	06/07/2022 18:28	WG1875265
Bromoform	U		0.00155	0.0330	1	06/07/2022 18:28	WG1875265
Bromomethane	U		0.00260	0.0165	1	06/07/2022 18:28	WG1875265
n-Butylbenzene	0.0516		0.00693	0.0165	1	06/07/2022 18:28	WG1875265
sec-Butylbenzene	0.0593		0.00380	0.0165	1	06/07/2022 18:28	WG1875265
tert-Butylbenzene	0.0116		0.00258	0.00660	1	06/07/2022 18:28	WG1875265
Carbon tetrachloride	U		0.00119	0.00660	1	06/07/2022 18:28	WG1875265
Chlorobenzene	U		0.000277	0.00330	1	06/07/2022 18:28	WG1875265
Chlorodibromomethane	U		0.000808	0.00330	1	06/07/2022 18:28	WG1875265
Chloroethane	U		0.00225	0.00660	1	06/07/2022 18:28	WG1875265
Chloroform	U		0.00136	0.00330	1	06/07/2022 18:28	WG1875265
Chloromethane	U		0.00574	0.0165	1	06/07/2022 18:28	WG1875265
2-Chlorotoluene	U		0.00114	0.00330	1	06/07/2022 18:28	WG1875265
4-Chlorotoluene	U		0.000594	0.00660	1	06/07/2022 18:28	WG1875265
1,2-Dibromo-3-Chloropropane	U		0.00515	0.0330	1	06/07/2022 18:28	WG1875265
1,2-Dibromoethane	U		0.000856	0.00330	1	06/07/2022 18:28	WG1875265
Dibromomethane	U		0.000990	0.00660	1	06/07/2022 18:28	WG1875265
1,2-Dichlorobenzene	U		0.000561	0.00660	1	06/07/2022 18:28	WG1875265
1,3-Dichlorobenzene	U		0.000792	0.00660	1	06/07/2022 18:28	WG1875265
1,4-Dichlorobenzene	U		0.000924	0.00660	1	06/07/2022 18:28	WG1875265
Dichlorodifluoromethane	U		0.00213	0.00330	1	06/07/2022 18:28	WG1875265
1,1-Dichloroethane	U		0.000648	0.00330	1	06/07/2022 18:28	WG1875265
1,2-Dichloroethane	U		0.000857	0.00330	1	06/07/2022 18:28	WG1875265
1,1-Dichloroethene	U		0.000800	0.00330	1	06/07/2022 18:28	WG1875265
cis-1,2-Dichloroethene	U		0.000969	0.00330	1	06/07/2022 18:28	WG1875265
trans-1,2-Dichloroethene	U		0.00137	0.00660	1	06/07/2022 18:28	WG1875265
1,2-Dichloropropane	U		0.00188	0.00660	1	06/07/2022 18:28	WG1875265
1,1-Dichloropropene	U		0.00107	0.00330	1	06/07/2022 18:28	WG1875265
1,3-Dichloropropane	U		0.000662	0.00660	1	06/07/2022 18:28	WG1875265
cis-1,3-Dichloropropene	U		0.00100	0.00330	1	06/07/2022 18:28	WG1875265
trans-1,3-Dichloropropene	U		0.00151	0.00660	1	06/07/2022 18:28	WG1875265
2,2-Dichloropropane	U		0.00182	0.00330	1	06/07/2022 18:28	WG1875265
Ethylbenzene	0.00222	J	0.000973	0.00330	1	06/07/2022 18:28	WG1875265
Hexachloro-1,3-butadiene	U		0.00792	0.0330	1	06/07/2022 18:28	WG1875265
n-Hexane	U		0.00298	0.00660	1	06/07/2022 18:28	WG1875265
Isopropylbenzene	0.0227		0.000561	0.00330	1	06/07/2022 18:28	WG1875265
p-Isopropyltoluene	U		0.00337	0.00660	1	06/07/2022 18:28	WG1875265
2-Butanone (MEK)	U		0.0839	0.132	1	06/07/2022 18:28	WG1875265
Methylene Chloride	U		0.00877	0.0330	1	06/07/2022 18:28	WG1875265

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	U		0.00301	0.0330	1	06/07/2022 18:28	WG1875265
Methyl tert-butyl ether	U		0.000462	0.00132	1	06/07/2022 18:28	WG1875265
Naphthalene	0.0133	J	0.00644	0.0165	1	06/07/2022 18:28	WG1875265
n-Propylbenzene	0.00740		0.00125	0.00660	1	06/07/2022 18:28	WG1875265
Styrene	U		0.000302	0.0165	1	06/07/2022 18:28	WG1875265
1,1,1,2-Tetrachloroethane	U		0.00125	0.00330	1	06/07/2022 18:28	WG1875265
1,1,2,2-Tetrachloroethane	U		0.000918	0.00330	1	06/07/2022 18:28	WG1875265
Tetrachloroethene	U		0.00118	0.00330	1	06/07/2022 18:28	WG1875265
Toluene	0.00370	J	0.00172	0.00660	1	06/07/2022 18:28	WG1875265
1,2,3-Trichlorobenzene	U		0.00968	0.0165	1	06/07/2022 18:28	WG1875265
1,2,4-Trichlorobenzene	U	J+	0.00581	0.0165	1	06/07/2022 18:28	WG1875265
1,1,1-Trichloroethane	U		0.00122	0.00330	1	06/07/2022 18:28	WG1875265
1,1,2-Trichloroethane	U		0.000788	0.00330	1	06/07/2022 18:28	WG1875265
Trichloroethene	U		0.000771	0.00132	1	06/07/2022 18:28	WG1875265
Trichlorofluoromethane	U		0.00109	0.00330	1	06/07/2022 18:28	WG1875265
1,2,3-Trichloropropane	U		0.00214	0.0165	1	06/07/2022 18:28	WG1875265
1,2,4-Trimethylbenzene	0.00493	J	0.00209	0.00660	1	06/07/2022 18:28	WG1875265
1,3,5-Trimethylbenzene	U		0.00264	0.00660	1	06/07/2022 18:28	WG1875265
Vinyl chloride	U		0.00153	0.00330	1	06/07/2022 18:28	WG1875265
Xylenes, Total	0.00766	J	0.00116	0.00858	1	06/07/2022 18:28	WG1875265
(S) Toluene-d8	*97.1*			*75.0-131*		*06/07/2022 18:28*	WG1875265
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*06/07/2022 18:28*	WG1875265
(S) 1,2-Dichloroethane-d4	*88.3*			*70.0-130*		*06/07/2022 18:28*	WG1875265

Semi-Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C20 Hydrocarbons	18.3		0.708	4.64	1	06/07/2022 09:50	WG1874699
C20-C34 Hydrocarbons	15.8		0.709	4.64	1	06/07/2022 09:50	WG1874699
(S) o-Terphenyl	*74.8*			*18.0-148*		*06/07/2022 09:50*	WG1874699

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.00267	0.00696	1	06/09/2022 18:42	WG1876352
Acenaphthene	0.00485	J	0.00242	0.00696	1	06/09/2022 18:42	WG1876352
Acenaphthylene	U		0.00251	0.00696	1	06/09/2022 18:42	WG1876352
Benzo(a)anthracene	0.00268	J	0.00201	0.00696	1	06/09/2022 18:42	WG1876352
Benzo(a)pyrene	0.00320	J	0.00208	0.00696	1	06/09/2022 18:42	WG1876352
Benzo(b)fluoranthene	0.00354	J	0.00177	0.00696	1	06/09/2022 18:42	WG1876352
Benzo(g,h,i)perylene	0.00592	J	0.00205	0.00696	1	06/09/2022 18:42	WG1876352
Benzo(k)fluoranthene	U		0.00249	0.00696	1	06/09/2022 18:42	WG1876352
Chrysene	0.00358	J	0.00269	0.00696	1	06/09/2022 18:42	WG1876352
Dibenz(a,h)anthracene	U		0.00200	0.00696	1	06/09/2022 18:42	WG1876352
Fluoranthene	0.00584	J	0.00263	0.00696	1	06/09/2022 18:42	WG1876352
Fluorene	0.00543	J	0.00238	0.00696	1	06/09/2022 18:42	WG1876352
Indeno(1,2,3-cd)pyrene	0.00305	J	0.00210	0.00696	1	06/09/2022 18:42	WG1876352
Naphthalene	0.0157	J	0.00473	0.0232	1	06/09/2022 18:42	WG1876352
Phenanthrene	0.0138		0.00268	0.00696	1	06/09/2022 18:42	WG1876352
Pyrene	0.00804		0.00232	0.00696	1	06/09/2022 18:42	WG1876352
1-Methylnaphthalene	0.0147	J	0.00521	0.0232	1	06/09/2022 18:42	WG1876352
2-Methylnaphthalene	0.0158	J	0.00495	0.0232	1	06/09/2022 18:42	WG1876352
2-Chloronaphthalene	U		0.00541	0.0232	1	06/09/2022 18:42	WG1876352
(S) Nitrobenzene-d5	*64.8*			*14.0-149*		*06/09/2022 18:42*	WG1876352
(S) 2-Fluorobiphenyl	*59.7*			*34.0-125*		*06/09/2022 18:42*	WG1876352

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
(S) p-Terphenyl-d14	*67.3*			*23.0-120*		*06/09/2022 18:42*	WG1876352

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.4		1	06/06/2022 14:08	WG1874749

Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C6 - C12	434		2.10	6.18	50	06/06/2022 14:40	WG1874920
(S) a,a,a-Trifluorotoluene(FID)	*86.8*			*77.0-120*		*06/06/2022 14:40*	WG1874920

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0903	0.124	2	06/07/2022 20:14	WG1875817
Acrylonitrile	U		0.00893	0.0309	2	06/07/2022 20:14	WG1875817
Benzene	1.22		0.00115	0.00247	2	06/07/2022 20:14	WG1875817
Bromobenzene	U		0.00223	0.0309	2	06/07/2022 20:14	WG1875817
Bromodichloromethane	U		0.00179	0.00618	2	06/07/2022 20:14	WG1875817
Bromoform	U		0.00289	0.0618	2	06/07/2022 20:14	WG1875817
Bromomethane	U		0.00487	0.0309	2	06/07/2022 20:14	WG1875817
n-Butylbenzene	1.47		0.0130	0.0309	2	06/07/2022 20:14	WG1875817
sec-Butylbenzene	0.871		0.00712	0.0309	2	06/07/2022 20:14	WG1875817
tert-Butylbenzene	0.0786		0.00482	0.0124	2	06/07/2022 20:14	WG1875817
Carbon tetrachloride	U		0.00223	0.0124	2	06/07/2022 20:14	WG1875817
Chlorobenzene	U		0.000519	0.00618	2	06/07/2022 20:14	WG1875817
Chlorodibromomethane	U		0.00151	0.00618	2	06/07/2022 20:14	WG1875817
Chloroethane	U		0.00420	0.0124	2	06/07/2022 20:14	WG1875817
Chloroform	U		0.00255	0.00618	2	06/07/2022 20:14	WG1875817
Chloromethane	U		0.0108	0.0309	2	06/07/2022 20:14	WG1875817
2-Chlorotoluene	U		0.00214	0.00618	2	06/07/2022 20:14	WG1875817
4-Chlorotoluene	U		0.00111	0.0124	2	06/07/2022 20:14	WG1875817
1,2-Dibromo-3-Chloropropane	U		0.00964	0.0618	2	06/07/2022 20:14	WG1875817
1,2-Dibromoethane	U		0.00161	0.00618	2	06/07/2022 20:14	WG1875817
Dibromomethane	U		0.00185	0.0124	2	06/07/2022 20:14	WG1875817
1,2-Dichlorobenzene	U		0.00105	0.0124	2	06/07/2022 20:14	WG1875817
1,3-Dichlorobenzene	U		0.00148	0.0124	2	06/07/2022 20:14	WG1875817
1,4-Dichlorobenzene	0.00266	J	0.00173	0.0124	2	06/07/2022 20:14	WG1875817
Dichlorodifluoromethane	U		0.00398	0.00618	2	06/07/2022 20:14	WG1875817
1,1-Dichloroethane	U		0.00121	0.00618	2	06/07/2022 20:14	WG1875817
1,2-Dichloroethane	U		0.00161	0.00618	2	06/07/2022 20:14	WG1875817
1,1-Dichloroethene	U		0.00150	0.00618	2	06/07/2022 20:14	WG1875817
cis-1,2-Dichloroethene	0.0826		0.00182	0.00618	2	06/07/2022 20:14	WG1875817
trans-1,2-Dichloroethene	0.00958	J	0.00257	0.0124	2	06/07/2022 20:14	WG1875817
1,2-Dichloropropane	U		0.00351	0.0124	2	06/07/2022 20:14	WG1875817
1,1-Dichloropropene	U		0.00200	0.00618	2	06/07/2022 20:14	WG1875817
1,3-Dichloropropane	U		0.00124	0.0124	2	06/07/2022 20:14	WG1875817
cis-1,3-Dichloropropene	U		0.00187	0.00618	2	06/07/2022 20:14	WG1875817
trans-1,3-Dichloropropene	U		0.00282	0.0124	2	06/07/2022 20:14	WG1875817
2,2-Dichloropropane	U		0.00341	0.00618	2	06/07/2022 20:14	WG1875817
Ethylbenzene	3.94		0.00182	0.00618	2	06/07/2022 20:14	WG1875817
Hexachloro-1,3-butadiene	U		0.0148	0.0618	2	06/07/2022 20:14	WG1875817
n-Hexane	3.52		0.00559	0.0124	2	06/07/2022 20:14	WG1875817
Isopropylbenzene	0.846		0.00105	0.00618	2	06/07/2022 20:14	WG1875817
p-Isopropyltoluene	0.904		0.00631	0.0124	2	06/07/2022 20:14	WG1875817
2-Butanone (MEK)	U		0.157	0.247	2	06/07/2022 20:14	WG1875817
Methylene Chloride	U		0.0164	0.0618	2	06/07/2022 20:14	WG1875817

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	U		0.00564	0.0618	2	06/07/2022 20:14	WG1875817
Methyl tert-butyl ether	U		0.000866	0.00247	2	06/07/2022 20:14	WG1875817
Naphthalene	4.25	J-	0.0121	0.0309	2	06/07/2022 20:14	WG1875817
n-Propylbenzene	2.39		0.00235	0.0124	2	06/07/2022 20:14	WG1875817
Styrene	U		0.000566	0.0309	2	06/07/2022 20:14	WG1875817
1,1,1,2-Tetrachloroethane	U		0.00235	0.00618	2	06/07/2022 20:14	WG1875817
1,1,2,2-Tetrachloroethane	U		0.00172	0.00618	2	06/07/2022 20:14	WG1875817
Tetrachloroethene	U		0.00221	0.00618	2	06/07/2022 20:14	WG1875817
Toluene	1.02		0.00321	0.0124	2	06/07/2022 20:14	WG1875817
1,2,3-Trichlorobenzene	U		0.0182	0.0309	2	06/07/2022 20:14	WG1875817
1,2,4-Trichlorobenzene	U		0.0109	0.0309	2	06/07/2022 20:14	WG1875817
1,1,1-Trichloroethane	U		0.00229	0.00618	2	06/07/2022 20:14	WG1875817
1,1,2-Trichloroethane	U		0.00147	0.00618	2	06/07/2022 20:14	WG1875817
Trichloroethene	0.0267		0.00145	0.00247	2	06/07/2022 20:14	WG1875817
Trichlorofluoromethane	U		0.00204	0.00618	2	06/07/2022 20:14	WG1875817
1,2,3-Trichloropropane	U		0.00401	0.0309	2	06/07/2022 20:14	WG1875817
1,2,4-Trimethylbenzene	17.1		0.0391	0.124	20	06/08/2022 23:32	WG1876160
1,3,5-Trimethylbenzene	0.231		0.00495	0.0124	2	06/07/2022 20:14	WG1875817
Vinyl chloride	U		0.00287	0.00618	2	06/07/2022 20:14	WG1875817
Xylenes, Total	3.35		0.00218	0.0161	2	06/07/2022 20:14	WG1875817
(S) Toluene-d8	*96.2*			*75.0-131*		*06/07/2022 20:14*	WG1875817
(S) Toluene-d8	*105*			*75.0-131*		*06/08/2022 23:32*	WG1876160
(S) 4-Bromofluorobenzene	*132*			*67.0-138*		*06/07/2022 20:14*	WG1875817
(S) 4-Bromofluorobenzene	*109*			*67.0-138*		*06/08/2022 23:32*	WG1876160
(S) 1,2-Dichloroethane-d4	*97.4*			*70.0-130*		*06/07/2022 20:14*	WG1875817
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*06/08/2022 23:32*	WG1876160

Semi-Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C20 Hydrocarbons	1590		27.3	179	40	06/06/2022 23:46	WG1874699
C20-C34 Hydrocarbons	1000		27.3	179	40	06/06/2022 23:46	WG1874699
(S) o-Terphenyl	*0.000*	J7		*18.0-148*		*06/06/2022 23:46*	WG1874699

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.00257	0.00671	1	06/10/2022 13:18	WG1876959
Acenaphthene	0.530		0.00234	0.00671	1	06/10/2022 13:18	WG1876959
Acenaphthylene	U		0.00242	0.00671	1	06/10/2022 13:18	WG1876959
Benzo(a)anthracene	0.419		0.00193	0.00671	1	06/10/2022 13:18	WG1876959
Benzo(a)pyrene	0.524		0.00200	0.00671	1	06/10/2022 13:18	WG1876959
Benzo(b)fluoranthene	0.297		0.00171	0.00671	1	06/10/2022 13:18	WG1876959
Benzo(g,h,i)perylene	0.504		0.00198	0.00671	1	06/10/2022 13:18	WG1876959
Benzo(k)fluoranthene	0.0583		0.00240	0.00671	1	06/10/2022 13:18	WG1876959
Chrysene	0.699		0.00259	0.00671	1	06/10/2022 13:18	WG1876959
Dibenz(a,h)anthracene	0.130		0.00192	0.00671	1	06/10/2022 13:18	WG1876959
Fluoranthene	0.353		0.00254	0.00671	1	06/10/2022 13:18	WG1876959
Fluorene	0.657		0.00229	0.00671	1	06/10/2022 13:18	WG1876959
Indeno(1,2,3-cd)pyrene	0.134		0.00202	0.00671	1	06/10/2022 13:18	WG1876959
Naphthalene	1.31		0.00456	0.0224	1	06/10/2022 13:18	WG1876959
Phenanthrene	2.69		0.00258	0.00671	1	06/10/2022 13:18	WG1876959
Pyrene	1.10		0.00224	0.00671	1	06/10/2022 13:18	WG1876959
1-Methylnaphthalene	3.91		0.00502	0.0224	1	06/10/2022 13:18	WG1876959
2-Methylnaphthalene	3.67		0.00477	0.0224	1	06/10/2022 13:18	WG1876959

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
2-Chloronaphthalene	U		0.00521	0.0224	1	06/10/2022 13:18	WG1876959
(S) Nitrobenzene-d5	*0.000*	J2		*14.0-149*		*06/10/2022 13:18*	WG1876959
(S) 2-Fluorobiphenyl	*88.5*			*34.0-125*		*06/10/2022 13:18*	WG1876959
(S) p-Terphenyl-d14	*83.1*			*23.0-120*		*06/10/2022 13:18*	WG1876959

Sample Narrative:

L1499430-05 WG1876959: Surrogate failure due to matrix interference

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	85.7		1	06/06/2022 14:08	WG1874749

Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C6 - C12	10.4		0.0396	0.117	1	06/04/2022 13:36	WG1873726
(S) a,a,a-Trifluorotoluene(FID)	*95.2*			*77.0-120*		*06/04/2022 13:36*	WG1873726

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0487	0.0667	1	06/07/2022 18:47	WG1875265
Acrylonitrile	U		0.00482	0.0167	1	06/07/2022 18:47	WG1875265
Benzene	0.304		0.000623	0.00133	1	06/07/2022 18:47	WG1875265
Bromobenzene	U		0.00120	0.0167	1	06/07/2022 18:47	WG1875265
Bromodichloromethane	U		0.000968	0.00334	1	06/07/2022 18:47	WG1875265
Bromoform	U		0.00156	0.0334	1	06/07/2022 18:47	WG1875265
Bromomethane	U		0.00263	0.0167	1	06/07/2022 18:47	WG1875265
n-Butylbenzene	0.127		0.00701	0.0167	1	06/07/2022 18:47	WG1875265
sec-Butylbenzene	0.141		0.00384	0.0167	1	06/07/2022 18:47	WG1875265
tert-Butylbenzene	0.0203		0.00260	0.00667	1	06/07/2022 18:47	WG1875265
Carbon tetrachloride	U		0.00120	0.00667	1	06/07/2022 18:47	WG1875265
Chlorobenzene	U		0.000280	0.00334	1	06/07/2022 18:47	WG1875265
Chlorodibromomethane	U		0.000817	0.00334	1	06/07/2022 18:47	WG1875265
Chloroethane	U		0.00227	0.00667	1	06/07/2022 18:47	WG1875265
Chloroform	0.0447		0.00137	0.00334	1	06/07/2022 18:47	WG1875265
Chloromethane	U		0.00581	0.0167	1	06/07/2022 18:47	WG1875265
2-Chlorotoluene	U		0.00115	0.00334	1	06/07/2022 18:47	WG1875265
4-Chlorotoluene	U		0.000601	0.00667	1	06/07/2022 18:47	WG1875265
1,2-Dibromo-3-Chloropropane	U		0.00521	0.0334	1	06/07/2022 18:47	WG1875265
1,2-Dibromoethane	U		0.000865	0.00334	1	06/07/2022 18:47	WG1875265
Dibromomethane	U		0.00100	0.00667	1	06/07/2022 18:47	WG1875265
1,2-Dichlorobenzene	U		0.000567	0.00667	1	06/07/2022 18:47	WG1875265
1,3-Dichlorobenzene	U		0.000801	0.00667	1	06/07/2022 18:47	WG1875265
1,4-Dichlorobenzene	U		0.000934	0.00667	1	06/07/2022 18:47	WG1875265
Dichlorodifluoromethane	U		0.00215	0.00334	1	06/07/2022 18:47	WG1875265
1,1-Dichloroethane	U		0.000655	0.00334	1	06/07/2022 18:47	WG1875265
1,2-Dichloroethane	U		0.000866	0.00334	1	06/07/2022 18:47	WG1875265
1,1-Dichloroethene	U		0.000809	0.00334	1	06/07/2022 18:47	WG1875265
cis-1,2-Dichloroethene	0.0194		0.000980	0.00334	1	06/07/2022 18:47	WG1875265
trans-1,2-Dichloroethene	0.00204	J	0.00139	0.00667	1	06/07/2022 18:47	WG1875265
1,2-Dichloropropane	U		0.00190	0.00667	1	06/07/2022 18:47	WG1875265
1,1-Dichloropropene	U		0.00108	0.00334	1	06/07/2022 18:47	WG1875265
1,3-Dichloropropane	U		0.000669	0.00667	1	06/07/2022 18:47	WG1875265
cis-1,3-Dichloropropene	U		0.00101	0.00334	1	06/07/2022 18:47	WG1875265
trans-1,3-Dichloropropene	U		0.00152	0.00667	1	06/07/2022 18:47	WG1875265
2,2-Dichloropropane	U		0.00184	0.00334	1	06/07/2022 18:47	WG1875265
Ethylbenzene	0.870		0.000984	0.00334	1	06/07/2022 18:47	WG1875265
Hexachloro-1,3-butadiene	U		0.00801	0.0334	1	06/07/2022 18:47	WG1875265
n-Hexane	1.06		0.00302	0.00667	1	06/07/2022 18:47	WG1875265
Isopropylbenzene	0.266		0.000567	0.00334	1	06/07/2022 18:47	WG1875265
p-Isopropyltoluene	0.104		0.00340	0.00667	1	06/07/2022 18:47	WG1875265
2-Butanone (MEK)	U		0.0848	0.133	1	06/07/2022 18:47	WG1875265
Methylene Chloride	U		0.00886	0.0334	1	06/07/2022 18:47	WG1875265

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	U		0.00304	0.0334	1	06/07/2022 18:47	WG1875265
Methyl tert-butyl ether	U		0.000467	0.00133	1	06/07/2022 18:47	WG1875265
Naphthalene	0.159		0.00651	0.0167	1	06/07/2022 07:27	WG1876233
n-Propylbenzene	0.338		0.00127	0.00667	1	06/07/2022 18:47	WG1875265
Styrene	U		0.000306	0.0167	1	06/07/2022 18:47	WG1875265
1,1,1,2-Tetrachloroethane	U		0.00127	0.00334	1	06/07/2022 18:47	WG1875265
1,1,2,2-Tetrachloroethane	U		0.000928	0.00334	1	06/07/2022 18:47	WG1875265
Tetrachloroethene	0.00141	J	0.00120	0.00334	1	06/07/2022 18:47	WG1875265
Toluene	0.234		0.00174	0.00667	1	06/07/2022 18:47	WG1875265
1,2,3-Trichlorobenzene	U		0.00978	0.0167	1	06/07/2022 18:47	WG1875265
1,2,4-Trichlorobenzene	U	J+	0.00587	0.0167	1	06/07/2022 18:47	WG1875265
1,1,1-Trichloroethane	U		0.00123	0.00334	1	06/07/2022 18:47	WG1875265
1,1,2-Trichloroethane	U		0.000797	0.00334	1	06/07/2022 18:47	WG1875265
Trichloroethene	0.00509		0.000779	0.00133	1	06/07/2022 18:47	WG1875265
Trichlorofluoromethane	U		0.00110	0.00334	1	06/07/2022 18:47	WG1875265
1,2,3-Trichloropropane	U		0.00216	0.0167	1	06/07/2022 18:47	WG1875265
1,2,4-Trimethylbenzene	2.14		0.00211	0.00667	1	06/07/2022 18:47	WG1875265
1,3,5-Trimethylbenzene	0.0713		0.00267	0.00667	1	06/07/2022 18:47	WG1875265
Vinyl chloride	U		0.00155	0.00334	1	06/07/2022 18:47	WG1875265
Xylenes, Total	0.799		0.00117	0.00868	1	06/07/2022 18:47	WG1875265
(S) Toluene-d8	*98.7*			*75.0-131*		*06/07/2022 18:47*	WG1875265
(S) Toluene-d8	*146*	J1		*75.0-131*		*06/07/2022 07:27*	WG1876233
(S) 4-Bromofluorobenzene	*111*			*67.0-138*		*06/07/2022 18:47*	WG1875265
(S) 4-Bromofluorobenzene	*95.7*			*67.0-138*		*06/07/2022 07:27*	WG1876233
(S) 1,2-Dichloroethane-d4	*88.6*			*70.0-130*		*06/07/2022 18:47*	WG1875265
(S) 1,2-Dichloroethane-d4	*81.2*			*70.0-130*		*06/07/2022 07:27*	WG1876233

Semi-Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C20 Hydrocarbons	386		35.6	233	50	06/07/2022 10:16	WG1874699
C20-C34 Hydrocarbons	1100		35.7	233	50	06/07/2022 10:16	WG1874699
(S) o-Terphenyl	*0.000*	J7		*18.0-148*		*06/07/2022 10:16*	WG1874699

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.183		0.00268	0.00700	1	06/10/2022 13:53	WG1876959
Acenaphthene	0.144		0.00244	0.00700	1	06/10/2022 13:53	WG1876959
Acenaphthylene	0.0305		0.00252	0.00700	1	06/10/2022 13:53	WG1876959
Benzo(a)anthracene	0.614		0.00202	0.00700	1	06/10/2022 13:53	WG1876959
Benzo(a)pyrene	0.658		0.00209	0.00700	1	06/10/2022 13:53	WG1876959
Benzo(b)fluoranthene	0.616		0.00179	0.00700	1	06/10/2022 13:53	WG1876959
Benzo(g,h,i)perylene	0.743		0.00207	0.00700	1	06/10/2022 13:53	WG1876959
Benzo(k)fluoranthene	0.179		0.00251	0.00700	1	06/10/2022 13:53	WG1876959
Chrysene	0.529		0.00271	0.00700	1	06/10/2022 13:53	WG1876959
Dibenz(a,h)anthracene	0.263		0.00201	0.00700	1	06/10/2022 13:53	WG1876959
Fluoranthene	0.964		0.00265	0.00700	1	06/10/2022 13:53	WG1876959
Fluorene	0.166		0.00239	0.00700	1	06/10/2022 13:53	WG1876959
Indeno(1,2,3-cd)pyrene	0.421		0.00211	0.00700	1	06/10/2022 13:53	WG1876959
Naphthalene	0.251		0.00476	0.0233	1	06/10/2022 13:53	WG1876959
Phenanthrene	0.953		0.00270	0.00700	1	06/10/2022 13:53	WG1876959
Pyrene	1.14		0.00233	0.00700	1	06/10/2022 13:53	WG1876959
1-Methylnaphthalene	0.245		0.00524	0.0233	1	06/10/2022 13:53	WG1876959
2-Methylnaphthalene	0.252		0.00498	0.0233	1	06/10/2022 13:53	WG1876959

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
2-Chloronaphthalene	U		0.00544	0.0233	1	06/10/2022 13:53	WG1876959
(S) Nitrobenzene-d5	*0.000*	J2		*14.0-149*		*06/10/2022 13:53*	WG1876959
(S) 2-Fluorobiphenyl	*65.5*			*34.0-125*		*06/10/2022 13:53*	WG1876959
(S) p-Terphenyl-d14	*82.1*			*23.0-120*		*06/10/2022 13:53*	WG1876959

Sample Narrative:

L1499430-06 WG1876959: Surrogate failure due to matrix interference

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.0		1	06/06/2022 14:08	WG1874749

Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C6 - C12	464		2.16	6.36	50	06/06/2022 15:01	WG1874920
(S) a,a,a-Trifluorotoluene(FID)	*91.3*			*77.0-120*		*06/06/2022 15:01*	WG1874920

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	J5	0.0929	0.127	2	06/07/2022 20:33	WG1875817
Acrylonitrile	U		0.00919	0.0318	2	06/07/2022 20:33	WG1875817
Benzene	1.06		0.00119	0.00254	2	06/07/2022 20:33	WG1875817
Bromobenzene	U		0.00229	0.0318	2	06/07/2022 20:33	WG1875817
Bromodichloromethane	U		0.00184	0.00636	2	06/07/2022 20:33	WG1875817
Bromoform	U		0.00298	0.0636	2	06/07/2022 20:33	WG1875817
Bromomethane	U	J3	0.00501	0.0318	2	06/07/2022 20:33	WG1875817
n-Butylbenzene	0.177		0.0134	0.0318	2	06/07/2022 20:33	WG1875817
sec-Butylbenzene	0.254		0.00733	0.0318	2	06/07/2022 20:33	WG1875817
tert-Butylbenzene	0.0629		0.00496	0.0127	2	06/07/2022 20:33	WG1875817
Carbon tetrachloride	U	J3	0.00229	0.0127	2	06/07/2022 20:33	WG1875817
Chlorobenzene	U		0.000534	0.00636	2	06/07/2022 20:33	WG1875817
Chlorodibromomethane	U		0.00155	0.00636	2	06/07/2022 20:33	WG1875817
Chloroethane	U	J3	0.00433	0.0127	2	06/07/2022 20:33	WG1875817
Chloroform	U		0.00262	0.00636	2	06/07/2022 20:33	WG1875817
Chloromethane	U	J3	0.0111	0.0318	2	06/07/2022 20:33	WG1875817
2-Chlorotoluene	U		0.00220	0.00636	2	06/07/2022 20:33	WG1875817
4-Chlorotoluene	U		0.00115	0.0127	2	06/07/2022 20:33	WG1875817
1,2-Dibromo-3-Chloropropane	U		0.00992	0.0636	2	06/07/2022 20:33	WG1875817
1,2-Dibromoethane	U		0.00165	0.00636	2	06/07/2022 20:33	WG1875817
Dibromomethane	U		0.00191	0.0127	2	06/07/2022 20:33	WG1875817
1,2-Dichlorobenzene	U		0.00108	0.0127	2	06/07/2022 20:33	WG1875817
1,3-Dichlorobenzene	U		0.00153	0.0127	2	06/07/2022 20:33	WG1875817
1,4-Dichlorobenzene	U		0.00178	0.0127	2	06/07/2022 20:33	WG1875817
Dichlorodifluoromethane	U	J3	0.00410	0.00636	2	06/07/2022 20:33	WG1875817
1,1-Dichloroethane	U	J3	0.00125	0.00636	2	06/07/2022 20:33	WG1875817
1,2-Dichloroethane	U		0.00165	0.00636	2	06/07/2022 20:33	WG1875817
1,1-Dichloroethene	U	J3	0.00154	0.00636	2	06/07/2022 20:33	WG1875817
cis-1,2-Dichloroethene	U		0.00187	0.00636	2	06/07/2022 20:33	WG1875817
trans-1,2-Dichloroethene	U	J3	0.00265	0.0127	2	06/07/2022 20:33	WG1875817
1,2-Dichloropropane	U		0.00361	0.0127	2	06/07/2022 20:33	WG1875817
1,1-Dichloropropene	U	J3	0.00206	0.00636	2	06/07/2022 20:33	WG1875817
1,3-Dichloropropane	U		0.00127	0.0127	2	06/07/2022 20:33	WG1875817
cis-1,3-Dichloropropene	U		0.00192	0.00636	2	06/07/2022 20:33	WG1875817
trans-1,3-Dichloropropene	U		0.00290	0.0127	2	06/07/2022 20:33	WG1875817
2,2-Dichloropropane	U	J3	0.00351	0.00636	2	06/07/2022 20:33	WG1875817
Ethylbenzene	0.321		0.00187	0.00636	2	06/07/2022 20:33	WG1875817
Hexachloro-1,3-butadiene	U		0.0153	0.0636	2	06/07/2022 20:33	WG1875817
n-Hexane	0.645		0.00575	0.0127	2	06/07/2022 20:33	WG1875817
Isopropylbenzene	0.256		0.00108	0.00636	2	06/07/2022 20:33	WG1875817
p-Isopropyltoluene	0.115		0.00649	0.0127	2	06/07/2022 20:33	WG1875817
2-Butanone (MEK)	U		0.162	0.254	2	06/07/2022 20:33	WG1875817
Methylene Chloride	U		0.0169	0.0636	2	06/07/2022 20:33	WG1875817

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	U		0.00580	0.0636	2	06/07/2022 20:33	WG1875817
Methyl tert-butyl ether	U		0.000891	0.00254	2	06/07/2022 20:33	WG1875817
Naphthalene	0.714	J-	0.0124	0.0318	2	06/07/2022 20:33	WG1875817
n-Propylbenzene	0.420		0.00242	0.0127	2	06/07/2022 20:33	WG1875817
Styrene	U		0.000583	0.0318	2	06/07/2022 20:33	WG1875817
1,1,1,2-Tetrachloroethane	U		0.00242	0.00636	2	06/07/2022 20:33	WG1875817
1,1,2,2-Tetrachloroethane	U	J5	0.00177	0.00636	2	06/07/2022 20:33	WG1875817
Tetrachloroethene	U	J3	0.00228	0.00636	2	06/07/2022 20:33	WG1875817
Toluene	0.220		0.00331	0.0127	2	06/07/2022 20:33	WG1875817
1,2,3-Trichlorobenzene	U		0.0187	0.0318	2	06/07/2022 20:33	WG1875817
1,2,4-Trichlorobenzene	U		0.0112	0.0318	2	06/07/2022 20:33	WG1875817
1,1,1-Trichloroethane	U	J3	0.00235	0.00636	2	06/07/2022 20:33	WG1875817
1,1,2-Trichloroethane	U	J5	0.00151	0.00636	2	06/07/2022 20:33	WG1875817
Trichloroethene	U		0.00149	0.00254	2	06/07/2022 20:33	WG1875817
Trichlorofluoromethane	U		0.00210	0.00636	2	06/07/2022 20:33	WG1875817
1,2,3-Trichloropropane	U	J5	0.00412	0.0318	2	06/07/2022 20:33	WG1875817
1,2,4-Trimethylbenzene	1.19		0.00402	0.0127	2	06/07/2022 20:33	WG1875817
1,3,5-Trimethylbenzene	0.186		0.00509	0.0127	2	06/07/2022 20:33	WG1875817
Vinyl chloride	U	J3	0.00295	0.00636	2	06/07/2022 20:33	WG1875817
Xylenes, Total	0.948	J5	0.00224	0.0165	2	06/07/2022 20:33	WG1875817
(S) Toluene-d8	*107*			*75.0-131*		*06/07/2022 20:33*	WG1875817
(S) 4-Bromofluorobenzene	*212*	J1		*67.0-138*		*06/07/2022 20:33*	WG1875817
(S) 1,2-Dichloroethane-d4	*93.3*			*70.0-130*		*06/07/2022 20:33*	WG1875817

Sample Narrative:

L1499430-07 WG1875817: Surrogate failure due to matrix interference.

Semi-Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C20 Hydrocarbons	1780		27.7	182	40	06/07/2022 00:42	WG1874699
C20-C34 Hydrocarbons	2200		27.7	182	40	06/07/2022 00:42	WG1874699
(S) o-Terphenyl	*0.000*	J7		*18.0-148*		*06/07/2022 00:42*	WG1874699

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	1.28		0.00261	0.00682	1	06/10/2022 13:35	WG1876959
Acenaphthene	0.427		0.00237	0.00682	1	06/10/2022 13:35	WG1876959
Acenaphthylene	0.149		0.00245	0.00682	1	06/10/2022 13:35	WG1876959
Benzo(a)anthracene	6.22		0.0197	0.0682	10	06/10/2022 15:04	WG1876959
Benzo(a)pyrene	10.2		0.0203	0.0682	10	06/10/2022 15:04	WG1876959
Benzo(b)fluoranthene	8.26		0.0174	0.0682	10	06/10/2022 15:04	WG1876959
Benzo(g,h,i)perylene	13.1		0.0201	0.0682	10	06/10/2022 15:04	WG1876959
Benzo(k)fluoranthene	2.56		0.00244	0.00682	1	06/10/2022 13:35	WG1876959
Chrysene	4.86		0.0264	0.0682	10	06/10/2022 15:04	WG1876959
Dibenz(a,h)anthracene	6.79		0.0195	0.0682	10	06/10/2022 15:04	WG1876959
Fluoranthene	8.20		0.0258	0.0682	10	06/10/2022 15:04	WG1876959
Fluorene	0.311		0.00233	0.00682	1	06/10/2022 13:35	WG1876959
Indeno(1,2,3-cd)pyrene	7.03		0.0206	0.0682	10	06/10/2022 15:04	WG1876959
Naphthalene	0.934		0.0463	0.227	10	06/10/2022 15:04	WG1876959
Phenanthrene	4.21		0.00262	0.00682	1	06/10/2022 13:35	WG1876959
Pyrene	8.05		0.0227	0.0682	10	06/10/2022 15:04	WG1876959
1-Methylnaphthalene	0.693		0.0510	0.227	10	06/10/2022 15:04	WG1876959
2-Methylnaphthalene	1.23		0.0485	0.227	10	06/10/2022 15:04	WG1876959

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
2-Chloronaphthalene	U		0.00529	0.0227	1	06/10/2022 13:35	WG1876959
(S) Nitrobenzene-d5	*0.000*	J2		*14.0-149*		*06/10/2022 13:35*	WG1876959
(S) Nitrobenzene-d5	*0.000*	J2		*14.0-149*		*06/10/2022 15:04*	WG1876959
(S) 2-Fluorobiphenyl	*61.3*			*34.0-125*		*06/10/2022 13:35*	WG1876959
(S) 2-Fluorobiphenyl	*79.1*			*34.0-125*		*06/10/2022 15:04*	WG1876959
(S) p-Terphenyl-d14	*127*	J1		*23.0-120*		*06/10/2022 15:04*	WG1876959
(S) p-Terphenyl-d14	*90.2*			*23.0-120*		*06/10/2022 13:35*	WG1876959

Sample Narrative:

L1499430-07 WG1876959: Surrogate failure due to matrix interference

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	83.4		1	06/06/2022 14:08	WG1874749

Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C6 - C12	2320		47.4	140	1000	06/06/2022 02:38	WG1874508
(S) a,a,a-Trifluorotoluene(FID)	*99.0*			*77.0-120*		*06/06/2022 02:38*	WG1874508

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		1.02	1.40	20	06/07/2022 20:52	WG1875817
Acrylonitrile	U		0.101	0.350	20	06/07/2022 20:52	WG1875817
Benzene	U		0.0131	0.0280	20	06/07/2022 20:52	WG1875817
Bromobenzene	U		0.0252	0.350	20	06/07/2022 20:52	WG1875817
Bromodichloromethane	U		0.0203	0.0699	20	06/07/2022 20:52	WG1875817
Bromoform	U		0.0327	0.699	20	06/07/2022 20:52	WG1875817
Bromomethane	U		0.0551	0.350	20	06/07/2022 20:52	WG1875817
n-Butylbenzene	1.76		0.147	0.350	20	06/07/2022 20:52	WG1875817
sec-Butylbenzene	2.25		0.0805	0.350	20	06/07/2022 20:52	WG1875817
tert-Butylbenzene	0.218		0.0545	0.140	20	06/07/2022 20:52	WG1875817
Carbon tetrachloride	U		0.0252	0.140	20	06/07/2022 20:52	WG1875817
Chlorobenzene	U		0.00587	0.0699	20	06/07/2022 20:52	WG1875817
Chlorodibromomethane	U		0.0171	0.0699	20	06/07/2022 20:52	WG1875817
Chloroethane	U		0.0475	0.140	20	06/07/2022 20:52	WG1875817
Chloroform	U		0.0288	0.0699	20	06/07/2022 20:52	WG1875817
Chloromethane	U		0.122	0.350	20	06/07/2022 20:52	WG1875817
2-Chlorotoluene	U		0.0242	0.0699	20	06/07/2022 20:52	WG1875817
4-Chlorotoluene	U		0.0126	0.140	20	06/07/2022 20:52	WG1875817
1,2-Dibromo-3-Chloropropane	U		0.109	0.699	20	06/07/2022 20:52	WG1875817
1,2-Dibromoethane	U		0.0182	0.0699	20	06/07/2022 20:52	WG1875817
Dibromomethane	U		0.0210	0.140	20	06/07/2022 20:52	WG1875817
1,2-Dichlorobenzene	U		0.0119	0.140	20	06/07/2022 20:52	WG1875817
1,3-Dichlorobenzene	U		0.0168	0.140	20	06/07/2022 20:52	WG1875817
1,4-Dichlorobenzene	U		0.0196	0.140	20	06/07/2022 20:52	WG1875817
Dichlorodifluoromethane	U		0.0450	0.0699	20	06/07/2022 20:52	WG1875817
1,1-Dichloroethane	U		0.0137	0.0699	20	06/07/2022 20:52	WG1875817
1,2-Dichloroethane	U		0.0182	0.0699	20	06/07/2022 20:52	WG1875817
1,1-Dichloroethene	U		0.0169	0.0699	20	06/07/2022 20:52	WG1875817
cis-1,2-Dichloroethene	U		0.0206	0.0699	20	06/07/2022 20:52	WG1875817
trans-1,2-Dichloroethene	U		0.0291	0.140	20	06/07/2022 20:52	WG1875817
1,2-Dichloropropane	U		0.0397	0.140	20	06/07/2022 20:52	WG1875817
1,1-Dichloropropene	U		0.0227	0.0699	20	06/07/2022 20:52	WG1875817
1,3-Dichloropropane	U		0.0140	0.140	20	06/07/2022 20:52	WG1875817
cis-1,3-Dichloropropene	U		0.0211	0.0699	20	06/07/2022 20:52	WG1875817
trans-1,3-Dichloropropene	U		0.0319	0.140	20	06/07/2022 20:52	WG1875817
2,2-Dichloropropane	U		0.0386	0.0699	20	06/07/2022 20:52	WG1875817
Ethylbenzene	0.0336	J	0.0206	0.0699	20	06/07/2022 20:52	WG1875817
Hexachloro-1,3-butadiene	U		0.168	0.699	20	06/07/2022 20:52	WG1875817
n-Hexane	U		0.0632	0.140	20	06/07/2022 20:52	WG1875817
Isopropylbenzene	2.89		0.0119	0.0699	20	06/07/2022 20:52	WG1875817
p-Isopropyltoluene	0.192		0.0713	0.140	20	06/07/2022 20:52	WG1875817
2-Butanone (MEK)	U		1.78	2.80	20	06/07/2022 20:52	WG1875817
Methylene Chloride	0.208	B J	0.186	0.699	20	06/07/2022 20:52	WG1875817

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	U		0.0638	0.699	20	06/07/2022 20:52	WG1875817
Methyl tert-butyl ether	U		0.00979	0.0280	20	06/07/2022 20:52	WG1875817
Naphthalene	0.550	J-	0.136	0.350	20	06/07/2022 20:52	WG1875817
n-Propylbenzene	4.22		0.0266	0.140	20	06/07/2022 20:52	WG1875817
Styrene	U		0.00640	0.350	20	06/07/2022 20:52	WG1875817
1,1,1,2-Tetrachloroethane	U		0.0266	0.0699	20	06/07/2022 20:52	WG1875817
1,1,2,2-Tetrachloroethane	U		0.0194	0.0699	20	06/07/2022 20:52	WG1875817
Tetrachloroethene	U		0.0250	0.0699	20	06/07/2022 20:52	WG1875817
Toluene	0.0545	J	0.0364	0.140	20	06/07/2022 20:52	WG1875817
1,2,3-Trichlorobenzene	U		0.206	0.350	20	06/07/2022 20:52	WG1875817
1,2,4-Trichlorobenzene	U		0.123	0.350	20	06/07/2022 20:52	WG1875817
1,1,1-Trichloroethane	U		0.0259	0.0699	20	06/07/2022 20:52	WG1875817
1,1,2-Trichloroethane	U		0.0166	0.0699	20	06/07/2022 20:52	WG1875817
Trichloroethene	U		0.0164	0.0280	20	06/07/2022 20:52	WG1875817
Trichlorofluoromethane	U		0.0231	0.0699	20	06/07/2022 20:52	WG1875817
1,2,3-Trichloropropane	U		0.0453	0.350	20	06/07/2022 20:52	WG1875817
1,2,4-Trimethylbenzene	0.336		0.0442	0.140	20	06/07/2022 20:52	WG1875817
1,3,5-Trimethylbenzene	U		0.0559	0.140	20	06/07/2022 20:52	WG1875817
Vinyl chloride	U		0.0324	0.0699	20	06/07/2022 20:52	WG1875817
Xylenes, Total	0.215		0.0246	0.182	20	06/07/2022 20:52	WG1875817
(S) Toluene-d8	*107*			*75.0-131*		*06/07/2022 20:52*	WG1875817
(S) 4-Bromofluorobenzene	*119*			*67.0-138*		*06/07/2022 20:52*	WG1875817
(S) 1,2-Dichloroethane-d4	*96.5*			*70.0-130*		*06/07/2022 20:52*	WG1875817

Semi-Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C20 Hydrocarbons	1730		14.6	95.9	20	06/07/2022 13:02	WG1874699
C20-C34 Hydrocarbons	165		0.732	4.80	1	06/06/2022 21:49	WG1874699
(S) o-Terphenyl	*0.000*	J7		*18.0-148*		*06/07/2022 13:02*	WG1874699
(S) o-Terphenyl	*20.5*			*18.0-148*		*06/06/2022 21:49*	WG1874699

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.0339		0.00276	0.00719	1	06/10/2022 12:25	WG1876959
Acenaphthene	0.106		0.00251	0.00719	1	06/10/2022 12:25	WG1876959
Acenaphthylene	U		0.00259	0.00719	1	06/10/2022 12:25	WG1876959
Benzo(a)anthracene	0.0162		0.00207	0.00719	1	06/10/2022 12:25	WG1876959
Benzo(a)pyrene	0.00819		0.00215	0.00719	1	06/10/2022 12:25	WG1876959
Benzo(b)fluoranthene	0.00931		0.00183	0.00719	1	06/10/2022 12:25	WG1876959
Benzo(g,h,i)perylene	0.00842		0.00212	0.00719	1	06/10/2022 12:25	WG1876959
Benzo(k)fluoranthene	U		0.00258	0.00719	1	06/10/2022 12:25	WG1876959
Chrysene	0.0194		0.00278	0.00719	1	06/10/2022 12:25	WG1876959
Dibenz(a,h)anthracene	0.00414	J	0.00206	0.00719	1	06/10/2022 12:25	WG1876959
Fluoranthene	0.0367		0.00272	0.00719	1	06/10/2022 12:25	WG1876959
Fluorene	0.161		0.00246	0.00719	1	06/10/2022 12:25	WG1876959
Indeno(1,2,3-cd)pyrene	0.00433	J	0.00217	0.00719	1	06/10/2022 12:25	WG1876959
Naphthalene	U		0.00489	0.0240	1	06/10/2022 12:25	WG1876959
Phenanthrene	0.369		0.00277	0.00719	1	06/10/2022 12:25	WG1876959
Pyrene	0.0580		0.00240	0.00719	1	06/10/2022 12:25	WG1876959
1-Methylnaphthalene	3.07		0.00538	0.0240	1	06/10/2022 12:25	WG1876959
2-Methylnaphthalene	0.189		0.00512	0.0240	1	06/10/2022 12:25	WG1876959
2-Chloronaphthalene	U		0.00559	0.0240	1	06/10/2022 12:25	WG1876959
(S) Nitrobenzene-d5	*0.000*	J2		*14.0-149*		*06/10/2022 12:25*	WG1876959

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
(S) 2-Fluorobiphenyl	*59.3*			*34.0-125*		*06/10/2022 12:25*	WG1876959
(S) p-Terphenyl-d14	*85.8*			*23.0-120*		*06/10/2022 12:25*	WG1876959

Sample Narrative:

L1499430-08 WG1876959: Surrogate failure due to matrix interference

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.2		1	06/06/2022 14:08	WG1874749

Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C6 - C12	104		1.01	2.98	25	06/06/2022 15:23	WG1874920
(S) a,a,a-Trifluorotoluene(FID)	*104*			*77.0-120*		*06/06/2022 15:23*	WG1874920

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0436	0.0597	1	06/07/2022 19:06	WG1875265
Acrylonitrile	U		0.00431	0.0149	1	06/07/2022 19:06	WG1875265
Benzene	0.0200		0.000557	0.00119	1	06/07/2022 19:06	WG1875265
Bromobenzene	U		0.00107	0.0149	1	06/07/2022 19:06	WG1875265
Bromodichloromethane	U		0.000865	0.00298	1	06/07/2022 19:06	WG1875265
Bromoform	U		0.00140	0.0298	1	06/07/2022 19:06	WG1875265
Bromomethane	U		0.00235	0.0149	1	06/07/2022 19:06	WG1875265
n-Butylbenzene	0.379		0.00627	0.0149	1	06/07/2022 19:06	WG1875265
sec-Butylbenzene	0.248		0.00344	0.0149	1	06/07/2022 19:06	WG1875265
tert-Butylbenzene	0.0138		0.00233	0.00597	1	06/07/2022 19:06	WG1875265
Carbon tetrachloride	U		0.00107	0.00597	1	06/07/2022 19:06	WG1875265
Chlorobenzene	U		0.000251	0.00298	1	06/07/2022 19:06	WG1875265
Chlorodibromomethane	U		0.000730	0.00298	1	06/07/2022 19:06	WG1875265
Chloroethane	U		0.00203	0.00597	1	06/07/2022 19:06	WG1875265
Chloroform	U		0.00123	0.00298	1	06/07/2022 19:06	WG1875265
Chloromethane	U		0.00519	0.0149	1	06/07/2022 19:06	WG1875265
2-Chlorotoluene	U		0.00103	0.00298	1	06/07/2022 19:06	WG1875265
4-Chlorotoluene	U		0.000537	0.00597	1	06/07/2022 19:06	WG1875265
1,2-Dibromo-3-Chloropropane	U		0.00465	0.0298	1	06/07/2022 19:06	WG1875265
1,2-Dibromoethane	U		0.000773	0.00298	1	06/07/2022 19:06	WG1875265
Dibromomethane	U		0.000895	0.00597	1	06/07/2022 19:06	WG1875265
1,2-Dichlorobenzene	U		0.000507	0.00597	1	06/07/2022 19:06	WG1875265
1,3-Dichlorobenzene	U		0.000716	0.00597	1	06/07/2022 19:06	WG1875265
1,4-Dichlorobenzene	U		0.000835	0.00597	1	06/07/2022 19:06	WG1875265
Dichlorodifluoromethane	U		0.00192	0.00298	1	06/07/2022 19:06	WG1875265
1,1-Dichloroethane	0.00477		0.000586	0.00298	1	06/07/2022 19:06	WG1875265
1,2-Dichloroethane	U		0.000775	0.00298	1	06/07/2022 19:06	WG1875265
1,1-Dichloroethene	U		0.000723	0.00298	1	06/07/2022 19:06	WG1875265
cis-1,2-Dichloroethene	0.00290	J	0.000876	0.00298	1	06/07/2022 19:06	WG1875265
trans-1,2-Dichloroethene	U		0.00124	0.00597	1	06/07/2022 19:06	WG1875265
1,2-Dichloropropane	U		0.00169	0.00597	1	06/07/2022 19:06	WG1875265
1,1-Dichloropropene	U		0.000965	0.00298	1	06/07/2022 19:06	WG1875265
1,3-Dichloropropane	U		0.000598	0.00597	1	06/07/2022 19:06	WG1875265
cis-1,3-Dichloropropene	U		0.000903	0.00298	1	06/07/2022 19:06	WG1875265
trans-1,3-Dichloropropene	U		0.00136	0.00597	1	06/07/2022 19:06	WG1875265
2,2-Dichloropropane	U		0.00165	0.00298	1	06/07/2022 19:06	WG1875265
Ethylbenzene	0.0212		0.000880	0.00298	1	06/07/2022 19:06	WG1875265
Hexachloro-1,3-butadiene	U		0.00716	0.0298	1	06/07/2022 19:06	WG1875265
n-Hexane	0.0467		0.00270	0.00597	1	06/07/2022 19:06	WG1875265
Isopropylbenzene	0.0996		0.000507	0.00298	1	06/07/2022 19:06	WG1875265
p-Isopropyltoluene	0.0187		0.00304	0.00597	1	06/07/2022 19:06	WG1875265
2-Butanone (MEK)	U		0.0758	0.119	1	06/07/2022 19:06	WG1875265
Methylene Chloride	U		0.00792	0.0298	1	06/07/2022 19:06	WG1875265

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	U		0.00272	0.0298	1	06/07/2022 19:06	WG1875265
Methyl tert-butyl ether	U		0.000418	0.00119	1	06/07/2022 19:06	WG1875265
Naphthalene	0.0218		0.00582	0.0149	1	06/07/2022 07:46	WG1876233
n-Propylbenzene	0.123		0.00113	0.00597	1	06/07/2022 19:06	WG1875265
Styrene	U		0.000273	0.0149	1	06/07/2022 19:06	WG1875265
1,1,1,2-Tetrachloroethane	U		0.00113	0.00298	1	06/07/2022 19:06	WG1875265
1,1,2,2-Tetrachloroethane	U		0.000829	0.00298	1	06/07/2022 19:06	WG1875265
Tetrachloroethene	U		0.00107	0.00298	1	06/07/2022 19:06	WG1875265
Toluene	0.0302		0.00155	0.00597	1	06/07/2022 19:06	WG1875265
1,2,3-Trichlorobenzene	U		0.00875	0.0149	1	06/07/2022 19:06	WG1875265
1,2,4-Trichlorobenzene	U	J+	0.00525	0.0149	1	06/07/2022 19:06	WG1875265
1,1,1-Trichloroethane	U		0.00110	0.00298	1	06/07/2022 19:06	WG1875265
1,1,2-Trichloroethane	U		0.000712	0.00298	1	06/07/2022 19:06	WG1875265
Trichloroethene	0.00218		0.000697	0.00119	1	06/07/2022 19:06	WG1875265
Trichlorofluoromethane	U		0.000987	0.00298	1	06/07/2022 19:06	WG1875265
1,2,3-Trichloropropane	U		0.00193	0.0149	1	06/07/2022 19:06	WG1875265
1,2,4-Trimethylbenzene	0.0853		0.00189	0.00597	1	06/07/2022 19:06	WG1875265
1,3,5-Trimethylbenzene	0.0184		0.00239	0.00597	1	06/07/2022 19:06	WG1875265
Vinyl chloride	U		0.00138	0.00298	1	06/07/2022 19:06	WG1875265
Xylenes, Total	0.0636		0.00105	0.00776	1	06/07/2022 19:06	WG1875265
(S) Toluene-d8	*99.5*			*75.0-131*		*06/07/2022 19:06*	WG1875265
(S) Toluene-d8	*98.1*			*75.0-131*		*06/07/2022 07:46*	WG1876233
(S) 4-Bromofluorobenzene	*118*			*67.0-138*		*06/07/2022 19:06*	WG1875265
(S) 4-Bromofluorobenzene	*98.3*			*67.0-138*		*06/07/2022 07:46*	WG1876233
(S) 1,2-Dichloroethane-d4	*89.0*			*70.0-130*		*06/07/2022 19:06*	WG1875265
(S) 1,2-Dichloroethane-d4	*81.1*			*70.0-130*		*06/07/2022 07:46*	WG1876233

Semi-Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C20 Hydrocarbons	752		6.69	43.9	10	06/07/2022 10:42	WG1874699
C20-C34 Hydrocarbons	831		6.70	43.9	10	06/07/2022 10:42	WG1874699
(S) o-Terphenyl	*93.9*			*18.0-148*		*06/07/2022 10:42*	WG1874699

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.00252	0.00658	1	06/10/2022 13:00	WG1876959
Acenaphthene	0.384		0.00229	0.00658	1	06/10/2022 13:00	WG1876959
Acenaphthylene	U		0.00237	0.00658	1	06/10/2022 13:00	WG1876959
Benzo(a)anthracene	0.159		0.00190	0.00658	1	06/10/2022 13:00	WG1876959
Benzo(a)pyrene	0.146		0.00196	0.00658	1	06/10/2022 13:00	WG1876959
Benzo(b)fluoranthene	0.163		0.00168	0.00658	1	06/10/2022 13:00	WG1876959
Benzo(g,h,i)perylene	0.131		0.00194	0.00658	1	06/10/2022 13:00	WG1876959
Benzo(k)fluoranthene	0.0503		0.00236	0.00658	1	06/10/2022 13:00	WG1876959
Chrysene	0.129		0.00254	0.00658	1	06/10/2022 13:00	WG1876959
Dibenz(a,h)anthracene	0.0447		0.00189	0.00658	1	06/10/2022 13:00	WG1876959
Fluoranthene	0.396		0.00249	0.00658	1	06/10/2022 13:00	WG1876959
Fluorene	0.557		0.00225	0.00658	1	06/10/2022 13:00	WG1876959
Indeno(1,2,3-cd)pyrene	0.0944		0.00199	0.00658	1	06/10/2022 13:00	WG1876959
Naphthalene	0.134		0.00447	0.0219	1	06/10/2022 13:00	WG1876959
Phenanthrene	2.17		0.00253	0.00658	1	06/10/2022 13:00	WG1876959
Pyrene	0.466		0.00219	0.00658	1	06/10/2022 13:00	WG1876959
1-Methylnaphthalene	2.88		0.00492	0.0219	1	06/10/2022 13:00	WG1876959
2-Methylnaphthalene	0.649		0.00468	0.0219	1	06/10/2022 13:00	WG1876959

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
2-Chloronaphthalene	U		0.00511	0.0219	1	06/10/2022 13:00	WG1876959
(S) Nitrobenzene-d5	*0.000*	J2		*14.0-149*		*06/10/2022 13:00*	WG1876959
(S) 2-Fluorobiphenyl	*55.3*			*34.0-125*		*06/10/2022 13:00*	WG1876959
(S) p-Terphenyl-d14	*90.4*			*23.0-120*		*06/10/2022 13:00*	WG1876959

Sample Narrative:

L1499430-09 WG1876959: Surrogate failure due to matrix interference

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U		0.0113	0.0500	1	06/07/2022 09:14	WG1875267
Acrolein	U		0.00254	0.0500	1	06/07/2022 09:14	WG1875267
Acrylonitrile	U		0.000671	0.0100	1	06/07/2022 09:14	WG1875267
Benzene	U		0.0000941	0.00100	1	06/07/2022 09:14	WG1875267
Bromobenzene	U		0.000118	0.00100	1	06/07/2022 09:14	WG1875267
Bromodichloromethane	U		0.000136	0.00100	1	06/07/2022 09:14	WG1875267
Bromoform	U		0.000129	0.00100	1	06/07/2022 09:14	WG1875267
Bromomethane	U		0.000605	0.00500	1	06/07/2022 09:14	WG1875267
n-Butylbenzene	U		0.000157	0.00100	1	06/07/2022 09:14	WG1875267
sec-Butylbenzene	U		0.000125	0.00100	1	06/07/2022 09:14	WG1875267
tert-Butylbenzene	U		0.000127	0.00100	1	06/07/2022 09:14	WG1875267
Carbon tetrachloride	U		0.000128	0.00100	1	06/07/2022 09:14	WG1875267
Chlorobenzene	U		0.000116	0.00100	1	06/07/2022 09:14	WG1875267
Chlorodibromomethane	U		0.000140	0.00100	1	06/07/2022 09:14	WG1875267
Chloroethane	U		0.000192	0.00500	1	06/07/2022 09:14	WG1875267
Chloroform	U		0.000111	0.00500	1	06/07/2022 09:14	WG1875267
Chloromethane	U		0.000960	0.00250	1	06/07/2022 09:14	WG1875267
2-Chlorotoluene	U		0.000106	0.00100	1	06/07/2022 09:14	WG1875267
4-Chlorotoluene	U		0.000114	0.00100	1	06/07/2022 09:14	WG1875267
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	06/07/2022 09:14	WG1875267
1,2-Dibromoethane	U		0.000126	0.00100	1	06/07/2022 09:14	WG1875267
Dibromomethane	U		0.000122	0.00100	1	06/07/2022 09:14	WG1875267
1,2-Dichlorobenzene	U		0.000107	0.00100	1	06/07/2022 09:14	WG1875267
1,3-Dichlorobenzene	U		0.000110	0.00100	1	06/07/2022 09:14	WG1875267
1,4-Dichlorobenzene	U		0.000120	0.00100	1	06/07/2022 09:14	WG1875267
Dichlorodifluoromethane	U		0.000374	0.00500	1	06/07/2022 09:14	WG1875267
1,1-Dichloroethane	U		0.000100	0.00100	1	06/07/2022 09:14	WG1875267
1,2-Dichloroethane	U		0.0000819	0.00100	1	06/07/2022 09:14	WG1875267
1,1-Dichloroethene	U		0.000188	0.00100	1	06/07/2022 09:14	WG1875267
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	06/07/2022 09:14	WG1875267
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	06/07/2022 09:14	WG1875267
1,2-Dichloropropane	U		0.000149	0.00100	1	06/07/2022 09:14	WG1875267
1,1-Dichloropropene	U		0.000142	0.00100	1	06/07/2022 09:14	WG1875267
1,3-Dichloropropane	U		0.000110	0.00100	1	06/07/2022 09:14	WG1875267
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	06/07/2022 09:14	WG1875267
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	06/07/2022 09:14	WG1875267
2,2-Dichloropropane	U		0.000161	0.00100	1	06/07/2022 09:14	WG1875267
Ethylbenzene	U		0.000137	0.00100	1	06/07/2022 09:14	WG1875267
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	06/07/2022 09:14	WG1875267
n-Hexane	U		0.000749	0.0100	1	06/07/2022 09:14	WG1875267
Isopropylbenzene	U		0.000105	0.00100	1	06/07/2022 09:14	WG1875267
p-Isopropyltoluene	U		0.000120	0.00100	1	06/07/2022 09:14	WG1875267
2-Butanone (MEK)	U		0.00119	0.0100	1	06/07/2022 09:14	WG1875267
Methylene Chloride	U		0.000430	0.00500	1	06/07/2022 09:14	WG1875267
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	06/07/2022 09:14	WG1875267
Methyl tert-butyl ether	U		0.000101	0.00100	1	06/07/2022 09:14	WG1875267
Naphthalene	U		0.00100	0.00500	1	06/07/2022 09:14	WG1875267
n-Propylbenzene	U		0.0000993	0.00100	1	06/07/2022 09:14	WG1875267
Styrene	U		0.000118	0.00100	1	06/07/2022 09:14	WG1875267
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	06/07/2022 09:14	WG1875267
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	06/07/2022 09:14	WG1875267
Tetrachloroethene	U		0.000300	0.00100	1	06/07/2022 09:14	WG1875267
Toluene	U		0.000278	0.00100	1	06/07/2022 09:14	WG1875267
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	06/07/2022 09:14	WG1875267
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	06/07/2022 09:14	WG1875267
1,1,1-Trichloroethane	U		0.000149	0.00100	1	06/07/2022 09:14	WG1875267

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
1,1,2-Trichloroethane	U		0.000158	0.00100	1	06/07/2022 09:14	WG1875267
Trichloroethene	U		0.000190	0.00100	1	06/07/2022 09:14	WG1875267
Trichlorofluoromethane	U		0.000160	0.00500	1	06/07/2022 09:14	WG1875267
1,2,3-Trichloropropane	U		0.000237	0.00250	1	06/07/2022 09:14	WG1875267
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	06/07/2022 09:14	WG1875267
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	06/07/2022 09:14	WG1875267
Vinyl chloride	U		0.000234	0.00100	1	06/07/2022 09:14	WG1875267
Xylenes, Total	U		0.000174	0.00300	1	06/07/2022 09:14	WG1875267
(S) Toluene-d8	*110*			*80.0-120*		*06/07/2022 09:14*	WG1875267
(S) 4-Bromofluorobenzene	*98.4*			*77.0-126*		*06/07/2022 09:14*	WG1875267
(S) 1,2-Dichloroethane-d4	*122*			*70.0-130*		*06/07/2022 09:14*	WG1875267

Method Blank (MB)

(MB) R3800152-1 06/06/22 14:08

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1499430-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1499430-03 06/06/22 14:08 • (DUP) R3800152-3 06/06/22 14:08

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	89.6	86.7	1	3.27		10

Laboratory Control Sample (LCS)

(LCS) R3800152-2 06/06/22 14:08

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3799764-2 06/04/22 09:17

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPHG C6 - C12	U		0.0339	0.100
(S) a,a,a-Trifluorotoluene(FID)	*110*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3799764-1 06/04/22 08:33

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPHG C6 - C12	5.50	4.97	90.4	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*101*	*77.0-120*	

L1499085-15 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1499085-15 06/04/22 10:00 • (MS) R3799764-3 06/04/22 16:50 • (MSD) R3799764-4 06/04/22 17:11

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPHG C6 - C12	5.45	0.376	4.45	4.74	74.8	78.5	1	10.0-149			6.31	27
(S) a,a,a-Trifluorotoluene(FID)					*99.4*	*102*		*77.0-120*				

Method Blank (MB)

(MB) R3799722-2 06/05/22 20:12

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPHG C6 - C12	1.13	J	0.848	2.50
(S) a,a,a-Trifluorotoluene(FID)	*101*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3799722-1 06/05/22 19:12

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPHG C6 - C12	5.50	5.12	93.1	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*109*	*77.0-120*	

Method Blank (MB)

(MB) R3800090-2 06/06/22 11:12

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPHG C6 - C12	U		0.0339	0.100
(S) a,a,a-Trifluorotoluene(FID)	*101*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3800090-1 06/06/22 10:24

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPHG C6 - C12	5.50	5.66	103	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*104*	*77.0-120*	

Method Blank (MB)

(MB) R3799974-4 06/06/22 09:16

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPHG C6 - C12	U		0.848	2.50
(S) a,a,a-Trifluorotoluene(FID)	*109*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3799974-2 06/06/22 07:50

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPHG C6 - C12	5.50	4.62	84.0	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*99.6*	*77.0-120*	

Method Blank (MB)

(MB) R3800662-2 06/07/22 14:20

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0365	0.0500
Acrylonitrile	U		0.00361	0.0125
Benzene	U		0.000467	0.00100
Bromobenzene	U		0.000900	0.0125
Bromodichloromethane	U		0.000725	0.00250
Bromoform	U		0.00117	0.0250
Bromomethane	U		0.00197	0.0125
n-Butylbenzene	U		0.00525	0.0125
sec-Butylbenzene	U		0.00288	0.0125
tert-Butylbenzene	U		0.00195	0.00500
Carbon tetrachloride	U		0.000898	0.00500
Chlorobenzene	U		0.000210	0.00250
Chlorodibromomethane	U		0.000612	0.00250
Chloroethane	U		0.00170	0.00500
Chloroform	U		0.00103	0.00250
Chloromethane	U		0.00435	0.0125
2-Chlorotoluene	U		0.000865	0.00250
4-Chlorotoluene	U		0.000450	0.00500
1,2-Dibromo-3-Chloropropane	U		0.00390	0.0250
1,2-Dibromoethane	U		0.000648	0.00250
Dibromomethane	U		0.000750	0.00500
1,2-Dichlorobenzene	U		0.000425	0.00500
1,3-Dichlorobenzene	U		0.000600	0.00500
1,4-Dichlorobenzene	U		0.000700	0.00500
Dichlorodifluoromethane	U		0.00161	0.00250
1,1-Dichloroethane	U		0.000491	0.00250
1,2-Dichloroethane	U		0.000649	0.00250
1,1-Dichloroethene	U		0.000606	0.00250
cis-1,2-Dichloroethene	U		0.000734	0.00250
trans-1,2-Dichloroethene	U		0.00104	0.00500
1,2-Dichloropropane	U		0.00142	0.00500
1,1-Dichloropropene	U		0.000809	0.00250
1,3-Dichloropropane	U		0.000501	0.00500
cis-1,3-Dichloropropene	U		0.000757	0.00250
trans-1,3-Dichloropropene	U		0.00114	0.00500
2,2-Dichloropropane	U		0.00138	0.00250
Ethylbenzene	U		0.000737	0.00250
Hexachloro-1,3-butadiene	U		0.00600	0.0250
n-Hexane	U		0.00226	0.00500
Isopropylbenzene	U		0.000425	0.00250

Method Blank (MB)

(MB) R3800662-2 06/07/22 14:20

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00255	0.00500
2-Butanone (MEK)	U		0.0635	0.100
Methylene Chloride	U		0.00664	0.0250
4-Methyl-2-pentanone (MIBK)	U		0.00228	0.0250
Methyl tert-butyl ether	U		0.000350	0.00100
Naphthalene	U		0.00488	0.0125
n-Propylbenzene	U		0.000950	0.00500
Styrene	U		0.000229	0.0125
1,1,1,2-Tetrachloroethane	U		0.000948	0.00250
1,1,2,2-Tetrachloroethane	U		0.000695	0.00250
Tetrachloroethene	U		0.000896	0.00250
Toluene	U		0.00130	0.00500
1,2,3-Trichlorobenzene	U		0.00733	0.0125
1,2,4-Trichlorobenzene	U		0.00440	0.0125
1,1,1-Trichloroethane	U		0.000923	0.00250
1,1,2-Trichloroethane	U		0.000597	0.00250
Trichloroethene	U		0.000584	0.00100
Trichlorofluoromethane	U		0.000827	0.00250
1,2,3-Trichloropropane	U		0.00162	0.0125
1,2,4-Trimethylbenzene	U		0.00158	0.00500
1,3,5-Trimethylbenzene	U		0.00200	0.00500
Vinyl chloride	U		0.00116	0.00250
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	*99.5*			*75.0-131*
(S) 4-Bromofluorobenzene	*104*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*98.6*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3800662-1 06/07/22 11:15

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.625	0.666	107	10.0-160	
Acrylonitrile	0.625	0.640	102	45.0-153	
Benzene	0.125	0.118	94.4	70.0-123	
Bromobenzene	0.125	0.104	83.2	73.0-121	
Bromodichloromethane	0.125	0.122	97.6	73.0-121	
Bromoform	0.125	0.113	90.4	64.0-132	
Bromomethane	0.125	0.102	81.6	56.0-147	

Laboratory Control Sample (LCS)

(LCS) R3800662-1 06/07/22 11:15

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
n-Butylbenzene	0.125	0.117	93.6	68.0-135	
sec-Butylbenzene	0.125	0.107	85.6	74.0-130	
tert-Butylbenzene	0.125	0.0988	79.0	75.0-127	
Carbon tetrachloride	0.125	0.129	103	66.0-128	
Chlorobenzene	0.125	0.118	94.4	76.0-128	
Chlorodibromomethane	0.125	0.115	92.0	74.0-127	
Chloroethane	0.125	0.138	110	61.0-134	
Chloroform	0.125	0.126	101	72.0-123	
Chloromethane	0.125	0.130	104	51.0-138	
2-Chlorotoluene	0.125	0.102	81.6	75.0-124	
4-Chlorotoluene	0.125	0.0982	78.6	75.0-124	
1,2-Dibromo-3-Chloropropane	0.125	0.109	87.2	59.0-130	
1,2-Dibromoethane	0.125	0.114	91.2	74.0-128	
Dibromomethane	0.125	0.121	96.8	75.0-122	
1,2-Dichlorobenzene	0.125	0.124	99.2	76.0-124	
1,3-Dichlorobenzene	0.125	0.120	96.0	76.0-125	
1,4-Dichlorobenzene	0.125	0.115	92.0	77.0-121	
Dichlorodifluoromethane	0.125	0.119	95.2	43.0-156	
1,1-Dichloroethane	0.125	0.116	92.8	70.0-127	
1,2-Dichloroethane	0.125	0.127	102	65.0-131	
1,1-Dichloroethene	0.125	0.118	94.4	65.0-131	
cis-1,2-Dichloroethene	0.125	0.128	102	73.0-125	
trans-1,2-Dichloroethene	0.125	0.132	106	71.0-125	
1,2-Dichloropropane	0.125	0.111	88.8	74.0-125	
1,1-Dichloropropene	0.125	0.136	109	73.0-125	
1,3-Dichloropropane	0.125	0.112	89.6	80.0-125	
cis-1,3-Dichloropropene	0.125	0.118	94.4	76.0-127	
trans-1,3-Dichloropropene	0.125	0.109	87.2	73.0-127	
2,2-Dichloropropane	0.125	0.152	122	59.0-135	
Ethylbenzene	0.125	0.118	94.4	74.0-126	
Hexachloro-1,3-butadiene	0.125	0.172	138	57.0-150	
n-Hexane	0.125	0.122	97.6	55.0-137	
Isopropylbenzene	0.125	0.132	106	72.0-127	
p-Isopropyltoluene	0.125	0.102	81.6	72.0-133	
2-Butanone (MEK)	0.625	0.574	91.8	30.0-160	
Methylene Chloride	0.125	0.122	97.6	68.0-123	
4-Methyl-2-pentanone (MIBK)	0.625	0.541	86.6	56.0-143	
Methyl tert-butyl ether	0.125	0.142	114	66.0-132	
Naphthalene	0.125	0.162	130	59.0-130	
n-Propylbenzene	0.125	0.105	84.0	74.0-126	

Laboratory Control Sample (LCS)

(LCS) R3800662-1 06/07/22 11:15

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Styrene	0.125	0.119	95.2	72.0-127	
1,1,1,2-Tetrachloroethane	0.125	0.125	100	74.0-129	
1,1,2,2-Tetrachloroethane	0.125	0.0997	79.8	68.0-128	
Tetrachloroethene	0.125	0.132	106	70.0-136	
Toluene	0.125	0.116	92.8	75.0-121	
1,2,3-Trichlorobenzene	0.125	0.168	134	59.0-139	
1,2,4-Trichlorobenzene	0.125	0.183	146	62.0-137	J4
1,1,1-Trichloroethane	0.125	0.147	118	69.0-126	
1,1,2-Trichloroethane	0.125	0.119	95.2	78.0-123	
Trichloroethene	0.125	0.142	114	76.0-126	
Trichlorofluoromethane	0.125	0.109	87.2	61.0-142	
1,2,3-Trichloropropane	0.125	0.104	83.2	67.0-129	
1,2,4-Trimethylbenzene	0.125	0.111	88.8	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.104	83.2	73.0-127	
Vinyl chloride	0.125	0.118	94.4	63.0-134	
Xylenes, Total	0.375	0.359	95.7	72.0-127	
(S) Toluene-d8			*96.1*	*75.0-131*	
(S) 4-Bromofluorobenzene			*109*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*103*	*70.0-130*	

Method Blank (MB)

(MB) R3800647-3 06/07/22 15:55

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0365	0.0500
Acrylonitrile	U		0.00361	0.0125
Benzene	U		0.000467	0.00100
Bromobenzene	U		0.000900	0.0125
Bromodichloromethane	U		0.000725	0.00250
Bromoform	U		0.00117	0.0250
Bromomethane	U		0.00197	0.0125
n-Butylbenzene	U		0.00525	0.0125
sec-Butylbenzene	U		0.00288	0.0125
tert-Butylbenzene	U		0.00195	0.00500
Carbon tetrachloride	U		0.000898	0.00500
Chlorobenzene	U		0.000210	0.00250
Chlorodibromomethane	U		0.000612	0.00250
Chloroethane	U		0.00170	0.00500
Chloroform	U		0.00103	0.00250
Chloromethane	U		0.00435	0.0125
2-Chlorotoluene	U		0.000865	0.00250
4-Chlorotoluene	U		0.000450	0.00500
1,2-Dibromo-3-Chloropropane	U		0.00390	0.0250
1,2-Dibromoethane	U		0.000648	0.00250
Dibromomethane	U		0.000750	0.00500
1,2-Dichlorobenzene	U		0.000425	0.00500
1,3-Dichlorobenzene	U		0.000600	0.00500
1,4-Dichlorobenzene	U		0.000700	0.00500
Dichlorodifluoromethane	U		0.00161	0.00250
1,1-Dichloroethane	U		0.000491	0.00250
1,2-Dichloroethane	U		0.000649	0.00250
1,1-Dichloroethene	U		0.000606	0.00250
cis-1,2-Dichloroethene	U		0.000734	0.00250
trans-1,2-Dichloroethene	U		0.00104	0.00500
1,2-Dichloropropane	U		0.00142	0.00500
1,1-Dichloropropene	U		0.000809	0.00250
1,3-Dichloropropane	U		0.000501	0.00500
cis-1,3-Dichloropropene	U		0.000757	0.00250
trans-1,3-Dichloropropene	U		0.00114	0.00500
2,2-Dichloropropane	U		0.00138	0.00250
Ethylbenzene	U		0.000737	0.00250
Hexachloro-1,3-butadiene	U		0.00600	0.0250
n-Hexane	U		0.00226	0.00500
Isopropylbenzene	U		0.000425	0.00250

Method Blank (MB)

(MB) R3800647-3 06/07/22 15:55

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00255	0.00500
2-Butanone (MEK)	U		0.0635	0.100
Methylene Chloride	0.00790	J	0.00664	0.0250
4-Methyl-2-pentanone (MIBK)	U		0.00228	0.0250
Methyl tert-butyl ether	U		0.000350	0.00100
Naphthalene	U		0.00488	0.0125
n-Propylbenzene	U		0.000950	0.00500
Styrene	U		0.000229	0.0125
1,1,1,2-Tetrachloroethane	U		0.000948	0.00250
1,1,2,2-Tetrachloroethane	U		0.000695	0.00250
Tetrachloroethene	U		0.000896	0.00250
Toluene	U		0.00130	0.00500
1,2,3-Trichlorobenzene	U		0.00733	0.0125
1,2,4-Trichlorobenzene	U		0.00440	0.0125
1,1,1-Trichloroethane	U		0.000923	0.00250
1,1,2-Trichloroethane	U		0.000597	0.00250
Trichloroethene	U		0.000584	0.00100
Trichlorofluoromethane	U		0.000827	0.00250
1,2,3-Trichloropropane	U		0.00162	0.0125
1,2,4-Trimethylbenzene	U		0.00158	0.00500
1,3,5-Trimethylbenzene	U		0.00200	0.00500
Vinyl chloride	U		0.00116	0.00250
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	*106*			*75.0-131*
(S) 4-Bromofluorobenzene	*97.5*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3800647-1 06/07/22 14:39 • (LCSD) R3800647-2 06/07/22 14:58

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.625	0.427	0.439	68.3	70.2	10.0-160			2.77	31
Acrylonitrile	0.625	0.484	0.457	77.4	73.1	45.0-153			5.74	22
Benzene	0.125	0.114	0.106	91.2	84.8	70.0-123			7.27	20
Bromobenzene	0.125	0.125	0.125	100	100	73.0-121			0.000	20
Bromodichloromethane	0.125	0.106	0.0991	84.8	79.3	73.0-121			6.73	20
Bromoform	0.125	0.0923	0.0979	73.8	78.3	64.0-132			5.89	20
Bromomethane	0.125	0.102	0.0902	81.6	72.2	56.0-147			12.3	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3800647-1 06/07/22 14:39 • (LCSD) R3800647-2 06/07/22 14:58

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
n-Butylbenzene	0.125	0.101	0.102	80.8	81.6	68.0-135			0.985	20
sec-Butylbenzene	0.125	0.108	0.108	86.4	86.4	74.0-130			0.000	20
tert-Butylbenzene	0.125	0.112	0.111	89.6	88.8	75.0-127			0.897	20
Carbon tetrachloride	0.125	0.117	0.109	93.6	87.2	66.0-128			7.08	20
Chlorobenzene	0.125	0.113	0.109	90.4	87.2	76.0-128			3.60	20
Chlorodibromomethane	0.125	0.107	0.104	85.6	83.2	74.0-127			2.84	20
Chloroethane	0.125	0.121	0.108	96.8	86.4	61.0-134			11.4	20
Chloroform	0.125	0.115	0.107	92.0	85.6	72.0-123			7.21	20
Chloromethane	0.125	0.112	0.104	89.6	83.2	51.0-138			7.41	20
2-Chlorotoluene	0.125	0.115	0.117	92.0	93.6	75.0-124			1.72	20
4-Chlorotoluene	0.125	0.111	0.111	88.8	88.8	75.0-124			0.000	20
1,2-Dibromo-3-Chloropropane	0.125	0.0920	0.0892	73.6	71.4	59.0-130			3.09	20
1,2-Dibromoethane	0.125	0.110	0.114	88.0	91.2	74.0-128			3.57	20
Dibromomethane	0.125	0.113	0.108	90.4	86.4	75.0-122			4.52	20
1,2-Dichlorobenzene	0.125	0.109	0.108	87.2	86.4	76.0-124			0.922	20
1,3-Dichlorobenzene	0.125	0.112	0.112	89.6	89.6	76.0-125			0.000	20
1,4-Dichlorobenzene	0.125	0.111	0.115	88.8	92.0	77.0-121			3.54	20
Dichlorodifluoromethane	0.125	0.113	0.104	90.4	83.2	43.0-156			8.29	20
1,1-Dichloroethane	0.125	0.121	0.114	96.8	91.2	70.0-127			5.96	20
1,2-Dichloroethane	0.125	0.120	0.116	96.0	92.8	65.0-131			3.39	20
1,1-Dichloroethene	0.125	0.133	0.124	106	99.2	65.0-131			7.00	20
cis-1,2-Dichloroethene	0.125	0.113	0.109	90.4	87.2	73.0-125			3.60	20
trans-1,2-Dichloroethene	0.125	0.116	0.111	92.8	88.8	71.0-125			4.41	20
1,2-Dichloropropane	0.125	0.120	0.111	96.0	88.8	74.0-125			7.79	20
1,1-Dichloropropene	0.125	0.117	0.108	93.6	86.4	73.0-125			8.00	20
1,3-Dichloropropane	0.125	0.118	0.116	94.4	92.8	80.0-125			1.71	20
cis-1,3-Dichloropropene	0.125	0.115	0.111	92.0	88.8	76.0-127			3.54	20
trans-1,3-Dichloropropene	0.125	0.115	0.114	92.0	91.2	73.0-127			0.873	20
2,2-Dichloropropane	0.125	0.0967	0.0890	77.4	71.2	59.0-135			8.29	20
Ethylbenzene	0.125	0.112	0.107	89.6	85.6	74.0-126			4.57	20
Hexachloro-1,3-butadiene	0.125	0.105	0.101	84.0	80.8	57.0-150			3.88	20
n-Hexane	0.125	0.113	0.108	90.4	86.4	55.0-137			4.52	20
Isopropylbenzene	0.125	0.103	0.0992	82.4	79.4	72.0-127			3.76	20
p-Isopropyltoluene	0.125	0.106	0.106	84.8	84.8	72.0-133			0.000	20
2-Butanone (MEK)	0.625	0.545	0.545	87.2	87.2	30.0-160			0.000	24
Methylene Chloride	0.125	0.109	0.0998	87.2	79.8	68.0-123			8.81	20
4-Methyl-2-pentanone (MIBK)	0.625	0.525	0.535	84.0	85.6	56.0-143			1.89	20
Methyl tert-butyl ether	0.125	0.106	0.106	84.8	84.8	66.0-132			0.000	20
Naphthalene	0.125	0.0698	0.0720	55.8	57.6	59.0-130	J4	J4	3.10	20
n-Propylbenzene	0.125	0.109	0.109	87.2	87.2	74.0-126			0.000	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3800647-1 06/07/22 14:39 • (LCSD) R3800647-2 06/07/22 14:58

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Styrene	0.125	0.105	0.104	84.0	83.2	72.0-127			0.957	20
1,1,1,2-Tetrachloroethane	0.125	0.106	0.107	84.8	85.6	74.0-129			0.939	20
1,1,2,2-Tetrachloroethane	0.125	0.117	0.119	93.6	95.2	68.0-128			1.69	20
Tetrachloroethene	0.125	0.113	0.108	90.4	86.4	70.0-136			4.52	20
Toluene	0.125	0.112	0.109	89.6	87.2	75.0-121			2.71	20
1,2,3-Trichlorobenzene	0.125	0.0774	0.0774	61.9	61.9	59.0-139			0.000	20
1,2,4-Trichlorobenzene	0.125	0.0779	0.0786	62.3	62.9	62.0-137			0.895	20
1,1,1-Trichloroethane	0.125	0.121	0.111	96.8	88.8	69.0-126			8.62	20
1,1,2-Trichloroethane	0.125	0.114	0.111	91.2	88.8	78.0-123			2.67	20
Trichloroethene	0.125	0.109	0.103	87.2	82.4	76.0-126			5.66	20
Trichlorofluoromethane	0.125	0.110	0.0996	88.0	79.7	61.0-142			9.92	20
1,2,3-Trichloropropane	0.125	0.126	0.122	101	97.6	67.0-129			3.23	20
1,2,4-Trimethylbenzene	0.125	0.101	0.0996	80.8	79.7	70.0-126			1.40	20
1,3,5-Trimethylbenzene	0.125	0.111	0.109	88.8	87.2	73.0-127			1.82	20
Vinyl chloride	0.125	0.126	0.115	101	92.0	63.0-134			9.13	20
Xylenes, Total	0.375	0.317	0.307	84.5	81.9	72.0-127			3.21	20
(S) Toluene-d8				*104*	*104*	*75.0-131*				
(S) 4-Bromofluorobenzene				*95.7*	*95.6*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*106*	*103*	*70.0-130*				

L1499430-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1499430-07 06/07/22 20:33 • (MS) R3800647-4 06/08/22 00:21 • (MSD) R3800647-5 06/08/22 00:40

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	1.59	U	2.54	2.60	160	163	2	10.0-160		J5	1.98	40
Acrylonitrile	1.59	U	1.22	1.34	76.5	84.0	2	10.0-160			9.37	40
Benzene	0.318	1.06	1.34	1.43	87.6	116	2	10.0-149			6.45	37
Bromobenzene	0.318	U	0.316	0.331	99.2	104	2	10.0-156			4.72	38
Bromodichloromethane	0.318	U	0.202	0.252	63.6	79.2	2	10.0-143			21.8	37
Bromoform	0.318	U	0.318	0.360	100	113	2	10.0-146			12.4	36
Bromomethane	0.318	U	0.0691	0.106	21.7	33.4	2	10.0-149		J3	42.4	38
n-Butylbenzene	0.318	0.177	0.429	0.415	79.2	74.8	2	10.0-160			3.32	40
sec-Butylbenzene	0.318	0.254	0.592	0.556	106	94.8	2	10.0-159			6.21	39
tert-Butylbenzene	0.318	0.0629	0.361	0.365	93.8	95.0	2	10.0-156			1.05	39
Carbon tetrachloride	0.318	U	0.173	0.289	54.4	90.8	2	10.0-145		J3	50.1	37
Chlorobenzene	0.318	U	0.326	0.397	102	125	2	10.0-152			19.7	39
Chlorodibromomethane	0.318	U	0.295	0.354	92.8	111	2	10.0-146			18.0	37
Chloroethane	0.318	U	0.0464	0.0756	14.6	23.8	2	10.0-146		J3	47.8	40

L1499430-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1499430-07 06/07/22 20:33 • (MS) R3800647-4 06/08/22 00:21 • (MSD) R3800647-5 06/08/22 00:40

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloroform	0.318	U	0.216	0.294	68.0	92.4	2	10.0-146			30.4	37
Chloromethane	0.318	U	0.149	0.226	46.8	71.2	2	10.0-159		J3	41.4	37
2-Chlorotoluene	0.318	U	0.364	0.374	114	118	2	10.0-159			2.76	38
4-Chlorotoluene	0.318	U	0.277	0.310	87.2	97.6	2	10.0-155			11.3	39
1,2-Dibromo-3-Chloropropane	0.318	U	0.317	0.274	99.6	86.0	2	10.0-151			14.7	39
1,2-Dibromoethane	0.318	U	0.333	0.378	105	119	2	10.0-148			12.5	34
Dibromomethane	0.318	U	0.261	0.298	82.0	93.6	2	10.0-147			13.2	35
1,2-Dichlorobenzene	0.318	U	0.295	0.291	92.8	91.6	2	10.0-155			1.30	37
1,3-Dichlorobenzene	0.318	U	0.282	0.296	88.8	93.2	2	10.0-153			4.84	38
1,4-Dichlorobenzene	0.318	U	0.285	0.288	89.6	90.4	2	10.0-151			0.889	38
Dichlorodifluoromethane	0.318	U	0.125	0.224	39.2	70.4	2	10.0-160		J3	57.0	35
1,1-Dichloroethane	0.318	U	0.201	0.295	63.2	92.8	2	10.0-147		J3	37.9	37
1,2-Dichloroethane	0.318	U	0.221	0.258	69.6	81.2	2	10.0-148			15.4	35
1,1-Dichloroethene	0.318	U	0.187	0.294	58.8	92.4	2	10.0-155		J3	44.4	37
cis-1,2-Dichloroethene	0.318	U	0.212	0.291	66.8	91.6	2	10.0-149			31.3	37
trans-1,2-Dichloroethene	0.318	U	0.182	0.282	57.2	88.8	2	10.0-150		J3	43.3	37
1,2-Dichloropropane	0.318	U	0.206	0.295	64.8	92.8	2	10.0-148			35.5	37
1,1-Dichloropropene	0.318	U	0.218	0.317	68.4	99.6	2	10.0-153		J3	37.1	35
1,3-Dichloropropane	0.318	U	0.310	0.360	97.6	113	2	10.0-154			14.8	35
cis-1,3-Dichloropropene	0.318	U	0.235	0.290	74.0	91.2	2	10.0-151			20.8	37
trans-1,3-Dichloropropene	0.318	U	0.279	0.338	87.6	106	2	10.0-148			19.4	37
2,2-Dichloropropane	0.318	U	0.116	0.179	36.5	56.4	2	10.0-138		J3	42.8	36
Ethylbenzene	0.318	0.321	0.695	0.823	118	158	2	10.0-160			16.9	38
Hexachloro-1,3-butadiene	0.318	U	0.420	0.383	132	120	2	10.0-160			9.19	40
n-Hexane	0.318	0.645	0.879	0.905	73.6	81.6	2	10.0-157			2.85	37
Isopropylbenzene	0.318	0.256	0.604	0.715	110	144	2	10.0-155			16.8	38
p-Isopropyltoluene	0.318	0.115	0.503	0.485	122	116	2	10.0-160			3.61	40
2-Butanone (MEK)	1.59	U	2.20	2.23	138	140	2	10.0-160			1.15	40
Methylene Chloride	0.318	U	0.229	0.298	72.0	93.6	2	10.0-141			26.1	37
4-Methyl-2-pentanone (MIBK)	1.59	U	2.19	2.44	138	154	2	10.0-160			11.0	35
Methyl tert-butyl ether	0.318	U	0.248	0.272	78.0	85.6	2	11.0-147			9.29	35
Naphthalene	0.318	0.714	1.15	0.950	138	74.4	2	10.0-160			19.2	36
n-Propylbenzene	0.318	0.420	0.735	0.691	99.2	85.2	2	10.0-158			6.24	38
Styrene	0.318	U	0.294	0.386	92.4	121	2	10.0-160			27.0	40
1,1,1,2-Tetrachloroethane	0.318	U	0.270	0.356	84.8	112	2	10.0-149			27.6	39
1,1,2,2-Tetrachloroethane	0.318	U	3.21	2.68	1010	844	2	10.0-160	J5	J5	17.7	35
Tetrachloroethene	0.318	U	0.224	0.355	70.4	112	2	10.0-156		J3	45.3	39
Toluene	0.318	0.220	0.547	0.659	103	138	2	10.0-156			18.6	38
1,2,3-Trichlorobenzene	0.318	U	0.216	0.196	68.0	61.6	2	10.0-160			9.88	40

L1499430-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1499430-07 06/07/22 20:33 • (MS) R3800647-4 06/08/22 00:21 • (MSD) R3800647-5 06/08/22 00:40

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
1,2,4-Trichlorobenzene	0.318	U	0.293	0.265	92.0	83.2	2	10.0-160			10.0	40
1,1,1-Trichloroethane	0.318	U	0.178	0.288	56.0	90.4	2	10.0-144		J3	47.0	35
1,1,2-Trichloroethane	0.318	U	1.39	1.41	436	444	2	10.0-160	J5	J5	1.82	35
Trichloroethene	0.318	U	0.205	0.298	64.4	93.6	2	10.0-156			37.0	38
Trichlorofluoromethane	0.318	U	0.0802	0.117	25.2	36.8	2	10.0-160			37.3	40
1,2,3-Trichloropropane	0.318	U	0.962	0.697	302	219	2	10.0-156	J5	J5	31.9	35
1,2,4-Trimethylbenzene	0.318	1.19	1.67	1.41	150	70.4	2	10.0-160			16.5	36
1,3,5-Trimethylbenzene	0.318	0.186	0.529	0.487	108	94.8	2	10.0-160			8.26	38
Vinyl chloride	0.318	U	0.135	0.238	42.4	74.8	2	10.0-160		J3	55.3	37
Xylenes, Total	0.954	0.948	2.16	2.48	127	161	2	10.0-160		J5	13.7	38
(S) Toluene-d8					*136*	*140*		*75.0-131*	J1	J1		
(S) 4-Bromofluorobenzene					*256*	*262*		*67.0-138*	J1	J1		
(S) 1,2-Dichloroethane-d4					*90.3*	*90.2*		*70.0-130*				

Sample Narrative:

OS: Surrogate failure due to matrix interference.

Method Blank (MB)

(MB) R3801044-3 06/08/22 14:11

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
1,2,4-Trimethylbenzene	U		0.00158	0.00500
(S) Toluene-d8	*98.5*			*75.0-131*
(S) 4-Bromofluorobenzene	*91.7*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3801044-1 06/08/22 12:53 • (LCSD) R3801044-2 06/08/22 13:12

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,2,4-Trimethylbenzene	0.125	0.112	0.102	89.6	81.6	70.0-126			9.35	20
(S) Toluene-d8				*99.1*	*98.4*	*75.0-131*				
(S) 4-Bromofluorobenzene				*94.6*	*94.7*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*113*	*119*	*70.0-130*				

Method Blank (MB)

(MB) R3800717-2 06/07/22 05:53

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Naphthalene	U		0.00488	0.0125
(S) Toluene-d8	*115*			*75.0-131*
(S) 4-Bromofluorobenzene	*99.3*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*89.4*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3800717-1 06/07/22 04:57

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Naphthalene	0.125	0.109	87.2	59.0-130	
(S) Toluene-d8			*110*	*75.0-131*	
(S) 4-Bromofluorobenzene			*85.3*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*92.7*	*70.0-130*	

Method Blank (MB)

(MB) R3800628-4 06/07/22 08:32

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0113	0.0500
Acrolein	U		0.00254	0.0500
Acrylonitrile	U		0.000671	0.0100
Benzene	U		0.0000941	0.00100
Bromobenzene	U		0.000118	0.00100
Bromodichloromethane	U		0.000136	0.00100
Bromoform	U		0.000129	0.00100
Bromomethane	U		0.000605	0.00500
n-Butylbenzene	U		0.000157	0.00100
sec-Butylbenzene	U		0.000125	0.00100
tert-Butylbenzene	U		0.000127	0.00100
Carbon tetrachloride	U		0.000128	0.00100
Chlorobenzene	U		0.000116	0.00100
Chlorodibromomethane	U		0.000140	0.00100
Chloroethane	U		0.000192	0.00500
Chloroform	U		0.000111	0.00500
Chloromethane	U		0.000960	0.00250
2-Chlorotoluene	U		0.000106	0.00100
4-Chlorotoluene	U		0.000114	0.00100
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500
1,2-Dibromoethane	U		0.000126	0.00100
Dibromomethane	U		0.000122	0.00100
1,2-Dichlorobenzene	U		0.000107	0.00100
1,3-Dichlorobenzene	U		0.000110	0.00100
1,4-Dichlorobenzene	U		0.000120	0.00100
Dichlorodifluoromethane	U		0.000374	0.00500
1,1-Dichloroethane	U		0.000100	0.00100
1,2-Dichloroethane	U		0.0000819	0.00100
1,1-Dichloroethene	U		0.000188	0.00100
cis-1,2-Dichloroethene	U		0.000126	0.00100
trans-1,2-Dichloroethene	U		0.000149	0.00100
1,2-Dichloropropane	U		0.000149	0.00100
1,1-Dichloropropene	U		0.000142	0.00100
1,3-Dichloropropane	U		0.000110	0.00100
cis-1,3-Dichloropropene	U		0.000111	0.00100
trans-1,3-Dichloropropene	U		0.000118	0.00100
2,2-Dichloropropane	U		0.000161	0.00100
Ethylbenzene	U		0.000137	0.00100
Hexachloro-1,3-butadiene	U		0.000337	0.00100
n-Hexane	U		0.000749	0.0100

Method Blank (MB)

(MB) R3800628-4 06/07/22 08:32

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Isopropylbenzene	U		0.000105	0.00100
p-Isopropyltoluene	U		0.000120	0.00100
2-Butanone (MEK)	U		0.00119	0.0100
Methylene Chloride	U		0.000430	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100
Methyl tert-butyl ether	U		0.000101	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.0000993	0.00100
Styrene	U		0.000118	0.00100
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100
Tetrachloroethene	U		0.000300	0.00100
Toluene	U		0.000278	0.00100
1,2,3-Trichlorobenzene	U		0.000230	0.00100
1,2,4-Trichlorobenzene	U		0.000481	0.00100
1,1,1-Trichloroethane	U		0.000149	0.00100
1,1,2-Trichloroethane	U		0.000158	0.00100
Trichloroethene	U		0.000190	0.00100
Trichlorofluoromethane	U		0.000160	0.00500
1,2,3-Trichloropropane	U		0.000237	0.00250
1,2,4-Trimethylbenzene	U		0.000322	0.00100
1,3,5-Trimethylbenzene	U		0.000104	0.00100
Vinyl chloride	U		0.000234	0.00100
Xylenes, Total	U		0.000174	0.00300
(S) Toluene-d8	*109*			*80.0-120*
(S) 4-Bromofluorobenzene	*97.8*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*121*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3800628-1 06/07/22 07:09 • (LCSD) R3800628-2 06/07/22 07:30

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.0250	0.0317	0.0314	127	126	19.0-160			0.951	27
Acrolein	0.0250	0.0145	0.0137	58.0	54.8	10.0-160			5.67	26
Acrylonitrile	0.0250	0.0291	0.0286	116	114	55.0-149			1.73	20
Benzene	0.00500	0.00467	0.00467	93.4	93.4	70.0-123			0.000	20
Bromobenzene	0.00500	0.00489	0.00498	97.8	99.6	73.0-121			1.82	20
Bromodichloromethane	0.00500	0.00461	0.00434	92.2	86.8	75.0-120			6.03	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3800628-1 06/07/22 07:09 • (LCSD) R3800628-2 06/07/22 07:30

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromoform	0.00500	0.00403	0.00419	80.6	83.8	68.0-132			3.89	20
Bromomethane	0.00500	0.00184	0.00175	36.8	35.0	10.0-160			5.01	25
n-Butylbenzene	0.00500	0.00456	0.00461	91.2	92.2	73.0-125			1.09	20
sec-Butylbenzene	0.00500	0.00495	0.00515	99.0	103	75.0-125			3.96	20
tert-Butylbenzene	0.00500	0.00464	0.00471	92.8	94.2	76.0-124			1.50	20
Carbon tetrachloride	0.00500	0.00507	0.00486	101	97.2	68.0-126			4.23	20
Chlorobenzene	0.00500	0.00472	0.00483	94.4	96.6	80.0-121			2.30	20
Chlorodibromomethane	0.00500	0.00443	0.00452	88.6	90.4	77.0-125			2.01	20
Chloroethane	0.00500	0.00534	0.00528	107	106	47.0-150			1.13	20
Chloroform	0.00500	0.00495	0.00499	99.0	99.8	73.0-120			0.805	20
Chloromethane	0.00500	0.00486	0.00478	97.2	95.6	41.0-142			1.66	20
2-Chlorotoluene	0.00500	0.00496	0.00516	99.2	103	76.0-123			3.95	20
4-Chlorotoluene	0.00500	0.00482	0.00495	96.4	99.0	75.0-122			2.66	20
1,2-Dibromo-3-Chloropropane	0.00500	0.00364	0.00363	72.8	72.6	58.0-134			0.275	20
1,2-Dibromoethane	0.00500	0.00473	0.00482	94.6	96.4	80.0-122			1.88	20
Dibromomethane	0.00500	0.00477	0.00451	95.4	90.2	80.0-120			5.60	20
1,2-Dichlorobenzene	0.00500	0.00520	0.00530	104	106	79.0-121			1.90	20
1,3-Dichlorobenzene	0.00500	0.00490	0.00507	98.0	101	79.0-120			3.41	20
1,4-Dichlorobenzene	0.00500	0.00513	0.00503	103	101	79.0-120			1.97	20
Dichlorodifluoromethane	0.00500	0.00461	0.00454	92.2	90.8	51.0-149			1.53	20
1,1-Dichloroethane	0.00500	0.00546	0.00532	109	106	70.0-126			2.60	20
1,2-Dichloroethane	0.00500	0.00541	0.00530	108	106	70.0-128			2.05	20
1,1-Dichloroethene	0.00500	0.00463	0.00446	92.6	89.2	71.0-124			3.74	20
cis-1,2-Dichloroethene	0.00500	0.00468	0.00463	93.6	92.6	73.0-120			1.07	20
trans-1,2-Dichloroethene	0.00500	0.00468	0.00438	93.6	87.6	73.0-120			6.62	20
1,2-Dichloropropane	0.00500	0.00500	0.00500	100	100	77.0-125			0.000	20
1,1-Dichloropropene	0.00500	0.00507	0.00506	101	101	74.0-126			0.197	20
1,3-Dichloropropane	0.00500	0.00515	0.00506	103	101	80.0-120			1.76	20
cis-1,3-Dichloropropene	0.00500	0.00479	0.00477	95.8	95.4	80.0-123			0.418	20
trans-1,3-Dichloropropene	0.00500	0.00485	0.00477	97.0	95.4	78.0-124			1.66	20
2,2-Dichloropropane	0.00500	0.00469	0.00469	93.8	93.8	58.0-130			0.000	20
Ethylbenzene	0.00500	0.00471	0.00479	94.2	95.8	79.0-123			1.68	20
Hexachloro-1,3-butadiene	0.00500	0.00493	0.00526	98.6	105	54.0-138			6.48	20
n-Hexane	0.00500	0.00528	0.00520	106	104	57.0-133			1.53	20
Isopropylbenzene	0.00500	0.00449	0.00452	89.8	90.4	76.0-127			0.666	20
p-Isopropyltoluene	0.00500	0.00482	0.00479	96.4	95.8	76.0-125			0.624	20
2-Butanone (MEK)	0.0250	0.0295	0.0285	118	114	44.0-160			3.45	20
Methylene Chloride	0.00500	0.00488	0.00483	97.6	96.6	67.0-120			1.03	20
4-Methyl-2-pentanone (MIBK)	0.0250	0.0322	0.0321	129	128	68.0-142			0.311	20
Methyl tert-butyl ether	0.00500	0.00476	0.00456	95.2	91.2	68.0-125			4.29	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3800628-1 06/07/22 07:09 • (LCSD) R3800628-2 06/07/22 07:30

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Naphthalene	0.00500	0.00627	0.00553	125	111	54.0-135			12.5	20
n-Propylbenzene	0.00500	0.00504	0.00517	101	103	77.0-124			2.55	20
Styrene	0.00500	0.00424	0.00424	84.8	84.8	73.0-130			0.000	20
1,1,1,2-Tetrachloroethane	0.00500	0.00443	0.00450	88.6	90.0	75.0-125			1.57	20
1,1,2,2-Tetrachloroethane	0.00500	0.00437	0.00441	87.4	88.2	65.0-130			0.911	20
Tetrachloroethene	0.00500	0.00521	0.00491	104	98.2	72.0-132			5.93	20
Toluene	0.00500	0.00489	0.00494	97.8	98.8	79.0-120			1.02	20
1,2,3-Trichlorobenzene	0.00500	0.00557	0.00597	111	119	50.0-138			6.93	20
1,2,4-Trichlorobenzene	0.00500	0.00462	0.00468	92.4	93.6	57.0-137			1.29	20
1,1,1-Trichloroethane	0.00500	0.00513	0.00512	103	102	73.0-124			0.195	20
1,1,2-Trichloroethane	0.00500	0.00472	0.00464	94.4	92.8	80.0-120			1.71	20
Trichloroethene	0.00500	0.00506	0.00492	101	98.4	78.0-124			2.81	20
Trichlorofluoromethane	0.00500	0.00506	0.00498	101	99.6	59.0-147			1.59	20
1,2,3-Trichloropropane	0.00500	0.00476	0.00510	95.2	102	73.0-130			6.90	20
1,2,4-Trimethylbenzene	0.00500	0.00490	0.00491	98.0	98.2	76.0-121			0.204	20
1,3,5-Trimethylbenzene	0.00500	0.00514	0.00500	103	100	76.0-122			2.76	20
Vinyl chloride	0.00500	0.00541	0.00533	108	107	67.0-131			1.49	20
Xylenes, Total	0.0150	0.0139	0.0137	92.7	91.3	79.0-123			1.45	20
(S) Toluene-d8				*106*	*107*	*80.0-120*				
(S) 4-Bromofluorobenzene				*101*	*100*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*120*	*122*	*70.0-130*				

Method Blank (MB)

(MB) R3800073-1 06/06/22 17:43

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C20 Hydrocarbons	U		0.610	4.00
C20-C34 Hydrocarbons	U		0.611	4.00
(S) o-Terphenyl	*77.9*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3800073-2 06/06/22 17:56

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C20 Hydrocarbons	25.0	17.5	70.0	50.0-150	
C20-C34 Hydrocarbons	25.0	18.3	73.2	50.0-150	
(S) o-Terphenyl			*66.7*	*18.0-148*	

Method Blank (MB)

(MB) R3801805-2 06/09/22 14:42

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Anthracene	U		0.00230	0.00600
Acenaphthene	U		0.00209	0.00600
Acenaphthylene	U		0.00216	0.00600
Benzo(a)anthracene	U		0.00173	0.00600
Benzo(a)pyrene	U		0.00179	0.00600
Benzo(b)fluoranthene	U		0.00153	0.00600
Benzo(g,h,i)perylene	U		0.00177	0.00600
Benzo(k)fluoranthene	U		0.00215	0.00600
Chrysene	U		0.00232	0.00600
Dibenz(a,h)anthracene	U		0.00172	0.00600
Fluoranthene	U		0.00227	0.00600
Fluorene	U		0.00205	0.00600
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600
Naphthalene	U		0.00408	0.0200
Phenanthrene	U		0.00231	0.00600
Pyrene	U		0.00200	0.00600
1-Methylnaphthalene	U		0.00449	0.0200
2-Methylnaphthalene	U		0.00427	0.0200
2-Chloronaphthalene	U		0.00466	0.0200
(S) Nitrobenzene-d5	*94.1*			*14.0-149*
(S) 2-Fluorobiphenyl	*94.4*			*34.0-125*
(S) p-Terphenyl-d14	*110*			*23.0-120*

Laboratory Control Sample (LCS)

(LCS) R3801805-1 06/09/22 14:22

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0677	84.6	50.0-126	
Acenaphthene	0.0800	0.0726	90.8	50.0-120	
Acenaphthylene	0.0800	0.0747	93.4	50.0-120	
Benzo(a)anthracene	0.0800	0.0679	84.9	45.0-120	
Benzo(a)pyrene	0.0800	0.0640	80.0	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0733	91.6	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0700	87.5	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0706	88.3	49.0-125	
Chrysene	0.0800	0.0708	88.5	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0724	90.5	47.0-125	
Fluoranthene	0.0800	0.0712	89.0	49.0-129	

Laboratory Control Sample (LCS)

(LCS) R3801805-1 06/09/22 14:22

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluorene	0.0800	0.0734	91.8	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0732	91.5	46.0-125	
Naphthalene	0.0800	0.0715	89.4	50.0-120	
Phenanthrene	0.0800	0.0693	86.6	47.0-120	
Pyrene	0.0800	0.0685	85.6	43.0-123	
1-Methylnaphthalene	0.0800	0.0724	90.5	51.0-121	
2-Methylnaphthalene	0.0800	0.0693	86.6	50.0-120	
2-Chloronaphthalene	0.0800	0.0721	90.1	50.0-120	
(S) Nitrobenzene-d5			*95.8*	*14.0-149*	
(S) 2-Fluorobiphenyl			*95.7*	*34.0-125*	
(S) p-Terphenyl-d14			*106*	*23.0-120*	

L1499413-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1499413-03 06/09/22 15:42 • (MS) R3801805-3 06/09/22 16:02 • (MSD) R3801805-4 06/09/22 16:22

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Anthracene	0.0812	0.0119	0.0730	0.0706	75.3	72.3	1	10.0-145			3.34	30
Acenaphthene	0.0812	0.00377	0.0653	0.0629	75.7	72.8	1	14.0-127			3.74	27
Acenaphthylene	0.0812	U	0.0632	0.0597	77.8	73.6	1	21.0-124			5.59	25
Benzo(a)anthracene	0.0812	0.108	0.159	0.152	62.8	53.8	1	10.0-139			4.68	30
Benzo(a)pyrene	0.0812	0.103	0.155	0.145	64.6	51.8	1	10.0-141			6.94	31
Benzo(b)fluoranthene	0.0812	0.136	0.182	0.167	56.4	37.2	1	10.0-140			8.96	36
Benzo(g,h,i)perylene	0.0812	0.0713	0.122	0.113	62.2	51.9	1	10.0-140			7.08	33
Benzo(k)fluoranthene	0.0812	0.0493	0.104	0.0958	67.4	57.2	1	10.0-137			8.33	31
Chrysene	0.0812	0.124	0.173	0.159	60.3	43.6	1	10.0-145			8.15	30
Dibenz(a,h)anthracene	0.0812	0.0172	0.0694	0.0653	64.4	59.2	1	10.0-132			6.18	31
Fluoranthene	0.0812	0.180	0.247	0.224	82.1	53.8	1	10.0-153			9.73	33
Fluorene	0.0812	U	0.0633	0.0602	77.9	74.1	1	11.0-130			5.06	29
Indeno(1,2,3-cd)pyrene	0.0812	0.0802	0.137	0.128	70.4	58.8	1	10.0-137			7.06	32
Naphthalene	0.0812	U	0.0617	0.0571	76.0	70.4	1	10.0-135			7.71	27
Phenanthrene	0.0812	0.0592	0.138	0.129	97.6	86.0	1	10.0-144			7.00	31
Pyrene	0.0812	0.178	0.231	0.212	65.4	42.3	1	10.0-148			8.45	35
1-Methylnaphthalene	0.0812	U	0.0646	0.0610	79.6	75.1	1	10.0-142			5.80	28
2-Methylnaphthalene	0.0812	U	0.0604	0.0562	74.4	69.2	1	10.0-137			7.14	28
2-Chloronaphthalene	0.0812	U	0.0583	0.0546	71.8	67.3	1	29.0-120			6.45	24
(S) Nitrobenzene-d5					*78.7*	*72.8*		*14.0-149*				
(S) 2-Fluorobiphenyl					*77.0*	*70.5*		*34.0-125*				
(S) p-Terphenyl-d14					*82.4*	*76.4*		*23.0-120*				

Method Blank (MB)

(MB) R3801850-2 06/10/22 07:29

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Anthracene	U		0.00230	0.00600
Acenaphthene	U		0.00209	0.00600
Acenaphthylene	U		0.00216	0.00600
Benzo(a)anthracene	U		0.00173	0.00600
Benzo(a)pyrene	U		0.00179	0.00600
Benzo(b)fluoranthene	U		0.00153	0.00600
Benzo(g,h,i)perylene	U		0.00177	0.00600
Benzo(k)fluoranthene	U		0.00215	0.00600
Chrysene	U		0.00232	0.00600
Dibenz(a,h)anthracene	U		0.00172	0.00600
Fluoranthene	U		0.00227	0.00600
Fluorene	U		0.00205	0.00600
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600
Naphthalene	U		0.00408	0.0200
Phenanthrene	U		0.00231	0.00600
Pyrene	U		0.00200	0.00600
1-Methylnaphthalene	U		0.00449	0.0200
2-Methylnaphthalene	U		0.00427	0.0200
2-Chloronaphthalene	U		0.00466	0.0200
(S) Nitrobenzene-d5	*53.5*			*14.0-149*
(S) 2-Fluorobiphenyl	*68.6*			*34.0-125*
(S) p-Terphenyl-d14	*109*			*23.0-120*

Laboratory Control Sample (LCS)

(LCS) R3801850-1 06/10/22 07:12

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0590	73.8	50.0-126	
Acenaphthene	0.0800	0.0604	75.5	50.0-120	
Acenaphthylene	0.0800	0.0629	78.6	50.0-120	
Benzo(a)anthracene	0.0800	0.0610	76.3	45.0-120	
Benzo(a)pyrene	0.0800	0.0485	60.6	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0615	76.9	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0588	73.5	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0601	75.1	49.0-125	
Chrysene	0.0800	0.0619	77.4	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0619	77.4	47.0-125	
Fluoranthene	0.0800	0.0601	75.1	49.0-129	

Laboratory Control Sample (LCS)

(LCS) R3801850-1 06/10/22 07:12

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluorene	0.0800	0.0629	78.6	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0613	76.6	46.0-125	
Naphthalene	0.0800	0.0591	73.9	50.0-120	
Phenanthrene	0.0800	0.0604	75.5	47.0-120	
Pyrene	0.0800	0.0659	82.4	43.0-123	
1-Methylnaphthalene	0.0800	0.0610	76.3	51.0-121	
2-Methylnaphthalene	0.0800	0.0589	73.6	50.0-120	
2-Chloronaphthalene	0.0800	0.0598	74.8	50.0-120	
(S) Nitrobenzene-d5			*69.2*	*14.0-149*	
(S) 2-Fluorobiphenyl			*75.5*	*34.0-125*	
(S) p-Terphenyl-d14			*103*	*23.0-120*	

L1499423-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1499423-04 06/10/22 08:04 • (MS) R3801850-3 06/10/22 08:21 • (MSD) R3801850-4 06/10/22 08:39

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Anthracene	0.0991	U	0.0370	0.0452	37.4	46.3	1	10.0-145			19.9	30
Acenaphthene	0.0991	U	0.0369	0.0432	37.2	44.2	1	14.0-127			15.6	27
Acenaphthylene	0.0991	U	0.0414	0.0481	41.8	49.3	1	21.0-124			15.1	25
Benzo(a)anthracene	0.0991	U	0.0381	0.0470	38.4	48.2	1	10.0-139			21.0	30
Benzo(a)pyrene	0.0991	U	0.0379	0.0462	38.3	47.4	1	10.0-141			19.7	31
Benzo(b)fluoranthene	0.0991	U	0.0324	0.0415	32.7	42.5	1	10.0-140			24.5	36
Benzo(g,h,i)perylene	0.0991	U	0.0365	0.0451	36.9	46.2	1	10.0-140			21.0	33
Benzo(k)fluoranthene	0.0991	U	0.0423	0.0504	42.7	51.7	1	10.0-137			17.6	31
Chrysene	0.0991	U	0.0452	0.0543	45.6	55.6	1	10.0-145			18.2	30
Dibenz(a,h)anthracene	0.0991	U	0.0450	0.0534	45.4	54.7	1	10.0-132			17.1	31
Fluoranthene	0.0991	U	0.0298	0.0405	30.0	41.5	1	10.0-153			30.5	33
Fluorene	0.0991	U	0.0369	0.0461	37.2	47.3	1	11.0-130			22.2	29
Indeno(1,2,3-cd)pyrene	0.0991	U	0.0367	0.0464	37.0	47.5	1	10.0-137			23.4	32
Naphthalene	0.0991	U	0.0506	0.0702	51.0	72.0	1	10.0-135		J3	32.6	27
Phenanthrene	0.0991	U	0.0336	0.0442	33.9	45.3	1	10.0-144			27.3	31
Pyrene	0.0991	U	0.0329	0.0450	33.2	46.1	1	10.0-148			30.8	35
1-Methylnaphthalene	0.0991	U	0.0433	0.0842	43.7	86.3	1	10.0-142		J3	64.1	28
2-Methylnaphthalene	0.0991	U	0.0415	0.0831	41.9	85.2	1	10.0-137		J3	66.8	28
2-Chloronaphthalene	0.0991	U	0.0414	0.0471	41.8	48.3	1	29.0-120			13.0	24
(S) Nitrobenzene-d5					*55.4*	*60.7*		*14.0-149*				
(S) 2-Fluorobiphenyl					*43.5*	*51.6*		*34.0-125*				
(S) p-Terphenyl-d14					*58.8*	*71.4*		*23.0-120*				

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
J-	The associated batch QC was outside the lower control limits; associated data has a potential negative bias.

GLOSSARY OF TERMS

Qualifier	Description
J+	The associated batch QC was outside the upper control limits; associated data has a potential positive bias.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Partners Environmental Consulting, Inc.
31100 Solon Road, Suite G
Solon, OH 44319

Billing Information:
Partners Environmental Consulting, Inc.
31100 Solon Road, Suite G
Solon, OH 44319

Report to: VALERIE WEIR

Email To: TWEIR VWEIR @ PARTNERSENV.com

Project Description: 2700 TRANSPORT ROAD

City/State Collected: CLEVELAND OH

Phone: **800-763-1363**
Fax:

Client Project # 2093.07

Lab Project #

Collected by (print): TOM WEIR

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Pres Chk

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs 8260	PAHs 8270	TPH C6-C34 8015								Remarks	Sample # (lab only)
MW-108 (2-4ft)	GRAB	SS	2-4	5/26/22	1030	2	X	X	X									-01
MW-108 (8-10ft)			8-10		1110	2	X	X	X									-02
MW-109 (0-2ft)			0-2		1340	2	X	X	X									-03
MW-109 (4-6ft)			4-6		1400	2	X	X	X									-04
MW-110 (0-2ft)			0-2	5/27/22	0830	2	X	X	X									-05
MW-110 (2-4ft)			2-4		0835	2	X	X	X									-06
MW-107 (2-4ft)			2-4		1030	2	X	X	X									-07
MW-106 (8-10ft			8-10		1245	3	X	X	X									-08
SB-110 (4-6ft)			4-6		1410	2	X	X	X									-09
TRIP BLANK-01	LAB	LAB	—	5/26/22	0930	1	X											-10

Chain of Custody Page 1 of 1

Pace Analytical™
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 1499430
J235

Acctnum: **PARENVOH**
Template:
Prelogin:
TSR:
PB:
Shipped Via:

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: OHIO VAP PROTOCOL

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: X NP __Y __N
COC Signed/Accurate: X Y __N
Bottles arrive intact: X Y __N
Correct bottles used: X Y __N
Sufficient volume sent: X Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCl / MeoH TBR	If preservation required by Login: Date/Time
THOMAS W	5/27/22	4:50	BARKUS HOLMES	1	
BARKUS HOLMES	5/27/22	4:50		Temp: °C Bottles Received: 0810=08 19	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 5.28 Time: 10:00	Hold: Condition: NCF / OK

ANALYTICAL REPORT

June 14, 2022

Partners Env. Consulting - Solon, OH

Sample Delivery Group:	L1500516
Samples Received:	06/02/2022
Project Number:	2093.07
Description:	2700 Transport Road

Report To: Valerie Weir
31100 Solon Road, Ste. G
Solon, OH 44139

Entire Report Reviewed By:

Heather J Wagner
Project Manager

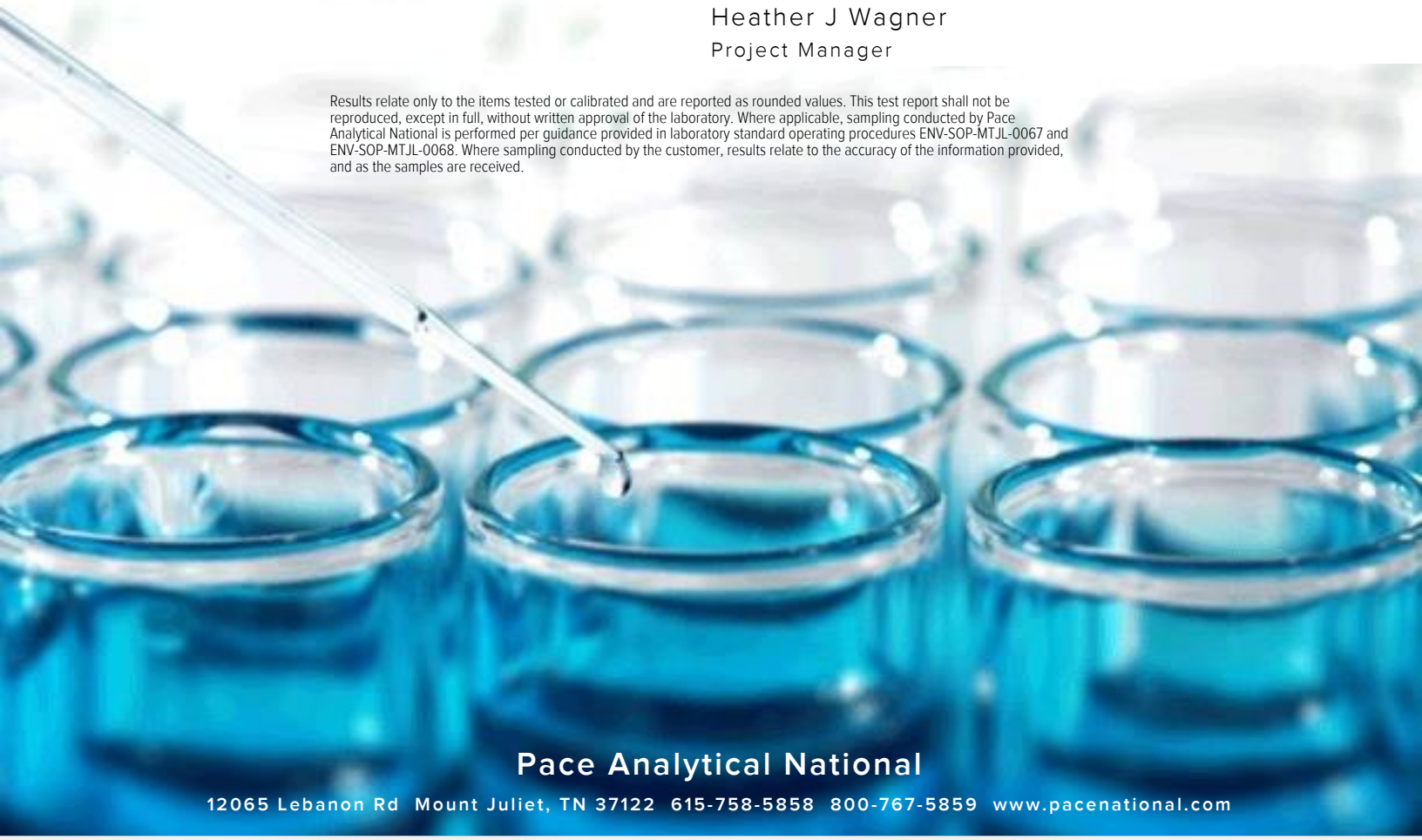


TABLE OF CONTENTS

SB-111 (0-2FT) L1500516-01 Solid

Collected by: Tom Weir | Collected date/time: 05/31/22 10:30 | Received date/time: 06/02/22 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1874753	1	06/07/22 15:42	06/07/22 16:09	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015B	WG1874734	1	06/03/22 19:24	06/06/22 09:07	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1875817	1	06/03/22 19:24	06/07/22 21:30	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015B	WG1875144	1	06/06/22 17:24	06/07/22 04:57	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1877621	1	06/10/22 16:45	06/11/22 09:58	AMG	Mt. Juliet, TN

SB-113 (0-2FT) L1500516-02 Solid

Collected by: Tom Weir | Collected date/time: 05/31/22 11:30 | Received date/time: 06/02/22 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1874753	1	06/07/22 15:42	06/07/22 16:09	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015B	WG1874734	1	06/03/22 19:24	06/06/22 09:27	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1875817	1	06/03/22 19:24	06/07/22 21:50	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015B	WG1875144	10	06/06/22 17:24	06/07/22 12:36	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1877621	1	06/10/22 16:45	06/11/22 11:09	AMG	Mt. Juliet, TN

SB-112 (8-10FT) L1500516-03 Solid

Collected by: Tom Weir | Collected date/time: 05/31/22 12:15 | Received date/time: 06/02/22 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1874753	1	06/07/22 15:42	06/07/22 16:09	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015B	WG1874732	100	06/03/22 19:24	06/06/22 17:11	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1875817	8	06/03/22 19:24	06/07/22 23:24	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015B	WG1875144	5	06/06/22 17:24	06/07/22 06:41	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1877621	1	06/10/22 16:45	06/11/22 10:52	AMG	Mt. Juliet, TN

SB-114 (0-2FT) L1500516-04 Solid

Collected by: Tom Weir | Collected date/time: 05/31/22 13:20 | Received date/time: 06/02/22 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1874753	1	06/07/22 15:42	06/07/22 16:09	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015B	WG1874734	1	06/03/22 19:24	06/06/22 09:48	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1875817	1	06/03/22 19:24	06/07/22 22:08	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015B	WG1875144	5	06/06/22 17:24	06/07/22 12:23	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1877621	1	06/10/22 16:45	06/11/22 10:34	AMG	Mt. Juliet, TN

SB-115 (2-4FT) L1500516-05 Solid

Collected by: Tom Weir | Collected date/time: 05/31/22 14:15 | Received date/time: 06/02/22 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1874753	1	06/07/22 15:42	06/07/22 16:09	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015B	WG1874734	1	06/03/22 19:24	06/06/22 10:08	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1875817	1	06/03/22 19:24	06/07/22 22:27	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015B	WG1875144	1	06/06/22 17:24	06/07/22 05:23	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1877621	1	06/10/22 16:45	06/11/22 10:16	AMG	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

SB-103 (4-6FT) L1500516-06 Solid

Collected by: Tom Weir | Collected date/time: 05/31/22 14:55 | Received date/time: 06/02/22 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1874753	1	06/07/22 15:42	06/07/22 16:09	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015B	WG1874734	1	06/03/22 19:24	06/06/22 10:28	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1875887	1	06/03/22 19:24	06/08/22 07:02	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1876580	1	06/03/22 19:24	06/08/22 23:55	JBE	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015B	WG1875144	1	06/06/22 17:24	06/07/22 06:02	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1877622	1	06/10/22 16:51	06/11/22 10:13	AMG	Mt. Juliet, TN

SB-102 (2-4FT) L1500516-07 Solid

Collected by: Tom Weir | Collected date/time: 05/31/22 15:30 | Received date/time: 06/02/22 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1874753	1	06/07/22 15:42	06/07/22 16:09	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015B	WG1874734	1	06/03/22 19:24	06/06/22 10:49	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1875887	1	06/03/22 19:24	06/08/22 07:21	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1876580	1	06/03/22 19:24	06/09/22 00:14	JBE	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015B	WG1875144	1	06/06/22 17:24	06/07/22 05:49	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1877622	1	06/10/22 16:51	06/11/22 09:54	AMG	Mt. Juliet, TN

SB-101 (6-8FT) L1500516-08 Solid

Collected by: Tom Weir | Collected date/time: 06/01/22 08:10 | Received date/time: 06/02/22 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1874753	1	06/07/22 15:42	06/07/22 16:09	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015B	WG1876907	25	06/03/22 19:24	06/09/22 12:33	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1875887	1	06/03/22 19:24	06/08/22 07:40	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1876580	1	06/03/22 19:24	06/09/22 00:33	JBE	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015B	WG1875144	10	06/06/22 17:24	06/07/22 07:07	JAS	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015B	WG1875144	50	06/06/22 17:24	06/07/22 12:49	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1878572	10	06/13/22 13:10	06/13/22 23:10	AMG	Mt. Juliet, TN

MW-101 (2-4FT) L1500516-09 Solid

Collected by: Tom Weir | Collected date/time: 06/01/22 08:40 | Received date/time: 06/02/22 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1874753	1	06/07/22 15:42	06/07/22 16:09	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015B	WG1876907	25	06/03/22 19:24	06/09/22 12:57	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1875887	1	06/03/22 19:24	06/08/22 07:59	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1876580	1	06/03/22 19:24	06/09/22 00:52	JBE	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015B	WG1875144	10	06/06/22 17:24	06/07/22 06:54	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1878572	1	06/13/22 13:10	06/13/22 22:16	AMG	Mt. Juliet, TN

SB-101DUPLICATE (6-8FT) L1500516-10 Solid

Collected by: Tom Weir | Collected date/time: 06/01/22 08:10 | Received date/time: 06/02/22 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1874755	1	06/07/22 15:19	06/07/22 15:38	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015B	WG1874734	1	06/03/22 19:24	06/06/22 11:50	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1875887	1	06/03/22 19:24	06/08/22 08:18	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1876580	1	06/03/22 19:24	06/09/22 01:11	JBE	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015B	WG1875144	1	06/06/22 17:24	06/07/22 06:15	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1878572	1	06/13/22 13:10	06/13/22 20:45	AMG	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

MW-103 (0-2FT) L1500516-11 Solid

Collected by: Tom Weir | Collected date/time: 06/01/22 11:10 | Received date/time: 06/02/22 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1874755	1	06/07/22 15:19	06/07/22 15:38	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015B	WG1876905	1	06/03/22 19:24	06/09/22 13:22	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1875887	1	06/03/22 19:24	06/08/22 08:37	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1876580	1	06/03/22 19:24	06/09/22 01:30	JBE	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015B	WG1875981	10	06/08/22 03:14	06/09/22 11:39	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1878572	1	06/13/22 13:10	06/13/22 21:59	AMG	Mt. Juliet, TN

MW-103 (6-8FT) L1500516-12 Solid

Collected by: Tom Weir | Collected date/time: 06/01/22 11:30 | Received date/time: 06/02/22 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1874755	1	06/07/22 15:19	06/07/22 15:38	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015B	WG1874734	1	06/03/22 19:24	06/06/22 12:31	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1875887	1	06/03/22 19:24	06/08/22 08:56	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1876580	1	06/03/22 19:24	06/09/22 01:49	JBE	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015B	WG1875981	200	06/08/22 03:14	06/09/22 12:05	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1878572	5	06/13/22 13:10	06/13/22 22:52	AMG	Mt. Juliet, TN

SB-106 (0-2FT) L1500516-13 Solid

Collected by: Tom Weir | Collected date/time: 06/01/22 12:40 | Received date/time: 06/02/22 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1874755	1	06/07/22 15:19	06/07/22 15:38	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015B	WG1876905	1	06/03/22 19:24	06/09/22 13:45	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1875887	1	06/03/22 19:24	06/08/22 09:15	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1876580	1	06/03/22 19:24	06/09/22 02:08	JBE	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015B	WG1875981	10	06/08/22 03:14	06/08/22 12:22	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1878572	5	06/13/22 13:10	06/13/22 22:34	AMG	Mt. Juliet, TN

EQP-01 L1500516-14 GW

Collected by: Tom Weir | Collected date/time: 06/01/22 15:00 | Received date/time: 06/02/22 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1876585	1	06/09/22 15:31	06/09/22 15:31	ADM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1875098	1	06/07/22 13:31	06/07/22 22:39	AMM	Mt. Juliet, TN

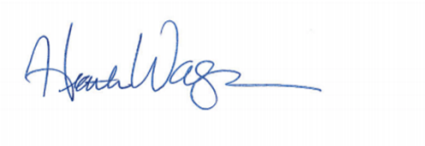
TRIP BLANK-02 L1500516-15 GW

Collected by: Tom Weir | Collected date/time: 05/31/22 09:00 | Received date/time: 06/02/22 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1876585	1	06/09/22 12:26	06/09/22 12:26	ADM	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Heather J Wagner
Project Manager

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.4		1	06/07/2022 16:09	WG1874753

Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C6 - C12	0.446		0.0363	0.107	1	06/06/2022 09:07	WG1874734
(S) a,a,a-Trifluorotoluene(FID)	*86.1*			*77.0-120*		*06/06/2022 09:07*	WG1874734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0417	0.0571	1	06/07/2022 21:30	WG1875817
Acrylonitrile	U		0.00412	0.0143	1	06/07/2022 21:30	WG1875817
Benzene	0.00779		0.000533	0.00114	1	06/07/2022 21:30	WG1875817
Bromobenzene	U		0.00103	0.0143	1	06/07/2022 21:30	WG1875817
Bromodichloromethane	U		0.000827	0.00285	1	06/07/2022 21:30	WG1875817
Bromoform	U		0.00134	0.0285	1	06/07/2022 21:30	WG1875817
Bromomethane	U		0.00225	0.0143	1	06/07/2022 21:30	WG1875817
n-Butylbenzene	U		0.00599	0.0143	1	06/07/2022 21:30	WG1875817
sec-Butylbenzene	0.00432	J	0.00329	0.0143	1	06/07/2022 21:30	WG1875817
tert-Butylbenzene	U		0.00223	0.00571	1	06/07/2022 21:30	WG1875817
Carbon tetrachloride	U		0.00102	0.00571	1	06/07/2022 21:30	WG1875817
Chlorobenzene	0.00387		0.000240	0.00285	1	06/07/2022 21:30	WG1875817
Chlorodibromomethane	U		0.000698	0.00285	1	06/07/2022 21:30	WG1875817
Chloroethane	U		0.00194	0.00571	1	06/07/2022 21:30	WG1875817
Chloroform	U		0.00118	0.00285	1	06/07/2022 21:30	WG1875817
Chloromethane	U		0.00496	0.0143	1	06/07/2022 21:30	WG1875817
2-Chlorotoluene	U		0.000987	0.00285	1	06/07/2022 21:30	WG1875817
4-Chlorotoluene	U		0.000513	0.00571	1	06/07/2022 21:30	WG1875817
1,2-Dibromo-3-Chloropropane	U		0.00445	0.0285	1	06/07/2022 21:30	WG1875817
1,2-Dibromoethane	U		0.000739	0.00285	1	06/07/2022 21:30	WG1875817
Dibromomethane	U		0.000856	0.00571	1	06/07/2022 21:30	WG1875817
1,2-Dichlorobenzene	0.000904	J	0.000485	0.00571	1	06/07/2022 21:30	WG1875817
1,3-Dichlorobenzene	U		0.000685	0.00571	1	06/07/2022 21:30	WG1875817
1,4-Dichlorobenzene	U		0.000799	0.00571	1	06/07/2022 21:30	WG1875817
Dichlorodifluoromethane	U		0.00184	0.00285	1	06/07/2022 21:30	WG1875817
1,1-Dichloroethane	U		0.000560	0.00285	1	06/07/2022 21:30	WG1875817
1,2-Dichloroethane	U		0.000741	0.00285	1	06/07/2022 21:30	WG1875817
1,1-Dichloroethene	U		0.000692	0.00285	1	06/07/2022 21:30	WG1875817
cis-1,2-Dichloroethene	U		0.000838	0.00285	1	06/07/2022 21:30	WG1875817
trans-1,2-Dichloroethene	U		0.00119	0.00571	1	06/07/2022 21:30	WG1875817
1,2-Dichloropropane	U		0.00162	0.00571	1	06/07/2022 21:30	WG1875817
1,1-Dichloropropene	U		0.000923	0.00285	1	06/07/2022 21:30	WG1875817
1,3-Dichloropropane	U		0.000572	0.00571	1	06/07/2022 21:30	WG1875817
cis-1,3-Dichloropropene	U		0.000864	0.00285	1	06/07/2022 21:30	WG1875817
trans-1,3-Dichloropropene	U		0.00130	0.00571	1	06/07/2022 21:30	WG1875817
2,2-Dichloropropane	U		0.00157	0.00285	1	06/07/2022 21:30	WG1875817
Ethylbenzene	0.00471		0.000841	0.00285	1	06/07/2022 21:30	WG1875817
Hexachloro-1,3-butadiene	U		0.00685	0.0285	1	06/07/2022 21:30	WG1875817
n-Hexane	0.00626		0.00258	0.00571	1	06/07/2022 21:30	WG1875817
Isopropylbenzene	0.00745		0.000485	0.00285	1	06/07/2022 21:30	WG1875817
p-Isopropyltoluene	U		0.00291	0.00571	1	06/07/2022 21:30	WG1875817
2-Butanone (MEK)	U		0.0725	0.114	1	06/07/2022 21:30	WG1875817
Methylene Chloride	0.0132	B J	0.00758	0.0285	1	06/07/2022 21:30	WG1875817

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	U		0.00260	0.0285	1	06/07/2022 21:30	WG1875817
Methyl tert-butyl ether	U		0.000399	0.00114	1	06/07/2022 21:30	WG1875817
Naphthalene	0.0276	J4	0.00557	0.0143	1	06/07/2022 21:30	WG1875817
n-Propylbenzene	0.0162		0.00108	0.00571	1	06/07/2022 21:30	WG1875817
Styrene	U		0.000261	0.0143	1	06/07/2022 21:30	WG1875817
1,1,1,2-Tetrachloroethane	U		0.00108	0.00285	1	06/07/2022 21:30	WG1875817
1,1,2,2-Tetrachloroethane	U		0.000793	0.00285	1	06/07/2022 21:30	WG1875817
Tetrachloroethene	U		0.00102	0.00285	1	06/07/2022 21:30	WG1875817
Toluene	0.00992		0.00148	0.00571	1	06/07/2022 21:30	WG1875817
1,2,3-Trichlorobenzene	U		0.00836	0.0143	1	06/07/2022 21:30	WG1875817
1,2,4-Trichlorobenzene	U		0.00502	0.0143	1	06/07/2022 21:30	WG1875817
1,1,1-Trichloroethane	U		0.00105	0.00285	1	06/07/2022 21:30	WG1875817
1,1,2-Trichloroethane	U		0.000681	0.00285	1	06/07/2022 21:30	WG1875817
Trichloroethene	U		0.000666	0.00114	1	06/07/2022 21:30	WG1875817
Trichlorofluoromethane	U		0.000944	0.00285	1	06/07/2022 21:30	WG1875817
1,2,3-Trichloropropane	U		0.00185	0.0143	1	06/07/2022 21:30	WG1875817
1,2,4-Trimethylbenzene	0.00799		0.00180	0.00571	1	06/07/2022 21:30	WG1875817
1,3,5-Trimethylbenzene	0.00232	J	0.00228	0.00571	1	06/07/2022 21:30	WG1875817
Vinyl chloride	U		0.00132	0.00285	1	06/07/2022 21:30	WG1875817
Xylenes, Total	0.0208		0.00100	0.00742	1	06/07/2022 21:30	WG1875817
(S) Toluene-d8	*108*			*75.0-131*		*06/07/2022 21:30*	WG1875817
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*06/07/2022 21:30*	WG1875817
(S) 1,2-Dichloroethane-d4	*89.1*			*70.0-130*		*06/07/2022 21:30*	WG1875817

Semi-Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C20 Hydrocarbons	16.7		0.653	4.28	1	06/07/2022 04:57	WG1875144
C20-C34 Hydrocarbons	45.5		0.654	4.28	1	06/07/2022 04:57	WG1875144
(S) o-Terphenyl	*88.5*			*18.0-148*		*06/07/2022 04:57*	WG1875144

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.0325		0.00246	0.00642	1	06/11/2022 09:58	WG1877621
Acenaphthene	0.0154		0.00224	0.00642	1	06/11/2022 09:58	WG1877621
Acenaphthylene	0.0147		0.00231	0.00642	1	06/11/2022 09:58	WG1877621
Benzo(a)anthracene	0.186		0.00185	0.00642	1	06/11/2022 09:58	WG1877621
Benzo(a)pyrene	0.188		0.00192	0.00642	1	06/11/2022 09:58	WG1877621
Benzo(b)fluoranthene	0.271		0.00164	0.00642	1	06/11/2022 09:58	WG1877621
Benzo(g,h,i)perylene	0.142		0.00189	0.00642	1	06/11/2022 09:58	WG1877621
Benzo(k)fluoranthene	0.0812		0.00230	0.00642	1	06/11/2022 09:58	WG1877621
Chrysene	0.181		0.00248	0.00642	1	06/11/2022 09:58	WG1877621
Dibenz(a,h)anthracene	0.0460		0.00184	0.00642	1	06/11/2022 09:58	WG1877621
Fluoranthene	0.294		0.00243	0.00642	1	06/11/2022 09:58	WG1877621
Fluorene	0.0182		0.00219	0.00642	1	06/11/2022 09:58	WG1877621
Indeno(1,2,3-cd)pyrene	0.124		0.00194	0.00642	1	06/11/2022 09:58	WG1877621
Naphthalene	0.0287		0.00437	0.0214	1	06/11/2022 09:58	WG1877621
Phenanthrene	0.172		0.00247	0.00642	1	06/11/2022 09:58	WG1877621
Pyrene	0.301		0.00214	0.00642	1	06/11/2022 09:58	WG1877621
1-Methylnaphthalene	0.0313		0.00481	0.0214	1	06/11/2022 09:58	WG1877621
2-Methylnaphthalene	0.0375		0.00457	0.0214	1	06/11/2022 09:58	WG1877621
2-Chloronaphthalene	U		0.00499	0.0214	1	06/11/2022 09:58	WG1877621
(S) Nitrobenzene-d5	*48.3*			*14.0-149*		*06/11/2022 09:58*	WG1877621
(S) 2-Fluorobiphenyl	*56.1*			*34.0-125*		*06/11/2022 09:58*	WG1877621

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
(S) p-Terphenyl-d14	*69.9*			*23.0-120*		*06/11/2022 09:58*	WG1877621

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.6		1	06/07/2022 16:09	WG1874753

Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C6 - C12	0.283	B	0.0378	0.112	1	06/06/2022 09:27	WG1874734
(S) a,a,a-Trifluorotoluene(FID)	*87.3*			*77.0-120*		*06/06/2022 09:27*	WG1874734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0450	0.0616	1	06/07/2022 21:50	WG1875817
Acrylonitrile	U		0.00445	0.0154	1	06/07/2022 21:50	WG1875817
Benzene	0.0290		0.000576	0.00123	1	06/07/2022 21:50	WG1875817
Bromobenzene	U		0.00111	0.0154	1	06/07/2022 21:50	WG1875817
Bromodichloromethane	U		0.000894	0.00308	1	06/07/2022 21:50	WG1875817
Bromoform	U		0.00144	0.0308	1	06/07/2022 21:50	WG1875817
Bromomethane	U		0.00243	0.0154	1	06/07/2022 21:50	WG1875817
n-Butylbenzene	U		0.00647	0.0154	1	06/07/2022 21:50	WG1875817
sec-Butylbenzene	0.00666	J	0.00355	0.0154	1	06/07/2022 21:50	WG1875817
tert-Butylbenzene	U		0.00240	0.00616	1	06/07/2022 21:50	WG1875817
Carbon tetrachloride	U		0.00111	0.00616	1	06/07/2022 21:50	WG1875817
Chlorobenzene	U		0.000259	0.00308	1	06/07/2022 21:50	WG1875817
Chlorodibromomethane	U		0.000754	0.00308	1	06/07/2022 21:50	WG1875817
Chloroethane	U		0.00210	0.00616	1	06/07/2022 21:50	WG1875817
Chloroform	U		0.00127	0.00308	1	06/07/2022 21:50	WG1875817
Chloromethane	U		0.00536	0.0154	1	06/07/2022 21:50	WG1875817
2-Chlorotoluene	U		0.00107	0.00308	1	06/07/2022 21:50	WG1875817
4-Chlorotoluene	U		0.000555	0.00616	1	06/07/2022 21:50	WG1875817
1,2-Dibromo-3-Chloropropane	U		0.00481	0.0308	1	06/07/2022 21:50	WG1875817
1,2-Dibromoethane	U		0.000799	0.00308	1	06/07/2022 21:50	WG1875817
Dibromomethane	U		0.000924	0.00616	1	06/07/2022 21:50	WG1875817
1,2-Dichlorobenzene	U		0.000524	0.00616	1	06/07/2022 21:50	WG1875817
1,3-Dichlorobenzene	U		0.000740	0.00616	1	06/07/2022 21:50	WG1875817
1,4-Dichlorobenzene	U		0.000863	0.00616	1	06/07/2022 21:50	WG1875817
Dichlorodifluoromethane	U		0.00198	0.00308	1	06/07/2022 21:50	WG1875817
1,1-Dichloroethane	U		0.000605	0.00308	1	06/07/2022 21:50	WG1875817
1,2-Dichloroethane	U		0.000800	0.00308	1	06/07/2022 21:50	WG1875817
1,1-Dichloroethene	U		0.000747	0.00308	1	06/07/2022 21:50	WG1875817
cis-1,2-Dichloroethene	U		0.000905	0.00308	1	06/07/2022 21:50	WG1875817
trans-1,2-Dichloroethene	U		0.00128	0.00616	1	06/07/2022 21:50	WG1875817
1,2-Dichloropropane	U		0.00175	0.00616	1	06/07/2022 21:50	WG1875817
1,1-Dichloropropene	U		0.000997	0.00308	1	06/07/2022 21:50	WG1875817
1,3-Dichloropropane	U		0.000617	0.00616	1	06/07/2022 21:50	WG1875817
cis-1,3-Dichloropropene	U		0.000933	0.00308	1	06/07/2022 21:50	WG1875817
trans-1,3-Dichloropropene	U		0.00141	0.00616	1	06/07/2022 21:50	WG1875817
2,2-Dichloropropane	U		0.00170	0.00308	1	06/07/2022 21:50	WG1875817
Ethylbenzene	0.0250		0.000908	0.00308	1	06/07/2022 21:50	WG1875817
Hexachloro-1,3-butadiene	U		0.00740	0.0308	1	06/07/2022 21:50	WG1875817
n-Hexane	U		0.00279	0.00616	1	06/07/2022 21:50	WG1875817
Isopropylbenzene	0.0161		0.000524	0.00308	1	06/07/2022 21:50	WG1875817
p-Isopropyltoluene	0.00330	J	0.00314	0.00616	1	06/07/2022 21:50	WG1875817
2-Butanone (MEK)	U		0.0783	0.123	1	06/07/2022 21:50	WG1875817
Methylene Chloride	0.0154	B J	0.00818	0.0308	1	06/07/2022 21:50	WG1875817

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	U		0.00281	0.0308	1	06/07/2022 21:50	WG1875817
Methyl tert-butyl ether	U		0.000431	0.00123	1	06/07/2022 21:50	WG1875817
Naphthalene	0.0525	J4	0.00601	0.0154	1	06/07/2022 21:50	WG1875817
n-Propylbenzene	0.0200		0.00117	0.00616	1	06/07/2022 21:50	WG1875817
Styrene	U		0.000282	0.0154	1	06/07/2022 21:50	WG1875817
1,1,1,2-Tetrachloroethane	U		0.00117	0.00308	1	06/07/2022 21:50	WG1875817
1,1,2,2-Tetrachloroethane	U		0.000857	0.00308	1	06/07/2022 21:50	WG1875817
Tetrachloroethene	U		0.00110	0.00308	1	06/07/2022 21:50	WG1875817
Toluene	0.0791		0.00160	0.00616	1	06/07/2022 21:50	WG1875817
1,2,3-Trichlorobenzene	U		0.00903	0.0154	1	06/07/2022 21:50	WG1875817
1,2,4-Trichlorobenzene	U		0.00542	0.0154	1	06/07/2022 21:50	WG1875817
1,1,1-Trichloroethane	U		0.00114	0.00308	1	06/07/2022 21:50	WG1875817
1,1,2-Trichloroethane	U		0.000736	0.00308	1	06/07/2022 21:50	WG1875817
Trichloroethene	U		0.000720	0.00123	1	06/07/2022 21:50	WG1875817
Trichlorofluoromethane	U		0.00102	0.00308	1	06/07/2022 21:50	WG1875817
1,2,3-Trichloropropane	U		0.00200	0.0154	1	06/07/2022 21:50	WG1875817
1,2,4-Trimethylbenzene	0.0276		0.00195	0.00616	1	06/07/2022 21:50	WG1875817
1,3,5-Trimethylbenzene	0.00622		0.00247	0.00616	1	06/07/2022 21:50	WG1875817
Vinyl chloride	U		0.00143	0.00308	1	06/07/2022 21:50	WG1875817
Xylenes, Total	0.107		0.00108	0.00801	1	06/07/2022 21:50	WG1875817
(S) Toluene-d8	*107*			*75.0-131*		*06/07/2022 21:50*	WG1875817
(S) 4-Bromofluorobenzene	*99.6*			*67.0-138*		*06/07/2022 21:50*	WG1875817
(S) 1,2-Dichloroethane-d4	*91.3*			*70.0-130*		*06/07/2022 21:50*	WG1875817

Semi-Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C20 Hydrocarbons	200		6.81	44.6	10	06/07/2022 12:36	WG1875144
C20-C34 Hydrocarbons	446		6.82	44.6	10	06/07/2022 12:36	WG1875144
(S) o-Terphenyl	*87.7*			*18.0-148*		*06/07/2022 12:36*	WG1875144

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.493	V	0.00257	0.00670	1	06/11/2022 11:09	WG1877621
Acenaphthene	0.191	J6	0.00233	0.00670	1	06/11/2022 11:09	WG1877621
Acenaphthylene	0.297	J6	0.00241	0.00670	1	06/11/2022 11:09	WG1877621
Benzo(a)anthracene	1.70	V	0.00193	0.00670	1	06/11/2022 11:09	WG1877621
Benzo(a)pyrene	1.34	V	0.00200	0.00670	1	06/11/2022 11:09	WG1877621
Benzo(b)fluoranthene	1.67	V	0.00171	0.00670	1	06/11/2022 11:09	WG1877621
Benzo(g,h,i)perylene	0.770	V	0.00198	0.00670	1	06/11/2022 11:09	WG1877621
Benzo(k)fluoranthene	0.580	V	0.00240	0.00670	1	06/11/2022 11:09	WG1877621
Chrysene	1.43	V	0.00259	0.00670	1	06/11/2022 11:09	WG1877621
Dibenz(a,h)anthracene	0.198	J6	0.00192	0.00670	1	06/11/2022 11:09	WG1877621
Fluoranthene	3.55	V	0.00253	0.00670	1	06/11/2022 11:09	WG1877621
Fluorene	0.365	V	0.00229	0.00670	1	06/11/2022 11:09	WG1877621
Indeno(1,2,3-cd)pyrene	0.824	V	0.00202	0.00670	1	06/11/2022 11:09	WG1877621
Naphthalene	0.356	J5	0.00455	0.0223	1	06/11/2022 11:09	WG1877621
Phenanthrene	3.43	V	0.00258	0.00670	1	06/11/2022 11:09	WG1877621
Pyrene	3.49	V	0.00223	0.00670	1	06/11/2022 11:09	WG1877621
1-Methylnaphthalene	0.410	J3 V	0.00501	0.0223	1	06/11/2022 11:09	WG1877621
2-Methylnaphthalene	0.448	J3 V	0.00477	0.0223	1	06/11/2022 11:09	WG1877621
2-Chloronaphthalene	U		0.00520	0.0223	1	06/11/2022 11:09	WG1877621
(S) Nitrobenzene-d5	*61.3*			*14.0-149*		*06/11/2022 11:09*	WG1877621
(S) 2-Fluorobiphenyl	*69.5*			*34.0-125*		*06/11/2022 11:09*	WG1877621

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
(S) p-Terphenyl-d14	*88.6*			*23.0-120*		*06/11/2022 11:09*	WG1877621

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	83.7		1	06/07/2022 16:09	WG1874753

Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C6 - C12	1350		4.71	13.9	100	06/06/2022 17:11	WG1874732
(S) a,a,a-Trifluorotoluene(FID)	*94.6*			*77.0-120*		*06/06/2022 17:11*	WG1874732

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.406	0.556	8	06/07/2022 23:24	WG1875817
Acrylonitrile	U		0.0401	0.139	8	06/07/2022 23:24	WG1875817
Benzene	0.264		0.00519	0.0111	8	06/07/2022 23:24	WG1875817
Bromobenzene	U		0.0100	0.139	8	06/07/2022 23:24	WG1875817
Bromodichloromethane	U		0.00805	0.0278	8	06/07/2022 23:24	WG1875817
Bromoform	U		0.0130	0.278	8	06/07/2022 23:24	WG1875817
Bromomethane	U		0.0219	0.139	8	06/07/2022 23:24	WG1875817
n-Butylbenzene	0.725		0.0583	0.139	8	06/07/2022 23:24	WG1875817
sec-Butylbenzene	0.750		0.0319	0.139	8	06/07/2022 23:24	WG1875817
tert-Butylbenzene	0.0639		0.0217	0.0556	8	06/07/2022 23:24	WG1875817
Carbon tetrachloride	U		0.00997	0.0556	8	06/07/2022 23:24	WG1875817
Chlorobenzene	U		0.00233	0.0278	8	06/07/2022 23:24	WG1875817
Chlorodibromomethane	U		0.00681	0.0278	8	06/07/2022 23:24	WG1875817
Chloroethane	U		0.0189	0.0556	8	06/07/2022 23:24	WG1875817
Chloroform	U		0.0114	0.0278	8	06/07/2022 23:24	WG1875817
Chloromethane	U		0.0483	0.139	8	06/07/2022 23:24	WG1875817
2-Chlorotoluene	U		0.00961	0.0278	8	06/07/2022 23:24	WG1875817
4-Chlorotoluene	U		0.00500	0.0556	8	06/07/2022 23:24	WG1875817
1,2-Dibromo-3-Chloropropane	U		0.0433	0.278	8	06/07/2022 23:24	WG1875817
1,2-Dibromoethane	U		0.00719	0.0278	8	06/07/2022 23:24	WG1875817
Dibromomethane	U		0.00833	0.0556	8	06/07/2022 23:24	WG1875817
1,2-Dichlorobenzene	U		0.00472	0.0556	8	06/07/2022 23:24	WG1875817
1,3-Dichlorobenzene	U		0.00667	0.0556	8	06/07/2022 23:24	WG1875817
1,4-Dichlorobenzene	U		0.00778	0.0556	8	06/07/2022 23:24	WG1875817
Dichlorodifluoromethane	U		0.0179	0.0278	8	06/07/2022 23:24	WG1875817
1,1-Dichloroethane	U		0.00546	0.0278	8	06/07/2022 23:24	WG1875817
1,2-Dichloroethane	U		0.00721	0.0278	8	06/07/2022 23:24	WG1875817
1,1-Dichloroethene	U		0.00674	0.0278	8	06/07/2022 23:24	WG1875817
cis-1,2-Dichloroethene	U		0.00815	0.0278	8	06/07/2022 23:24	WG1875817
trans-1,2-Dichloroethene	U		0.0116	0.0556	8	06/07/2022 23:24	WG1875817
1,2-Dichloropropane	U		0.0158	0.0556	8	06/07/2022 23:24	WG1875817
1,1-Dichloropropene	U		0.00899	0.0278	8	06/07/2022 23:24	WG1875817
1,3-Dichloropropane	U		0.00557	0.0556	8	06/07/2022 23:24	WG1875817
cis-1,3-Dichloropropene	U		0.00842	0.0278	8	06/07/2022 23:24	WG1875817
trans-1,3-Dichloropropene	U		0.0127	0.0556	8	06/07/2022 23:24	WG1875817
2,2-Dichloropropane	U		0.0153	0.0278	8	06/07/2022 23:24	WG1875817
Ethylbenzene	0.0211	J	0.00819	0.0278	8	06/07/2022 23:24	WG1875817
Hexachloro-1,3-butadiene	U		0.0667	0.278	8	06/07/2022 23:24	WG1875817
n-Hexane	U		0.0251	0.0556	8	06/07/2022 23:24	WG1875817
Isopropylbenzene	0.886		0.00472	0.0278	8	06/07/2022 23:24	WG1875817
p-Isopropyltoluene	U		0.0283	0.0556	8	06/07/2022 23:24	WG1875817
2-Butanone (MEK)	U		0.706	1.11	8	06/07/2022 23:24	WG1875817
Methylene Chloride	U		0.0737	0.278	8	06/07/2022 23:24	WG1875817

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	U		0.0253	0.278	8	06/07/2022 23:24	WG1875817
Methyl tert-butyl ether	U		0.00389	0.0111	8	06/07/2022 23:24	WG1875817
Naphthalene	U	J4	0.0542	0.139	8	06/07/2022 23:24	WG1875817
n-Propylbenzene	1.69		0.0106	0.0556	8	06/07/2022 23:24	WG1875817
Styrene	U		0.00254	0.139	8	06/07/2022 23:24	WG1875817
1,1,1,2-Tetrachloroethane	U		0.0105	0.0278	8	06/07/2022 23:24	WG1875817
1,1,2,2-Tetrachloroethane	U		0.00772	0.0278	8	06/07/2022 23:24	WG1875817
Tetrachloroethene	U		0.00996	0.0278	8	06/07/2022 23:24	WG1875817
Toluene	U		0.0144	0.0556	8	06/07/2022 23:24	WG1875817
1,2,3-Trichlorobenzene	U		0.0814	0.139	8	06/07/2022 23:24	WG1875817
1,2,4-Trichlorobenzene	U		0.0489	0.139	8	06/07/2022 23:24	WG1875817
1,1,1-Trichloroethane	U		0.0102	0.0278	8	06/07/2022 23:24	WG1875817
1,1,2-Trichloroethane	U		0.00664	0.0278	8	06/07/2022 23:24	WG1875817
Trichloroethene	U		0.00649	0.0111	8	06/07/2022 23:24	WG1875817
Trichlorofluoromethane	U		0.00919	0.0278	8	06/07/2022 23:24	WG1875817
1,2,3-Trichloropropane	U		0.0181	0.139	8	06/07/2022 23:24	WG1875817
1,2,4-Trimethylbenzene	U		0.0175	0.0556	8	06/07/2022 23:24	WG1875817
1,3,5-Trimethylbenzene	0.0406	J	0.0222	0.0556	8	06/07/2022 23:24	WG1875817
Vinyl chloride	U		0.0129	0.0278	8	06/07/2022 23:24	WG1875817
Xylenes, Total	0.115		0.00978	0.0722	8	06/07/2022 23:24	WG1875817
(S) Toluene-d8	*111*			*75.0-131*		*06/07/2022 23:24*	WG1875817
(S) 4-Bromofluorobenzene	*129*			*67.0-138*		*06/07/2022 23:24*	WG1875817
(S) 1,2-Dichloroethane-d4	*94.7*			*70.0-130*		*06/07/2022 23:24*	WG1875817

Sample Narrative:

L1500516-03 WG1875817: Non-target compounds too high to run at a lower dilution.

Semi-Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C20 Hydrocarbons	945		3.64	23.9	5	06/07/2022 06:41	WG1875144
C20-C34 Hydrocarbons	812		3.64	23.9	5	06/07/2022 06:41	WG1875144
(S) o-Terphenyl	*18.4*			*18.0-148*		*06/07/2022 06:41*	WG1875144

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.189		0.00275	0.00717	1	06/11/2022 10:52	WG1877621
Acenaphthene	0.325		0.00250	0.00717	1	06/11/2022 10:52	WG1877621
Acenaphthylene	U		0.00258	0.00717	1	06/11/2022 10:52	WG1877621
Benzo(a)anthracene	0.317		0.00207	0.00717	1	06/11/2022 10:52	WG1877621
Benzo(a)pyrene	0.324		0.00214	0.00717	1	06/11/2022 10:52	WG1877621
Benzo(b)fluoranthene	0.330		0.00183	0.00717	1	06/11/2022 10:52	WG1877621
Benzo(g,h,i)perylene	0.284		0.00211	0.00717	1	06/11/2022 10:52	WG1877621
Benzo(k)fluoranthene	0.0977		0.00257	0.00717	1	06/11/2022 10:52	WG1877621
Chrysene	0.319		0.00277	0.00717	1	06/11/2022 10:52	WG1877621
Dibenz(a,h)anthracene	0.0878		0.00205	0.00717	1	06/11/2022 10:52	WG1877621
Fluoranthene	0.635		0.00271	0.00717	1	06/11/2022 10:52	WG1877621
Fluorene	0.695		0.00245	0.00717	1	06/11/2022 10:52	WG1877621
Indeno(1,2,3-cd)pyrene	0.184		0.00216	0.00717	1	06/11/2022 10:52	WG1877621
Naphthalene	0.432		0.00487	0.0239	1	06/11/2022 10:52	WG1877621
Phenanthrene	2.02		0.00276	0.00717	1	06/11/2022 10:52	WG1877621
Pyrene	0.626		0.00239	0.00717	1	06/11/2022 10:52	WG1877621
1-Methylnaphthalene	1.95		0.00536	0.0239	1	06/11/2022 10:52	WG1877621
2-Methylnaphthalene	0.984		0.00510	0.0239	1	06/11/2022 10:52	WG1877621

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
2-Chloronaphthalene	U		0.00557	0.0239	1	06/11/2022 10:52	WG1877621
(S) Nitrobenzene-d5	*0.000*	J2		*14.0-149*		*06/11/2022 10:52*	WG1877621
(S) 2-Fluorobiphenyl	*62.5*			*34.0-125*		*06/11/2022 10:52*	WG1877621
(S) p-Terphenyl-d14	*70.9*			*23.0-120*		*06/11/2022 10:52*	WG1877621

Sample Narrative:

L1500516-03 WG1877621: Surrogate failure due to matrix interference

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.8		1	06/07/2022 16:09	WG1874753

Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C6 - C12	0.0649	B J	0.0382	0.113	1	06/06/2022 09:48	WG1874734
(S) a,a,a-Trifluorotoluene(FID)	*95.6*			*77.0-120*		*06/06/2022 09:48*	WG1874734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0457	0.0626	1	06/07/2022 22:08	WG1875817
Acrylonitrile	U		0.00452	0.0157	1	06/07/2022 22:08	WG1875817
Benzene	0.00601		0.000585	0.00125	1	06/07/2022 22:08	WG1875817
Bromobenzene	U		0.00113	0.0157	1	06/07/2022 22:08	WG1875817
Bromodichloromethane	U		0.000908	0.00313	1	06/07/2022 22:08	WG1875817
Bromoform	U		0.00147	0.0313	1	06/07/2022 22:08	WG1875817
Bromomethane	U		0.00247	0.0157	1	06/07/2022 22:08	WG1875817
n-Butylbenzene	U		0.00658	0.0157	1	06/07/2022 22:08	WG1875817
sec-Butylbenzene	U		0.00361	0.0157	1	06/07/2022 22:08	WG1875817
tert-Butylbenzene	U		0.00244	0.00626	1	06/07/2022 22:08	WG1875817
Carbon tetrachloride	U		0.00112	0.00626	1	06/07/2022 22:08	WG1875817
Chlorobenzene	U		0.000263	0.00313	1	06/07/2022 22:08	WG1875817
Chlorodibromomethane	U		0.000767	0.00313	1	06/07/2022 22:08	WG1875817
Chloroethane	U		0.00213	0.00626	1	06/07/2022 22:08	WG1875817
Chloroform	U		0.00129	0.00313	1	06/07/2022 22:08	WG1875817
Chloromethane	U		0.00545	0.0157	1	06/07/2022 22:08	WG1875817
2-Chlorotoluene	U		0.00108	0.00313	1	06/07/2022 22:08	WG1875817
4-Chlorotoluene	U		0.000564	0.00626	1	06/07/2022 22:08	WG1875817
1,2-Dibromo-3-Chloropropane	U		0.00489	0.0313	1	06/07/2022 22:08	WG1875817
1,2-Dibromoethane	U		0.000812	0.00313	1	06/07/2022 22:08	WG1875817
Dibromomethane	U		0.000940	0.00626	1	06/07/2022 22:08	WG1875817
1,2-Dichlorobenzene	U		0.000532	0.00626	1	06/07/2022 22:08	WG1875817
1,3-Dichlorobenzene	U		0.000752	0.00626	1	06/07/2022 22:08	WG1875817
1,4-Dichlorobenzene	U		0.000877	0.00626	1	06/07/2022 22:08	WG1875817
Dichlorodifluoromethane	U		0.00202	0.00313	1	06/07/2022 22:08	WG1875817
1,1-Dichloroethane	U		0.000615	0.00313	1	06/07/2022 22:08	WG1875817
1,2-Dichloroethane	U		0.000813	0.00313	1	06/07/2022 22:08	WG1875817
1,1-Dichloroethene	U		0.000759	0.00313	1	06/07/2022 22:08	WG1875817
cis-1,2-Dichloroethene	U		0.000920	0.00313	1	06/07/2022 22:08	WG1875817
trans-1,2-Dichloroethene	U		0.00130	0.00626	1	06/07/2022 22:08	WG1875817
1,2-Dichloropropane	U		0.00178	0.00626	1	06/07/2022 22:08	WG1875817
1,1-Dichloropropene	U		0.00101	0.00313	1	06/07/2022 22:08	WG1875817
1,3-Dichloropropane	U		0.000628	0.00626	1	06/07/2022 22:08	WG1875817
cis-1,3-Dichloropropene	U		0.000948	0.00313	1	06/07/2022 22:08	WG1875817
trans-1,3-Dichloropropene	U		0.00143	0.00626	1	06/07/2022 22:08	WG1875817
2,2-Dichloropropane	U		0.00173	0.00313	1	06/07/2022 22:08	WG1875817
Ethylbenzene	0.0110		0.000923	0.00313	1	06/07/2022 22:08	WG1875817
Hexachloro-1,3-butadiene	U		0.00752	0.0313	1	06/07/2022 22:08	WG1875817
n-Hexane	U		0.00283	0.00626	1	06/07/2022 22:08	WG1875817
Isopropylbenzene	0.00630		0.000532	0.00313	1	06/07/2022 22:08	WG1875817
p-Isopropyltoluene	U		0.00319	0.00626	1	06/07/2022 22:08	WG1875817
2-Butanone (MEK)	U		0.0796	0.125	1	06/07/2022 22:08	WG1875817
Methylene Chloride	0.0174	B J	0.00832	0.0313	1	06/07/2022 22:08	WG1875817

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	U		0.00286	0.0313	1	06/07/2022 22:08	WG1875817
Methyl tert-butyl ether	U		0.000438	0.00125	1	06/07/2022 22:08	WG1875817
Naphthalene	0.0227	J4	0.00611	0.0157	1	06/07/2022 22:08	WG1875817
n-Propylbenzene	0.00614	J	0.00119	0.00626	1	06/07/2022 22:08	WG1875817
Styrene	U		0.000287	0.0157	1	06/07/2022 22:08	WG1875817
1,1,1,2-Tetrachloroethane	U		0.00119	0.00313	1	06/07/2022 22:08	WG1875817
1,1,2,2-Tetrachloroethane	U		0.000871	0.00313	1	06/07/2022 22:08	WG1875817
Tetrachloroethene	U		0.00112	0.00313	1	06/07/2022 22:08	WG1875817
Toluene	0.0306		0.00163	0.00626	1	06/07/2022 22:08	WG1875817
1,2,3-Trichlorobenzene	U		0.00918	0.0157	1	06/07/2022 22:08	WG1875817
1,2,4-Trichlorobenzene	U		0.00551	0.0157	1	06/07/2022 22:08	WG1875817
1,1,1-Trichloroethane	U		0.00116	0.00313	1	06/07/2022 22:08	WG1875817
1,1,2-Trichloroethane	U		0.000748	0.00313	1	06/07/2022 22:08	WG1875817
Trichloroethene	U		0.000732	0.00125	1	06/07/2022 22:08	WG1875817
Trichlorofluoromethane	U		0.00104	0.00313	1	06/07/2022 22:08	WG1875817
1,2,3-Trichloropropane	U		0.00203	0.0157	1	06/07/2022 22:08	WG1875817
1,2,4-Trimethylbenzene	0.0212		0.00198	0.00626	1	06/07/2022 22:08	WG1875817
1,3,5-Trimethylbenzene	0.00457	J	0.00251	0.00626	1	06/07/2022 22:08	WG1875817
Vinyl chloride	U		0.00145	0.00313	1	06/07/2022 22:08	WG1875817
Xylenes, Total	0.0639		0.00110	0.00814	1	06/07/2022 22:08	WG1875817
(S) Toluene-d8	*106*			*75.0-131*		*06/07/2022 22:08*	WG1875817
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*06/07/2022 22:08*	WG1875817
(S) 1,2-Dichloroethane-d4	*90.9*			*70.0-130*		*06/07/2022 22:08*	WG1875817

Semi-Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C20 Hydrocarbons	58.9		3.43	22.5	5	06/07/2022 12:23	WG1875144
C20-C34 Hydrocarbons	155		3.43	22.5	5	06/07/2022 12:23	WG1875144
(S) o-Terphenyl	*96.1*			*18.0-148*		*06/07/2022 12:23*	WG1875144

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.0689		0.00259	0.00676	1	06/11/2022 10:34	WG1877621
Acenaphthene	0.0232		0.00235	0.00676	1	06/11/2022 10:34	WG1877621
Acenaphthylene	0.0184		0.00243	0.00676	1	06/11/2022 10:34	WG1877621
Benzo(a)anthracene	0.318		0.00195	0.00676	1	06/11/2022 10:34	WG1877621
Benzo(a)pyrene	0.287		0.00202	0.00676	1	06/11/2022 10:34	WG1877621
Benzo(b)fluoranthene	0.381		0.00172	0.00676	1	06/11/2022 10:34	WG1877621
Benzo(g,h,i)perylene	0.191		0.00199	0.00676	1	06/11/2022 10:34	WG1877621
Benzo(k)fluoranthene	0.136		0.00242	0.00676	1	06/11/2022 10:34	WG1877621
Chrysene	0.264		0.00261	0.00676	1	06/11/2022 10:34	WG1877621
Dibenz(a,h)anthracene	0.0417		0.00194	0.00676	1	06/11/2022 10:34	WG1877621
Fluoranthene	0.624		0.00256	0.00676	1	06/11/2022 10:34	WG1877621
Fluorene	0.0227		0.00231	0.00676	1	06/11/2022 10:34	WG1877621
Indeno(1,2,3-cd)pyrene	0.191		0.00204	0.00676	1	06/11/2022 10:34	WG1877621
Naphthalene	0.149		0.00459	0.0225	1	06/11/2022 10:34	WG1877621
Phenanthrene	0.325		0.00260	0.00676	1	06/11/2022 10:34	WG1877621
Pyrene	0.626		0.00225	0.00676	1	06/11/2022 10:34	WG1877621
1-Methylnaphthalene	0.136		0.00506	0.0225	1	06/11/2022 10:34	WG1877621
2-Methylnaphthalene	0.193		0.00481	0.0225	1	06/11/2022 10:34	WG1877621
2-Chloronaphthalene	U		0.00525	0.0225	1	06/11/2022 10:34	WG1877621
(S) Nitrobenzene-d5	*61.0*			*14.0-149*		*06/11/2022 10:34*	WG1877621
(S) 2-Fluorobiphenyl	*63.9*			*34.0-125*		*06/11/2022 10:34*	WG1877621

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
(S) p-Terphenyl-d14	*81.4*			*23.0-120*		*06/11/2022 10:34*	WG1877621

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	82.5		1	06/07/2022 16:09	WG1874753

Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C6 - C12	0.213	B	0.0411	0.121	1	06/06/2022 10:08	WG1874734
(S) a,a,a-Trifluorotoluene(FID)	*93.4*			*77.0-120*		*06/06/2022 10:08*	WG1874734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0520	0.0712	1	06/07/2022 22:27	WG1875817
Acrylonitrile	U		0.00514	0.0178	1	06/07/2022 22:27	WG1875817
Benzene	0.00883		0.000665	0.00142	1	06/07/2022 22:27	WG1875817
Bromobenzene	U		0.00128	0.0178	1	06/07/2022 22:27	WG1875817
Bromodichloromethane	U		0.00103	0.00356	1	06/07/2022 22:27	WG1875817
Bromoform	U		0.00167	0.0356	1	06/07/2022 22:27	WG1875817
Bromomethane	U		0.00281	0.0178	1	06/07/2022 22:27	WG1875817
n-Butylbenzene	U		0.00748	0.0178	1	06/07/2022 22:27	WG1875817
sec-Butylbenzene	0.00439	J	0.00410	0.0178	1	06/07/2022 22:27	WG1875817
tert-Butylbenzene	U		0.00278	0.00712	1	06/07/2022 22:27	WG1875817
Carbon tetrachloride	U		0.00128	0.00712	1	06/07/2022 22:27	WG1875817
Chlorobenzene	U		0.000299	0.00356	1	06/07/2022 22:27	WG1875817
Chlorodibromomethane	U		0.000872	0.00356	1	06/07/2022 22:27	WG1875817
Chloroethane	U		0.00242	0.00712	1	06/07/2022 22:27	WG1875817
Chloroform	U		0.00147	0.00356	1	06/07/2022 22:27	WG1875817
Chloromethane	U		0.00620	0.0178	1	06/07/2022 22:27	WG1875817
2-Chlorotoluene	U		0.00123	0.00356	1	06/07/2022 22:27	WG1875817
4-Chlorotoluene	U		0.000641	0.00712	1	06/07/2022 22:27	WG1875817
1,2-Dibromo-3-Chloropropane	U		0.00556	0.0356	1	06/07/2022 22:27	WG1875817
1,2-Dibromoethane	U		0.000923	0.00356	1	06/07/2022 22:27	WG1875817
Dibromomethane	U		0.00107	0.00712	1	06/07/2022 22:27	WG1875817
1,2-Dichlorobenzene	U		0.000606	0.00712	1	06/07/2022 22:27	WG1875817
1,3-Dichlorobenzene	U		0.000855	0.00712	1	06/07/2022 22:27	WG1875817
1,4-Dichlorobenzene	U		0.000997	0.00712	1	06/07/2022 22:27	WG1875817
Dichlorodifluoromethane	U		0.00229	0.00356	1	06/07/2022 22:27	WG1875817
1,1-Dichloroethane	0.0111		0.000700	0.00356	1	06/07/2022 22:27	WG1875817
1,2-Dichloroethane	U		0.000925	0.00356	1	06/07/2022 22:27	WG1875817
1,1-Dichloroethene	U		0.000863	0.00356	1	06/07/2022 22:27	WG1875817
cis-1,2-Dichloroethene	U		0.00105	0.00356	1	06/07/2022 22:27	WG1875817
trans-1,2-Dichloroethene	U		0.00148	0.00712	1	06/07/2022 22:27	WG1875817
1,2-Dichloropropane	U		0.00202	0.00712	1	06/07/2022 22:27	WG1875817
1,1-Dichloropropene	U		0.00115	0.00356	1	06/07/2022 22:27	WG1875817
1,3-Dichloropropane	U		0.000714	0.00712	1	06/07/2022 22:27	WG1875817
cis-1,3-Dichloropropene	U		0.00108	0.00356	1	06/07/2022 22:27	WG1875817
trans-1,3-Dichloropropene	U		0.00162	0.00712	1	06/07/2022 22:27	WG1875817
2,2-Dichloropropane	U		0.00197	0.00356	1	06/07/2022 22:27	WG1875817
Ethylbenzene	0.0147		0.00105	0.00356	1	06/07/2022 22:27	WG1875817
Hexachloro-1,3-butadiene	U		0.00855	0.0356	1	06/07/2022 22:27	WG1875817
n-Hexane	0.0797		0.00322	0.00712	1	06/07/2022 22:27	WG1875817
Isopropylbenzene	0.0114		0.000606	0.00356	1	06/07/2022 22:27	WG1875817
p-Isopropyltoluene	U		0.00363	0.00712	1	06/07/2022 22:27	WG1875817
2-Butanone (MEK)	U		0.0905	0.142	1	06/07/2022 22:27	WG1875817
Methylene Chloride	0.0190	B J	0.00946	0.0356	1	06/07/2022 22:27	WG1875817

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	U		0.00325	0.0356	1	06/07/2022 22:27	WG1875817
Methyl tert-butyl ether	U		0.000499	0.00142	1	06/07/2022 22:27	WG1875817
Naphthalene	0.0306	J4	0.00695	0.0178	1	06/07/2022 22:27	WG1875817
n-Propylbenzene	0.0125		0.00135	0.00712	1	06/07/2022 22:27	WG1875817
Styrene	U		0.000326	0.0178	1	06/07/2022 22:27	WG1875817
1,1,1,2-Tetrachloroethane	U		0.00135	0.00356	1	06/07/2022 22:27	WG1875817
1,1,2,2-Tetrachloroethane	U		0.000990	0.00356	1	06/07/2022 22:27	WG1875817
Tetrachloroethene	U		0.00128	0.00356	1	06/07/2022 22:27	WG1875817
Toluene	0.0405		0.00185	0.00712	1	06/07/2022 22:27	WG1875817
1,2,3-Trichlorobenzene	U		0.0104	0.0178	1	06/07/2022 22:27	WG1875817
1,2,4-Trichlorobenzene	U		0.00627	0.0178	1	06/07/2022 22:27	WG1875817
1,1,1-Trichloroethane	0.00396		0.00132	0.00356	1	06/07/2022 22:27	WG1875817
1,1,2-Trichloroethane	U		0.000851	0.00356	1	06/07/2022 22:27	WG1875817
Trichloroethene	U		0.000832	0.00142	1	06/07/2022 22:27	WG1875817
Trichlorofluoromethane	U		0.00118	0.00356	1	06/07/2022 22:27	WG1875817
1,2,3-Trichloropropane	U		0.00231	0.0178	1	06/07/2022 22:27	WG1875817
1,2,4-Trimethylbenzene	0.0184		0.00225	0.00712	1	06/07/2022 22:27	WG1875817
1,3,5-Trimethylbenzene	0.00368	J	0.00285	0.00712	1	06/07/2022 22:27	WG1875817
Vinyl chloride	U		0.00165	0.00356	1	06/07/2022 22:27	WG1875817
Xylenes, Total	0.0668		0.00125	0.00926	1	06/07/2022 22:27	WG1875817
(S) Toluene-d8	*106*			*75.0-131*		*06/07/2022 22:27*	WG1875817
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*06/07/2022 22:27*	WG1875817
(S) 1,2-Dichloroethane-d4	*96.3*			*70.0-130*		*06/07/2022 22:27*	WG1875817

Semi-Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C20 Hydrocarbons	20.1		0.740	4.85	1	06/07/2022 05:23	WG1875144
C20-C34 Hydrocarbons	22.9		0.741	4.85	1	06/07/2022 05:23	WG1875144
(S) o-Terphenyl	*54.4*			*18.0-148*		*06/07/2022 05:23*	WG1875144

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.0457		0.00279	0.00727	1	06/11/2022 10:16	WG1877621
Acenaphthene	0.0272		0.00253	0.00727	1	06/11/2022 10:16	WG1877621
Acenaphthylene	0.0132		0.00262	0.00727	1	06/11/2022 10:16	WG1877621
Benzo(a)anthracene	0.143		0.00210	0.00727	1	06/11/2022 10:16	WG1877621
Benzo(a)pyrene	0.118		0.00217	0.00727	1	06/11/2022 10:16	WG1877621
Benzo(b)fluoranthene	0.167		0.00186	0.00727	1	06/11/2022 10:16	WG1877621
Benzo(g,h,i)perylene	0.0798		0.00215	0.00727	1	06/11/2022 10:16	WG1877621
Benzo(k)fluoranthene	0.0621		0.00261	0.00727	1	06/11/2022 10:16	WG1877621
Chrysene	0.125		0.00281	0.00727	1	06/11/2022 10:16	WG1877621
Dibenz(a,h)anthracene	0.0189		0.00209	0.00727	1	06/11/2022 10:16	WG1877621
Fluoranthene	0.266		0.00275	0.00727	1	06/11/2022 10:16	WG1877621
Fluorene	0.0349		0.00249	0.00727	1	06/11/2022 10:16	WG1877621
Indeno(1,2,3-cd)pyrene	0.0818		0.00219	0.00727	1	06/11/2022 10:16	WG1877621
Naphthalene	0.724		0.00495	0.0242	1	06/11/2022 10:16	WG1877621
Phenanthrene	0.372		0.00280	0.00727	1	06/11/2022 10:16	WG1877621
Pyrene	0.275		0.00242	0.00727	1	06/11/2022 10:16	WG1877621
1-Methylnaphthalene	0.620		0.00544	0.0242	1	06/11/2022 10:16	WG1877621
2-Methylnaphthalene	0.863		0.00518	0.0242	1	06/11/2022 10:16	WG1877621
2-Chloronaphthalene	U		0.00565	0.0242	1	06/11/2022 10:16	WG1877621
(S) Nitrobenzene-d5	*64.9*			*14.0-149*		*06/11/2022 10:16*	WG1877621
(S) 2-Fluorobiphenyl	*68.2*			*34.0-125*		*06/11/2022 10:16*	WG1877621

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
(S) p-Terphenyl-d14	*84.6*			*23.0-120*		*06/11/2022 10:16*	WG1877621

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.8		1	06/07/2022 16:09	WG1874753

Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C6 - C12	0.187	B	0.0373	0.110	1	06/06/2022 10:28	WG1874734
(S) a,a,a-Trifluorotoluene(FID)	*91.4*			*77.0-120*		*06/06/2022 10:28*	WG1874734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0439	0.0601	1	06/08/2022 07:02	WG1875887
Acrylonitrile	U		0.00434	0.0150	1	06/08/2022 07:02	WG1875887
Benzene	0.00450		0.000562	0.00120	1	06/08/2022 07:02	WG1875887
Bromobenzene	U		0.00108	0.0150	1	06/08/2022 07:02	WG1875887
Bromodichloromethane	U		0.000872	0.00301	1	06/08/2022 07:02	WG1875887
Bromoform	U		0.00141	0.0301	1	06/08/2022 07:02	WG1875887
Bromomethane	U		0.00237	0.0150	1	06/08/2022 23:55	WG1876580
n-Butylbenzene	U		0.00631	0.0150	1	06/08/2022 23:55	WG1876580
sec-Butylbenzene	U		0.00346	0.0150	1	06/08/2022 07:02	WG1875887
tert-Butylbenzene	U		0.00235	0.00601	1	06/08/2022 07:02	WG1875887
Carbon tetrachloride	U		0.00108	0.00601	1	06/08/2022 07:02	WG1875887
Chlorobenzene	U		0.000253	0.00301	1	06/08/2022 07:02	WG1875887
Chlorodibromomethane	U		0.000736	0.00301	1	06/08/2022 07:02	WG1875887
Chloroethane	U		0.00204	0.00601	1	06/08/2022 23:55	WG1876580
Chloroform	U		0.00124	0.00301	1	06/08/2022 07:02	WG1875887
Chloromethane	U		0.00523	0.0150	1	06/08/2022 23:55	WG1876580
2-Chlorotoluene	U		0.00104	0.00301	1	06/08/2022 07:02	WG1875887
4-Chlorotoluene	U		0.000541	0.00601	1	06/08/2022 07:02	WG1875887
1,2-Dibromo-3-Chloropropane	U		0.00469	0.0301	1	06/08/2022 07:02	WG1875887
1,2-Dibromoethane	U		0.000779	0.00301	1	06/08/2022 07:02	WG1875887
Dibromomethane	U		0.000902	0.00601	1	06/08/2022 07:02	WG1875887
1,2-Dichlorobenzene	U		0.000511	0.00601	1	06/08/2022 07:02	WG1875887
1,3-Dichlorobenzene	U		0.000722	0.00601	1	06/08/2022 07:02	WG1875887
1,4-Dichlorobenzene	U		0.000842	0.00601	1	06/08/2022 07:02	WG1875887
Dichlorodifluoromethane	U		0.00194	0.00301	1	06/08/2022 23:55	WG1876580
1,1-Dichloroethane	U		0.000590	0.00301	1	06/08/2022 07:02	WG1875887
1,2-Dichloroethane	U		0.000780	0.00301	1	06/08/2022 07:02	WG1875887
1,1-Dichloroethene	U		0.000729	0.00301	1	06/08/2022 07:02	WG1875887
cis-1,2-Dichloroethene	0.00176	J	0.000883	0.00301	1	06/08/2022 07:02	WG1875887
trans-1,2-Dichloroethene	U		0.00125	0.00601	1	06/08/2022 07:02	WG1875887
1,2-Dichloropropane	U		0.00171	0.00601	1	06/08/2022 07:02	WG1875887
1,1-Dichloropropene	U		0.000973	0.00301	1	06/08/2022 07:02	WG1875887
1,3-Dichloropropane	U		0.000602	0.00601	1	06/08/2022 07:02	WG1875887
cis-1,3-Dichloropropene	U		0.000910	0.00301	1	06/08/2022 07:02	WG1875887
trans-1,3-Dichloropropene	U		0.00137	0.00601	1	06/08/2022 07:02	WG1875887
2,2-Dichloropropane	U		0.00166	0.00301	1	06/08/2022 23:55	WG1876580
Ethylbenzene	0.00277	J	0.000886	0.00301	1	06/08/2022 07:02	WG1875887
Hexachloro-1,3-butadiene	U		0.00722	0.0301	1	06/08/2022 07:02	WG1875887
n-Hexane	0.00616		0.00272	0.00601	1	06/08/2022 23:55	WG1876580
Isopropylbenzene	0.00416		0.000511	0.00301	1	06/08/2022 07:02	WG1875887
p-Isopropyltoluene	U		0.00307	0.00601	1	06/08/2022 07:02	WG1875887
2-Butanone (MEK)	U		0.0764	0.120	1	06/08/2022 07:02	WG1875887
Methylene Chloride	0.0168	B J	0.00799	0.0301	1	06/08/2022 07:02	WG1875887

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	U		0.00274	0.0301	1	06/08/2022 07:02	WG1875887
Methyl tert-butyl ether	U		0.000421	0.00120	1	06/08/2022 07:02	WG1875887
Naphthalene	U		0.00587	0.0150	1	06/08/2022 07:02	WG1875887
n-Propylbenzene	0.00408	J	0.00114	0.00601	1	06/08/2022 07:02	WG1875887
Styrene	U		0.000275	0.0150	1	06/08/2022 07:02	WG1875887
1,1,1,2-Tetrachloroethane	U		0.00114	0.00301	1	06/08/2022 07:02	WG1875887
1,1,2,2-Tetrachloroethane	U		0.000836	0.00301	1	06/08/2022 07:02	WG1875887
Tetrachloroethene	0.0125		0.00108	0.00301	1	06/08/2022 07:02	WG1875887
Toluene	0.00321	J	0.00156	0.00601	1	06/08/2022 07:02	WG1875887
1,2,3-Trichlorobenzene	U		0.00881	0.0150	1	06/08/2022 07:02	WG1875887
1,2,4-Trichlorobenzene	U		0.00529	0.0150	1	06/08/2022 07:02	WG1875887
1,1,1-Trichloroethane	U		0.00111	0.00301	1	06/08/2022 07:02	WG1875887
1,1,2-Trichloroethane	U		0.000718	0.00301	1	06/08/2022 07:02	WG1875887
Trichloroethene	0.00236		0.000702	0.00120	1	06/08/2022 07:02	WG1875887
Trichlorofluoromethane	U		0.000995	0.00301	1	06/08/2022 23:55	WG1876580
1,2,3-Trichloropropane	U		0.00195	0.0150	1	06/08/2022 07:02	WG1875887
1,2,4-Trimethylbenzene	0.00440	J	0.00190	0.00601	1	06/08/2022 07:02	WG1875887
1,3,5-Trimethylbenzene	U		0.00241	0.00601	1	06/08/2022 07:02	WG1875887
Vinyl chloride	U		0.00139	0.00301	1	06/08/2022 23:55	WG1876580
Xylenes, Total	0.0104		0.00106	0.00782	1	06/08/2022 07:02	WG1875887
(S) Toluene-d8	*105*			*75.0-131*		*06/08/2022 07:02*	WG1875887
(S) Toluene-d8	*105*			*75.0-131*		*06/08/2022 23:55*	WG1876580
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*06/08/2022 07:02*	WG1875887
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*06/08/2022 23:55*	WG1876580
(S) 1,2-Dichloroethane-d4	*92.9*			*70.0-130*		*06/08/2022 07:02*	WG1875887
(S) 1,2-Dichloroethane-d4	*91.4*			*70.0-130*		*06/08/2022 23:55*	WG1876580

Semi-Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C20 Hydrocarbons	20.3		0.672	4.40	1	06/07/2022 06:02	WG1875144
C20-C34 Hydrocarbons	49.1		0.673	4.40	1	06/07/2022 06:02	WG1875144
(S) o-Terphenyl	*85.1*			*18.0-148*		*06/07/2022 06:02*	WG1875144

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.0416	J3 J5	0.00253	0.00661	1	06/11/2022 10:13	WG1877622
Acenaphthene	0.0183		0.00230	0.00661	1	06/11/2022 10:13	WG1877622
Acenaphthylene	0.00404	J	0.00238	0.00661	1	06/11/2022 10:13	WG1877622
Benzo(a)anthracene	0.145	J3 J5	0.00190	0.00661	1	06/11/2022 10:13	WG1877622
Benzo(a)pyrene	0.144	J3 J5	0.00197	0.00661	1	06/11/2022 10:13	WG1877622
Benzo(b)fluoranthene	0.186	J3 J5	0.00168	0.00661	1	06/11/2022 10:13	WG1877622
Benzo(g,h,i)perylene	0.0967	J3 J5	0.00195	0.00661	1	06/11/2022 10:13	WG1877622
Benzo(k)fluoranthene	0.0678	J5	0.00237	0.00661	1	06/11/2022 10:13	WG1877622
Chrysene	0.133	J3 J5	0.00255	0.00661	1	06/11/2022 10:13	WG1877622
Dibenz(a,h)anthracene	0.0216	J3 J5	0.00189	0.00661	1	06/11/2022 10:13	WG1877622
Fluoranthene	0.335	J3 J5	0.00250	0.00661	1	06/11/2022 10:13	WG1877622
Fluorene	0.0178	J5	0.00226	0.00661	1	06/11/2022 10:13	WG1877622
Indeno(1,2,3-cd)pyrene	0.107	J3 J5	0.00199	0.00661	1	06/11/2022 10:13	WG1877622
Naphthalene	0.0122	J J3 J5	0.00449	0.0220	1	06/11/2022 10:13	WG1877622
Phenanthrene	0.192	J3 J5	0.00254	0.00661	1	06/11/2022 10:13	WG1877622
Pyrene	0.298	J3 J5	0.00220	0.00661	1	06/11/2022 10:13	WG1877622
1-Methylnaphthalene	0.0120	J J3 J5	0.00494	0.0220	1	06/11/2022 10:13	WG1877622
2-Methylnaphthalene	0.0148	J J3 J5	0.00470	0.0220	1	06/11/2022 10:13	WG1877622

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
2-Chloronaphthalene	U		0.00513	0.0220	1	06/11/2022 10:13	WG1877622
(S) Nitrobenzene-d5	*63.0*			*14.0-149*		*06/11/2022 10:13*	WG1877622
(S) 2-Fluorobiphenyl	*64.7*			*34.0-125*		*06/11/2022 10:13*	WG1877622
(S) p-Terphenyl-d14	*64.7*			*23.0-120*		*06/11/2022 10:13*	WG1877622

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.1		1	06/07/2022 16:09	WG1874753

Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C6 - C12	0.0883	B J	0.0389	0.115	1	06/06/2022 10:49	WG1874734
(S) a,a,a-Trifluorotoluene(FID)	*91.0*			*77.0-120*		*06/06/2022 10:49*	WG1874734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0474	0.0649	1	06/08/2022 07:21	WG1875887
Acrylonitrile	U		0.00468	0.0162	1	06/08/2022 07:21	WG1875887
Benzene	U		0.000606	0.00130	1	06/08/2022 07:21	WG1875887
Bromobenzene	U		0.00117	0.0162	1	06/08/2022 07:21	WG1875887
Bromodichloromethane	U		0.000941	0.00324	1	06/08/2022 07:21	WG1875887
Bromoform	U		0.00152	0.0324	1	06/08/2022 07:21	WG1875887
Bromomethane	U		0.00256	0.0162	1	06/09/2022 00:14	WG1876580
n-Butylbenzene	U		0.00681	0.0162	1	06/09/2022 00:14	WG1876580
sec-Butylbenzene	U		0.00374	0.0162	1	06/08/2022 07:21	WG1875887
tert-Butylbenzene	U		0.00253	0.00649	1	06/08/2022 07:21	WG1875887
Carbon tetrachloride	U		0.00117	0.00649	1	06/08/2022 07:21	WG1875887
Chlorobenzene	U		0.000272	0.00324	1	06/08/2022 07:21	WG1875887
Chlorodibromomethane	U		0.000794	0.00324	1	06/08/2022 07:21	WG1875887
Chloroethane	U		0.00221	0.00649	1	06/09/2022 00:14	WG1876580
Chloroform	U		0.00134	0.00324	1	06/08/2022 07:21	WG1875887
Chloromethane	U		0.00564	0.0162	1	06/09/2022 00:14	WG1876580
2-Chlorotoluene	U		0.00112	0.00324	1	06/08/2022 07:21	WG1875887
4-Chlorotoluene	U		0.000584	0.00649	1	06/08/2022 07:21	WG1875887
1,2-Dibromo-3-Chloropropane	U		0.00506	0.0324	1	06/08/2022 07:21	WG1875887
1,2-Dibromoethane	U		0.000841	0.00324	1	06/08/2022 07:21	WG1875887
Dibromomethane	U		0.000973	0.00649	1	06/08/2022 07:21	WG1875887
1,2-Dichlorobenzene	U		0.000551	0.00649	1	06/08/2022 07:21	WG1875887
1,3-Dichlorobenzene	U		0.000779	0.00649	1	06/08/2022 07:21	WG1875887
1,4-Dichlorobenzene	U		0.000908	0.00649	1	06/08/2022 07:21	WG1875887
Dichlorodifluoromethane	U		0.00209	0.00324	1	06/09/2022 00:14	WG1876580
1,1-Dichloroethane	U		0.000637	0.00324	1	06/08/2022 07:21	WG1875887
1,2-Dichloroethane	U		0.000842	0.00324	1	06/08/2022 07:21	WG1875887
1,1-Dichloroethene	U		0.000786	0.00324	1	06/08/2022 07:21	WG1875887
cis-1,2-Dichloroethene	U		0.000952	0.00324	1	06/08/2022 07:21	WG1875887
trans-1,2-Dichloroethene	U		0.00135	0.00649	1	06/08/2022 07:21	WG1875887
1,2-Dichloropropane	U		0.00184	0.00649	1	06/08/2022 07:21	WG1875887
1,1-Dichloropropene	U		0.00105	0.00324	1	06/08/2022 07:21	WG1875887
1,3-Dichloropropane	U		0.000650	0.00649	1	06/08/2022 07:21	WG1875887
cis-1,3-Dichloropropene	U		0.000982	0.00324	1	06/08/2022 07:21	WG1875887
trans-1,3-Dichloropropene	U		0.00148	0.00649	1	06/08/2022 07:21	WG1875887
2,2-Dichloropropane	U		0.00179	0.00324	1	06/09/2022 00:14	WG1876580
Ethylbenzene	U		0.000956	0.00324	1	06/08/2022 07:21	WG1875887
Hexachloro-1,3-butadiene	U		0.00779	0.0324	1	06/08/2022 07:21	WG1875887
n-Hexane	U		0.00293	0.00649	1	06/09/2022 00:14	WG1876580
Isopropylbenzene	U		0.000551	0.00324	1	06/08/2022 07:21	WG1875887
p-Isopropyltoluene	U		0.00331	0.00649	1	06/08/2022 07:21	WG1875887
2-Butanone (MEK)	U		0.0824	0.130	1	06/08/2022 07:21	WG1875887
Methylene Chloride	0.0178	B J	0.00862	0.0324	1	06/08/2022 07:21	WG1875887

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	U		0.00296	0.0324	1	06/08/2022 07:21	WG1875887
Methyl tert-butyl ether	U		0.000454	0.00130	1	06/08/2022 07:21	WG1875887
Naphthalene	U		0.00633	0.0162	1	06/08/2022 07:21	WG1875887
n-Propylbenzene	U		0.00123	0.00649	1	06/08/2022 07:21	WG1875887
Styrene	U		0.000297	0.0162	1	06/08/2022 07:21	WG1875887
1,1,1,2-Tetrachloroethane	U		0.00123	0.00324	1	06/08/2022 07:21	WG1875887
1,1,2,2-Tetrachloroethane	U		0.000902	0.00324	1	06/08/2022 07:21	WG1875887
Tetrachloroethene	U		0.00116	0.00324	1	06/08/2022 07:21	WG1875887
Toluene	U		0.00169	0.00649	1	06/08/2022 07:21	WG1875887
1,2,3-Trichlorobenzene	U		0.00951	0.0162	1	06/08/2022 07:21	WG1875887
1,2,4-Trichlorobenzene	U		0.00571	0.0162	1	06/08/2022 07:21	WG1875887
1,1,1-Trichloroethane	U		0.00120	0.00324	1	06/08/2022 07:21	WG1875887
1,1,2-Trichloroethane	U		0.000775	0.00324	1	06/08/2022 07:21	WG1875887
Trichloroethene	U		0.000758	0.00130	1	06/08/2022 07:21	WG1875887
Trichlorofluoromethane	U		0.00107	0.00324	1	06/09/2022 00:14	WG1876580
1,2,3-Trichloropropane	U		0.00210	0.0162	1	06/08/2022 07:21	WG1875887
1,2,4-Trimethylbenzene	U		0.00205	0.00649	1	06/08/2022 07:21	WG1875887
1,3,5-Trimethylbenzene	U		0.00260	0.00649	1	06/08/2022 07:21	WG1875887
Vinyl chloride	U		0.00151	0.00324	1	06/09/2022 00:14	WG1876580
Xylenes, Total	U		0.00114	0.00843	1	06/08/2022 07:21	WG1875887
(S) Toluene-d8	*106*			*75.0-131*		*06/08/2022 07:21*	WG1875887
(S) Toluene-d8	*106*			*75.0-131*		*06/09/2022 00:14*	WG1876580
(S) 4-Bromofluorobenzene	*98.8*			*67.0-138*		*06/08/2022 07:21*	WG1875887
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*06/09/2022 00:14*	WG1876580
(S) 1,2-Dichloroethane-d4	*95.4*			*70.0-130*		*06/08/2022 07:21*	WG1875887
(S) 1,2-Dichloroethane-d4	*97.2*			*70.0-130*		*06/09/2022 00:14*	WG1876580

Semi-Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C20 Hydrocarbons	51.9		0.700	4.59	1	06/07/2022 05:49	WG1875144
C20-C34 Hydrocarbons	56.3		0.701	4.59	1	06/07/2022 05:49	WG1875144
(S) o-Terphenyl	*64.9*			*18.0-148*		*06/07/2022 05:49*	WG1875144

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.00428	J	0.00264	0.00689	1	06/11/2022 09:54	WG1877622
Acenaphthene	0.00342	J	0.00240	0.00689	1	06/11/2022 09:54	WG1877622
Acenaphthylene	U		0.00248	0.00689	1	06/11/2022 09:54	WG1877622
Benzo(a)anthracene	0.00615	J	0.00199	0.00689	1	06/11/2022 09:54	WG1877622
Benzo(a)pyrene	0.00618	J	0.00206	0.00689	1	06/11/2022 09:54	WG1877622
Benzo(b)fluoranthene	0.00450	J	0.00176	0.00689	1	06/11/2022 09:54	WG1877622
Benzo(g,h,i)perylene	0.00947		0.00203	0.00689	1	06/11/2022 09:54	WG1877622
Benzo(k)fluoranthene	U		0.00247	0.00689	1	06/11/2022 09:54	WG1877622
Chrysene	0.00983		0.00266	0.00689	1	06/11/2022 09:54	WG1877622
Dibenz(a,h)anthracene	U		0.00197	0.00689	1	06/11/2022 09:54	WG1877622
Fluoranthene	0.00533	J	0.00261	0.00689	1	06/11/2022 09:54	WG1877622
Fluorene	0.00268	J	0.00235	0.00689	1	06/11/2022 09:54	WG1877622
Indeno(1,2,3-cd)pyrene	0.00243	J	0.00208	0.00689	1	06/11/2022 09:54	WG1877622
Naphthalene	0.00739	J	0.00468	0.0230	1	06/11/2022 09:54	WG1877622
Phenanthrene	0.00954		0.00265	0.00689	1	06/11/2022 09:54	WG1877622
Pyrene	0.0398		0.00230	0.00689	1	06/11/2022 09:54	WG1877622
1-Methylnaphthalene	0.00863	J	0.00516	0.0230	1	06/11/2022 09:54	WG1877622
2-Methylnaphthalene	0.0140	J	0.00490	0.0230	1	06/11/2022 09:54	WG1877622

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
2-Chloronaphthalene	U		0.00535	0.0230	1	06/11/2022 09:54	WG1877622
(S) Nitrobenzene-d5	*62.7*			*14.0-149*		*06/11/2022 09:54*	WG1877622
(S) 2-Fluorobiphenyl	*56.8*			*34.0-125*		*06/11/2022 09:54*	WG1877622
(S) p-Terphenyl-d14	*55.1*			*23.0-120*		*06/11/2022 09:54*	WG1877622

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	85.9		1	06/07/2022 16:09	WG1874753

Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C6 - C12	178		1.13	3.32	25	06/09/2022 12:33	WG1876907
(S) a,a,a-Trifluorotoluene(FID)	*98.1*			*77.0-120*		*06/09/2022 12:33*	WG1876907

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0485	0.0665	1	06/08/2022 07:40	WG1875887
Acrylonitrile	U		0.00480	0.0166	1	06/08/2022 07:40	WG1875887
Benzene	0.00120	J	0.000621	0.00133	1	06/08/2022 07:40	WG1875887
Bromobenzene	U		0.00120	0.0166	1	06/08/2022 07:40	WG1875887
Bromodichloromethane	U		0.000964	0.00332	1	06/08/2022 07:40	WG1875887
Bromoform	U		0.00156	0.0332	1	06/08/2022 07:40	WG1875887
Bromomethane	U		0.00262	0.0166	1	06/09/2022 00:33	WG1876580
n-Butylbenzene	0.0763		0.00698	0.0166	1	06/09/2022 00:33	WG1876580
sec-Butylbenzene	0.0275		0.00383	0.0166	1	06/08/2022 07:40	WG1875887
tert-Butylbenzene	0.00984		0.00259	0.00665	1	06/08/2022 07:40	WG1875887
Carbon tetrachloride	U		0.00119	0.00665	1	06/08/2022 07:40	WG1875887
Chlorobenzene	U		0.000279	0.00332	1	06/08/2022 07:40	WG1875887
Chlorodibromomethane	U		0.000814	0.00332	1	06/08/2022 07:40	WG1875887
Chloroethane	U		0.00226	0.00665	1	06/09/2022 00:33	WG1876580
Chloroform	U		0.00137	0.00332	1	06/08/2022 07:40	WG1875887
Chloromethane	U		0.00578	0.0166	1	06/09/2022 00:33	WG1876580
2-Chlorotoluene	U		0.00115	0.00332	1	06/08/2022 07:40	WG1875887
4-Chlorotoluene	U		0.000598	0.00665	1	06/08/2022 07:40	WG1875887
1,2-Dibromo-3-Chloropropane	U		0.00519	0.0332	1	06/08/2022 07:40	WG1875887
1,2-Dibromoethane	U		0.000862	0.00332	1	06/08/2022 07:40	WG1875887
Dibromomethane	U		0.000997	0.00665	1	06/08/2022 07:40	WG1875887
1,2-Dichlorobenzene	U		0.000565	0.00665	1	06/08/2022 07:40	WG1875887
1,3-Dichlorobenzene	U		0.000798	0.00665	1	06/08/2022 07:40	WG1875887
1,4-Dichlorobenzene	U		0.000931	0.00665	1	06/08/2022 07:40	WG1875887
Dichlorodifluoromethane	U		0.00214	0.00332	1	06/09/2022 00:33	WG1876580
1,1-Dichloroethane	U		0.000653	0.00332	1	06/08/2022 07:40	WG1875887
1,2-Dichloroethane	U		0.000863	0.00332	1	06/08/2022 07:40	WG1875887
1,1-Dichloroethene	U		0.000806	0.00332	1	06/08/2022 07:40	WG1875887
cis-1,2-Dichloroethene	U		0.000976	0.00332	1	06/08/2022 07:40	WG1875887
trans-1,2-Dichloroethene	U		0.00138	0.00665	1	06/08/2022 07:40	WG1875887
1,2-Dichloropropane	U		0.00189	0.00665	1	06/08/2022 07:40	WG1875887
1,1-Dichloropropene	U		0.00108	0.00332	1	06/08/2022 07:40	WG1875887
1,3-Dichloropropane	U		0.000666	0.00665	1	06/08/2022 07:40	WG1875887
cis-1,3-Dichloropropene	U		0.00101	0.00332	1	06/08/2022 07:40	WG1875887
trans-1,3-Dichloropropene	U		0.00152	0.00665	1	06/08/2022 07:40	WG1875887
2,2-Dichloropropane	U		0.00184	0.00332	1	06/09/2022 00:33	WG1876580
Ethylbenzene	0.00549		0.000980	0.00332	1	06/08/2022 07:40	WG1875887
Hexachloro-1,3-butadiene	U		0.00798	0.0332	1	06/08/2022 07:40	WG1875887
n-Hexane	0.0838		0.00301	0.00665	1	06/09/2022 00:33	WG1876580
Isopropylbenzene	0.0108		0.000565	0.00332	1	06/08/2022 07:40	WG1875887
p-Isopropyltoluene	0.00366	J	0.00339	0.00665	1	06/08/2022 07:40	WG1875887
2-Butanone (MEK)	U		0.0844	0.133	1	06/08/2022 07:40	WG1875887
Methylene Chloride	0.0210	B J	0.00883	0.0332	1	06/08/2022 07:40	WG1875887

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	U		0.00303	0.0332	1	06/08/2022 07:40	WG1875887
Methyl tert-butyl ether	U		0.000465	0.00133	1	06/08/2022 07:40	WG1875887
Naphthalene	0.0261		0.00649	0.0166	1	06/08/2022 07:40	WG1875887
n-Propylbenzene	0.00848		0.00126	0.00665	1	06/08/2022 07:40	WG1875887
Styrene	U		0.000305	0.0166	1	06/08/2022 07:40	WG1875887
1,1,1,2-Tetrachloroethane	U		0.00126	0.00332	1	06/08/2022 07:40	WG1875887
1,1,2,2-Tetrachloroethane	U		0.000924	0.00332	1	06/08/2022 07:40	WG1875887
Tetrachloroethene	U		0.00119	0.00332	1	06/08/2022 07:40	WG1875887
Toluene	0.00366	J	0.00173	0.00665	1	06/08/2022 07:40	WG1875887
1,2,3-Trichlorobenzene	U		0.00975	0.0166	1	06/08/2022 07:40	WG1875887
1,2,4-Trichlorobenzene	U		0.00585	0.0166	1	06/08/2022 07:40	WG1875887
1,1,1-Trichloroethane	U		0.00123	0.00332	1	06/08/2022 07:40	WG1875887
1,1,2-Trichloroethane	U		0.000794	0.00332	1	06/08/2022 07:40	WG1875887
Trichloroethene	U		0.000777	0.00133	1	06/08/2022 07:40	WG1875887
Trichlorofluoromethane	U		0.00110	0.00332	1	06/09/2022 00:33	WG1876580
1,2,3-Trichloropropane	U		0.00215	0.0166	1	06/08/2022 07:40	WG1875887
1,2,4-Trimethylbenzene	0.0136		0.00210	0.00665	1	06/08/2022 07:40	WG1875887
1,3,5-Trimethylbenzene	0.00308	J	0.00266	0.00665	1	06/08/2022 07:40	WG1875887
Vinyl chloride	U		0.00154	0.00332	1	06/09/2022 00:33	WG1876580
Xylenes, Total	0.0173		0.00117	0.00864	1	06/08/2022 07:40	WG1875887
(S) Toluene-d8	*100*			*75.0-131*		*06/08/2022 07:40*	WG1875887
(S) Toluene-d8	*100*			*75.0-131*		*06/09/2022 00:33*	WG1876580
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*06/08/2022 07:40*	WG1875887
(S) 4-Bromofluorobenzene	*118*			*67.0-138*		*06/09/2022 00:33*	WG1876580
(S) 1,2-Dichloroethane-d4	*89.6*			*70.0-130*		*06/08/2022 07:40*	WG1875887
(S) 1,2-Dichloroethane-d4	*90.3*			*70.0-130*		*06/09/2022 00:33*	WG1876580

Semi-Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C20 Hydrocarbons	1100		7.10	46.6	10	06/07/2022 07:07	WG1875144
C20-C34 Hydrocarbons	2280		35.6	233	50	06/07/2022 12:49	WG1875144
(S) o-Terphenyl	*80.8*			*18.0-148*		*06/07/2022 07:07*	WG1875144
(S) o-Terphenyl	*0.000*	J7		*18.0-148*		*06/07/2022 12:49*	WG1875144

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.943		0.0268	0.0699	10	06/13/2022 23:10	WG1878572
Acenaphthene	0.535		0.0243	0.0699	10	06/13/2022 23:10	WG1878572
Acenaphthylene	0.146		0.0252	0.0699	10	06/13/2022 23:10	WG1878572
Benzo(a)anthracene	8.60		0.0201	0.0699	10	06/13/2022 23:10	WG1878572
Benzo(a)pyrene	23.5		0.0208	0.0699	10	06/13/2022 23:10	WG1878572
Benzo(b)fluoranthene	11.0		0.0178	0.0699	10	06/13/2022 23:10	WG1878572
Benzo(g,h,i)perylene	28.1		0.0206	0.0699	10	06/13/2022 23:10	WG1878572
Benzo(k)fluoranthene	1.91		0.0250	0.0699	10	06/13/2022 23:10	WG1878572
Chrysene	6.84		0.0270	0.0699	10	06/13/2022 23:10	WG1878572
Dibenz(a,h)anthracene	12.9		0.0200	0.0699	10	06/13/2022 23:10	WG1878572
Fluoranthene	1.74		0.0264	0.0699	10	06/13/2022 23:10	WG1878572
Fluorene	0.671		0.0239	0.0699	10	06/13/2022 23:10	WG1878572
Indeno(1,2,3-cd)pyrene	11.4		0.0211	0.0699	10	06/13/2022 23:10	WG1878572
Naphthalene	0.581		0.0475	0.233	10	06/13/2022 23:10	WG1878572
Phenanthrene	1.12		0.0269	0.0699	10	06/13/2022 23:10	WG1878572
Pyrene	6.18		0.0233	0.0699	10	06/13/2022 23:10	WG1878572
1-Methylnaphthalene	0.680		0.0523	0.233	10	06/13/2022 23:10	WG1878572

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
2-Methylnaphthalene	0.813		0.0497	0.233	10	06/13/2022 23:10	WG1878572
2-Chloronaphthalene	U		0.0543	0.233	10	06/13/2022 23:10	WG1878572
(S) Nitrobenzene-d5	*0.000*	J2		*14.0-149*		*06/13/2022 23:10*	WG1878572
(S) 2-Fluorobiphenyl	*70.2*			*34.0-125*		*06/13/2022 23:10*	WG1878572
(S) p-Terphenyl-d14	*108*			*23.0-120*		*06/13/2022 23:10*	WG1878572

Sample Narrative:

L1500516-08 WG1878572: Surrogate failure due to matrix interference

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	82.4		1	06/07/2022 16:09	WG1874753

Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C6 - C12	257		1.21	3.57	25	06/09/2022 12:57	WG1876907
(S) a,a,a-Trifluorotoluene(FID)	*100*			*77.0-120*		*06/09/2022 12:57*	WG1876907

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0522	0.0715	1	06/08/2022 07:59	WG1875887
Acrylonitrile	U		0.00516	0.0179	1	06/08/2022 07:59	WG1875887
Benzene	0.00247		0.000668	0.00143	1	06/08/2022 07:59	WG1875887
Bromobenzene	U		0.00129	0.0179	1	06/08/2022 07:59	WG1875887
Bromodichloromethane	U		0.00104	0.00357	1	06/08/2022 07:59	WG1875887
Bromoform	U		0.00167	0.0357	1	06/08/2022 07:59	WG1875887
Bromomethane	U		0.00282	0.0179	1	06/09/2022 00:52	WG1876580
n-Butylbenzene	0.0916		0.00750	0.0179	1	06/09/2022 00:52	WG1876580
sec-Butylbenzene	0.0443		0.00412	0.0179	1	06/08/2022 07:59	WG1875887
tert-Butylbenzene	0.0103		0.00279	0.00715	1	06/08/2022 07:59	WG1875887
Carbon tetrachloride	U		0.00128	0.00715	1	06/08/2022 07:59	WG1875887
Chlorobenzene	U		0.000300	0.00357	1	06/08/2022 07:59	WG1875887
Chlorodibromomethane	U		0.000875	0.00357	1	06/08/2022 07:59	WG1875887
Chloroethane	U		0.00243	0.00715	1	06/09/2022 00:52	WG1876580
Chloroform	U		0.00147	0.00357	1	06/08/2022 07:59	WG1875887
Chloromethane	U		0.00622	0.0179	1	06/09/2022 00:52	WG1876580
2-Chlorotoluene	U		0.00124	0.00357	1	06/08/2022 07:59	WG1875887
4-Chlorotoluene	U		0.000643	0.00715	1	06/08/2022 07:59	WG1875887
1,2-Dibromo-3-Chloropropane	U		0.00558	0.0357	1	06/08/2022 07:59	WG1875887
1,2-Dibromoethane	U		0.000926	0.00357	1	06/08/2022 07:59	WG1875887
Dibromomethane	U		0.00107	0.00715	1	06/08/2022 07:59	WG1875887
1,2-Dichlorobenzene	U		0.000608	0.00715	1	06/08/2022 07:59	WG1875887
1,3-Dichlorobenzene	U		0.000858	0.00715	1	06/08/2022 07:59	WG1875887
1,4-Dichlorobenzene	U		0.00100	0.00715	1	06/08/2022 07:59	WG1875887
Dichlorodifluoromethane	U		0.00230	0.00357	1	06/09/2022 00:52	WG1876580
1,1-Dichloroethane	U		0.000702	0.00357	1	06/08/2022 07:59	WG1875887
1,2-Dichloroethane	U		0.000928	0.00357	1	06/08/2022 07:59	WG1875887
1,1-Dichloroethene	U		0.000866	0.00357	1	06/08/2022 07:59	WG1875887
cis-1,2-Dichloroethene	U		0.00105	0.00357	1	06/08/2022 07:59	WG1875887
trans-1,2-Dichloroethene	U		0.00149	0.00715	1	06/08/2022 07:59	WG1875887
1,2-Dichloropropane	U		0.00203	0.00715	1	06/08/2022 07:59	WG1875887
1,1-Dichloropropene	U		0.00116	0.00357	1	06/08/2022 07:59	WG1875887
1,3-Dichloropropane	U		0.000716	0.00715	1	06/08/2022 07:59	WG1875887
cis-1,3-Dichloropropene	U		0.00108	0.00357	1	06/08/2022 07:59	WG1875887
trans-1,3-Dichloropropene	U		0.00163	0.00715	1	06/08/2022 07:59	WG1875887
2,2-Dichloropropane	U		0.00197	0.00357	1	06/09/2022 00:52	WG1876580
Ethylbenzene	0.00623		0.00105	0.00357	1	06/08/2022 07:59	WG1875887
Hexachloro-1,3-butadiene	U		0.00858	0.0357	1	06/08/2022 07:59	WG1875887
n-Hexane	0.0330		0.00323	0.00715	1	06/09/2022 00:52	WG1876580
Isopropylbenzene	0.0167		0.000608	0.00357	1	06/08/2022 07:59	WG1875887
p-Isopropyltoluene	0.655		0.00365	0.00715	1	06/08/2022 07:59	WG1875887
2-Butanone (MEK)	U		0.0908	0.143	1	06/08/2022 07:59	WG1875887
Methylene Chloride	0.0202	B J	0.00949	0.0357	1	06/08/2022 07:59	WG1875887

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	U		0.00326	0.0357	1	06/08/2022 07:59	WG1875887
Methyl tert-butyl ether	U		0.000500	0.00143	1	06/08/2022 07:59	WG1875887
Naphthalene	0.0249		0.00698	0.0179	1	06/08/2022 07:59	WG1875887
n-Propylbenzene	0.0246		0.00136	0.00715	1	06/08/2022 07:59	WG1875887
Styrene	U		0.000327	0.0179	1	06/08/2022 07:59	WG1875887
1,1,1,2-Tetrachloroethane	U		0.00136	0.00357	1	06/08/2022 07:59	WG1875887
1,1,2,2-Tetrachloroethane	U		0.000994	0.00357	1	06/08/2022 07:59	WG1875887
Tetrachloroethene	U		0.00128	0.00357	1	06/08/2022 07:59	WG1875887
Toluene	0.00602	J	0.00186	0.00715	1	06/08/2022 07:59	WG1875887
1,2,3-Trichlorobenzene	U		0.0105	0.0179	1	06/08/2022 07:59	WG1875887
1,2,4-Trichlorobenzene	U		0.00629	0.0179	1	06/08/2022 07:59	WG1875887
1,1,1-Trichloroethane	U		0.00132	0.00357	1	06/08/2022 07:59	WG1875887
1,1,2-Trichloroethane	U		0.000853	0.00357	1	06/08/2022 07:59	WG1875887
Trichloroethene	U		0.000835	0.00143	1	06/08/2022 07:59	WG1875887
Trichlorofluoromethane	U		0.00118	0.00357	1	06/09/2022 00:52	WG1876580
1,2,3-Trichloropropane	U		0.00232	0.0179	1	06/08/2022 07:59	WG1875887
1,2,4-Trimethylbenzene	0.0793		0.00226	0.00715	1	06/08/2022 07:59	WG1875887
1,3,5-Trimethylbenzene	0.0222		0.00286	0.00715	1	06/08/2022 07:59	WG1875887
Vinyl chloride	U		0.00166	0.00357	1	06/09/2022 00:52	WG1876580
Xylenes, Total	0.0202		0.00126	0.00929	1	06/08/2022 07:59	WG1875887
(S) Toluene-d8	*109*			*75.0-131*		*06/08/2022 07:59*	WG1875887
(S) Toluene-d8	*115*			*75.0-131*		*06/09/2022 00:52*	WG1876580
(S) 4-Bromofluorobenzene	*135*			*67.0-138*		*06/08/2022 07:59*	WG1875887
(S) 4-Bromofluorobenzene	*160*	J1		*67.0-138*		*06/09/2022 00:52*	WG1876580
(S) 1,2-Dichloroethane-d4	*87.0*			*70.0-130*		*06/08/2022 07:59*	WG1875887
(S) 1,2-Dichloroethane-d4	*86.8*			*70.0-130*		*06/09/2022 00:52*	WG1876580

Semi-Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C20 Hydrocarbons	301		7.40	48.6	10	06/07/2022 06:54	WG1875144
C20-C34 Hydrocarbons	583		7.42	48.6	10	06/07/2022 06:54	WG1875144
(S) o-Terphenyl	*61.0*			*18.0-148*		*06/07/2022 06:54*	WG1875144

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.268		0.00279	0.00728	1	06/13/2022 22:16	WG1878572
Acenaphthene	0.136		0.00254	0.00728	1	06/13/2022 22:16	WG1878572
Acenaphthylene	0.152		0.00262	0.00728	1	06/13/2022 22:16	WG1878572
Benzo(a)anthracene	1.01		0.00210	0.00728	1	06/13/2022 22:16	WG1878572
Benzo(a)pyrene	1.34		0.00217	0.00728	1	06/13/2022 22:16	WG1878572
Benzo(b)fluoranthene	1.11		0.00186	0.00728	1	06/13/2022 22:16	WG1878572
Benzo(g,h,i)perylene	1.75		0.00215	0.00728	1	06/13/2022 22:16	WG1878572
Benzo(k)fluoranthene	0.283		0.00261	0.00728	1	06/13/2022 22:16	WG1878572
Chrysene	1.04		0.00282	0.00728	1	06/13/2022 22:16	WG1878572
Dibenz(a,h)anthracene	0.659		0.00209	0.00728	1	06/13/2022 22:16	WG1878572
Fluoranthene	1.07		0.00276	0.00728	1	06/13/2022 22:16	WG1878572
Fluorene	0.210		0.00249	0.00728	1	06/13/2022 22:16	WG1878572
Indeno(1,2,3-cd)pyrene	0.884		0.00220	0.00728	1	06/13/2022 22:16	WG1878572
Naphthalene	0.651		0.00495	0.0243	1	06/13/2022 22:16	WG1878572
Phenanthrene	1.31		0.00280	0.00728	1	06/13/2022 22:16	WG1878572
Pyrene	1.82		0.00243	0.00728	1	06/13/2022 22:16	WG1878572
1-Methylnaphthalene	0.700		0.00545	0.0243	1	06/13/2022 22:16	WG1878572
2-Methylnaphthalene	0.832		0.00518	0.0243	1	06/13/2022 22:16	WG1878572

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
2-Chloronaphthalene	U		0.00566	0.0243	1	06/13/2022 22:16	WG1878572
(S) Nitrobenzene-d5	*0.000*	J2		*14.0-149*		*06/13/2022 22:16*	WG1878572
(S) 2-Fluorobiphenyl	*80.7*			*34.0-125*		*06/13/2022 22:16*	WG1878572
(S) p-Terphenyl-d14	*111*			*23.0-120*		*06/13/2022 22:16*	WG1878572

Sample Narrative:

L1500516-09 WG1878572: Surrogate failure due to matrix interference

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	83.4		1	06/07/2022 15:38	WG1874755

Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C6 - C12	5.00		0.0406	0.120	1	06/06/2022 11:50	WG1874734
(S) a,a,a-Trifluorotoluene(FID)	*78.9*			*77.0-120*		*06/06/2022 11:50*	WG1874734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0510	0.0699	1	06/08/2022 08:18	WG1875887
Acrylonitrile	U		0.00505	0.0175	1	06/08/2022 08:18	WG1875887
Benzene	0.00100	J	0.000653	0.00140	1	06/08/2022 08:18	WG1875887
Bromobenzene	U		0.00126	0.0175	1	06/08/2022 08:18	WG1875887
Bromodichloromethane	U		0.00101	0.00350	1	06/08/2022 08:18	WG1875887
Bromoform	U		0.00164	0.0350	1	06/08/2022 08:18	WG1875887
Bromomethane	U		0.00276	0.0175	1	06/09/2022 01:11	WG1876580
n-Butylbenzene	0.0571		0.00734	0.0175	1	06/09/2022 01:11	WG1876580
sec-Butylbenzene	0.0173	J	0.00403	0.0175	1	06/08/2022 08:18	WG1875887
tert-Butylbenzene	0.0101		0.00273	0.00699	1	06/08/2022 08:18	WG1875887
Carbon tetrachloride	U		0.00126	0.00699	1	06/08/2022 08:18	WG1875887
Chlorobenzene	U		0.000294	0.00350	1	06/08/2022 08:18	WG1875887
Chlorodibromomethane	U		0.000856	0.00350	1	06/08/2022 08:18	WG1875887
Chloroethane	U		0.00238	0.00699	1	06/09/2022 01:11	WG1876580
Chloroform	U		0.00144	0.00350	1	06/08/2022 08:18	WG1875887
Chloromethane	U		0.00608	0.0175	1	06/09/2022 01:11	WG1876580
2-Chlorotoluene	U		0.00121	0.00350	1	06/08/2022 08:18	WG1875887
4-Chlorotoluene	U		0.000629	0.00699	1	06/08/2022 08:18	WG1875887
1,2-Dibromo-3-Chloropropane	U		0.00545	0.0350	1	06/08/2022 08:18	WG1875887
1,2-Dibromoethane	U		0.000906	0.00350	1	06/08/2022 08:18	WG1875887
Dibromomethane	U		0.00105	0.00699	1	06/08/2022 08:18	WG1875887
1,2-Dichlorobenzene	U		0.000594	0.00699	1	06/08/2022 08:18	WG1875887
1,3-Dichlorobenzene	U		0.000839	0.00699	1	06/08/2022 08:18	WG1875887
1,4-Dichlorobenzene	U		0.000979	0.00699	1	06/08/2022 08:18	WG1875887
Dichlorodifluoromethane	U		0.00225	0.00350	1	06/09/2022 01:11	WG1876580
1,1-Dichloroethane	U		0.000687	0.00350	1	06/08/2022 08:18	WG1875887
1,2-Dichloroethane	U		0.000908	0.00350	1	06/08/2022 08:18	WG1875887
1,1-Dichloroethene	U		0.000847	0.00350	1	06/08/2022 08:18	WG1875887
cis-1,2-Dichloroethene	U		0.00103	0.00350	1	06/08/2022 08:18	WG1875887
trans-1,2-Dichloroethene	U		0.00145	0.00699	1	06/08/2022 08:18	WG1875887
1,2-Dichloropropane	U		0.00199	0.00699	1	06/08/2022 08:18	WG1875887
1,1-Dichloropropene	U		0.00113	0.00350	1	06/08/2022 08:18	WG1875887
1,3-Dichloropropane	U		0.000701	0.00699	1	06/08/2022 08:18	WG1875887
cis-1,3-Dichloropropene	U		0.00106	0.00350	1	06/08/2022 08:18	WG1875887
trans-1,3-Dichloropropene	U		0.00159	0.00699	1	06/08/2022 08:18	WG1875887
2,2-Dichloropropane	U		0.00193	0.00350	1	06/09/2022 01:11	WG1876580
Ethylbenzene	0.00443		0.00103	0.00350	1	06/08/2022 08:18	WG1875887
Hexachloro-1,3-butadiene	U		0.00839	0.0350	1	06/08/2022 08:18	WG1875887
n-Hexane	0.0608		0.00316	0.00699	1	06/09/2022 01:11	WG1876580
Isopropylbenzene	0.00748		0.000594	0.00350	1	06/08/2022 08:18	WG1875887
p-Isopropyltoluene	0.0234		0.00357	0.00699	1	06/08/2022 08:18	WG1875887
2-Butanone (MEK)	U		0.0888	0.140	1	06/08/2022 08:18	WG1875887
Methylene Chloride	0.0197	B J	0.00929	0.0350	1	06/08/2022 08:18	WG1875887

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	U		0.00319	0.0350	1	06/08/2022 08:18	WG1875887
Methyl tert-butyl ether	U		0.000489	0.00140	1	06/08/2022 08:18	WG1875887
Naphthalene	0.0264		0.00682	0.0175	1	06/08/2022 08:18	WG1875887
n-Propylbenzene	0.00948		0.00133	0.00699	1	06/08/2022 08:18	WG1875887
Styrene	U		0.000320	0.0175	1	06/08/2022 08:18	WG1875887
1,1,1,2-Tetrachloroethane	U		0.00133	0.00350	1	06/08/2022 08:18	WG1875887
1,1,2,2-Tetrachloroethane	U		0.000972	0.00350	1	06/08/2022 08:18	WG1875887
Tetrachloroethene	U		0.00125	0.00350	1	06/08/2022 08:18	WG1875887
Toluene	0.00422	J	0.00182	0.00699	1	06/08/2022 08:18	WG1875887
1,2,3-Trichlorobenzene	U		0.0103	0.0175	1	06/08/2022 08:18	WG1875887
1,2,4-Trichlorobenzene	U		0.00615	0.0175	1	06/08/2022 08:18	WG1875887
1,1,1-Trichloroethane	U		0.00129	0.00350	1	06/08/2022 08:18	WG1875887
1,1,2-Trichloroethane	U		0.000835	0.00350	1	06/08/2022 08:18	WG1875887
Trichloroethene	U		0.000817	0.00140	1	06/08/2022 08:18	WG1875887
Trichlorofluoromethane	U		0.00116	0.00350	1	06/09/2022 01:11	WG1876580
1,2,3-Trichloropropane	U		0.00227	0.0175	1	06/08/2022 08:18	WG1875887
1,2,4-Trimethylbenzene	0.0147		0.00221	0.00699	1	06/08/2022 08:18	WG1875887
1,3,5-Trimethylbenzene	0.00359	J	0.00280	0.00699	1	06/08/2022 08:18	WG1875887
Vinyl chloride	U		0.00162	0.00350	1	06/09/2022 01:11	WG1876580
Xylenes, Total	0.0206		0.00123	0.00909	1	06/08/2022 08:18	WG1875887
(S) Toluene-d8	*107*			*75.0-131*		*06/08/2022 08:18*	WG1875887
(S) Toluene-d8	*113*			*75.0-131*		*06/09/2022 01:11*	WG1876580
(S) 4-Bromofluorobenzene	*123*			*67.0-138*		*06/08/2022 08:18*	WG1875887
(S) 4-Bromofluorobenzene	*119*			*67.0-138*		*06/09/2022 01:11*	WG1876580
(S) 1,2-Dichloroethane-d4	*86.1*			*70.0-130*		*06/08/2022 08:18*	WG1875887
(S) 1,2-Dichloroethane-d4	*85.4*			*70.0-130*		*06/09/2022 01:11*	WG1876580

Semi-Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C20 Hydrocarbons	24.3		0.731	4.79	1	06/07/2022 06:15	WG1875144
C20-C34 Hydrocarbons	71.7		0.732	4.79	1	06/07/2022 06:15	WG1875144
(S) o-Terphenyl	*22.1*			*18.0-148*		*06/07/2022 06:15*	WG1875144

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.00831		0.00276	0.00719	1	06/13/2022 20:45	WG1878572
Acenaphthene	0.00277	J	0.00250	0.00719	1	06/13/2022 20:45	WG1878572
Acenaphthylene	U		0.00259	0.00719	1	06/13/2022 20:45	WG1878572
Benzo(a)anthracene	0.0451		0.00207	0.00719	1	06/13/2022 20:45	WG1878572
Benzo(a)pyrene	0.0485		0.00215	0.00719	1	06/13/2022 20:45	WG1878572
Benzo(b)fluoranthene	0.0668		0.00183	0.00719	1	06/13/2022 20:45	WG1878572
Benzo(g,h,i)perylene	0.0495		0.00212	0.00719	1	06/13/2022 20:45	WG1878572
Benzo(k)fluoranthene	0.0206		0.00258	0.00719	1	06/13/2022 20:45	WG1878572
Chrysene	0.0470		0.00278	0.00719	1	06/13/2022 20:45	WG1878572
Dibenz(a,h)anthracene	0.0119		0.00206	0.00719	1	06/13/2022 20:45	WG1878572
Fluoranthene	0.116		0.00272	0.00719	1	06/13/2022 20:45	WG1878572
Fluorene	0.00302	J	0.00246	0.00719	1	06/13/2022 20:45	WG1878572
Indeno(1,2,3-cd)pyrene	0.0379		0.00217	0.00719	1	06/13/2022 20:45	WG1878572
Naphthalene	0.0127	J	0.00489	0.0240	1	06/13/2022 20:45	WG1878572
Phenanthrene	0.0501		0.00277	0.00719	1	06/13/2022 20:45	WG1878572
Pyrene	0.107		0.00240	0.00719	1	06/13/2022 20:45	WG1878572
1-Methylnaphthalene	0.0135	J	0.00538	0.0240	1	06/13/2022 20:45	WG1878572
2-Methylnaphthalene	0.0181	J	0.00512	0.0240	1	06/13/2022 20:45	WG1878572

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
2-Chloronaphthalene	U		0.00559	0.0240	1	06/13/2022 20:45	WG1878572
(S) Nitrobenzene-d5	*75.9*			*14.0-149*		*06/13/2022 20:45*	WG1878572
(S) 2-Fluorobiphenyl	*80.8*			*34.0-125*		*06/13/2022 20:45*	WG1878572
(S) p-Terphenyl-d14	*105*			*23.0-120*		*06/13/2022 20:45*	WG1878572

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	84.7		1	06/07/2022 15:38	WG1874755

Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C6 - C12	0.107	J	0.0400	0.118	1	06/09/2022 13:22	WG1876905
(S) a,a,a-Trifluorotoluene(FID)	*106*			*77.0-120*		*06/09/2022 13:22*	WG1876905

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0497	0.0681	1	06/08/2022 08:37	WG1875887
Acrylonitrile	U		0.00492	0.0170	1	06/08/2022 08:37	WG1875887
Benzene	U		0.000636	0.00136	1	06/08/2022 08:37	WG1875887
Bromobenzene	U		0.00123	0.0170	1	06/08/2022 08:37	WG1875887
Bromodichloromethane	U		0.000988	0.00341	1	06/08/2022 08:37	WG1875887
Bromoform	U		0.00159	0.0341	1	06/08/2022 08:37	WG1875887
Bromomethane	U		0.00268	0.0170	1	06/09/2022 01:30	WG1876580
n-Butylbenzene	U		0.00715	0.0170	1	06/09/2022 01:30	WG1876580
sec-Butylbenzene	U		0.00392	0.0170	1	06/08/2022 08:37	WG1875887
tert-Butylbenzene	U		0.00266	0.00681	1	06/08/2022 08:37	WG1875887
Carbon tetrachloride	U		0.00122	0.00681	1	06/08/2022 08:37	WG1875887
Chlorobenzene	U		0.000286	0.00341	1	06/08/2022 08:37	WG1875887
Chlorodibromomethane	U		0.000834	0.00341	1	06/08/2022 08:37	WG1875887
Chloroethane	U		0.00232	0.00681	1	06/09/2022 01:30	WG1876580
Chloroform	U		0.00140	0.00341	1	06/08/2022 08:37	WG1875887
Chloromethane	U		0.00593	0.0170	1	06/09/2022 01:30	WG1876580
2-Chlorotoluene	U		0.00118	0.00341	1	06/08/2022 08:37	WG1875887
4-Chlorotoluene	U		0.000613	0.00681	1	06/08/2022 08:37	WG1875887
1,2-Dibromo-3-Chloropropane	U		0.00531	0.0341	1	06/08/2022 08:37	WG1875887
1,2-Dibromoethane	U		0.000883	0.00341	1	06/08/2022 08:37	WG1875887
Dibromomethane	U		0.00102	0.00681	1	06/08/2022 08:37	WG1875887
1,2-Dichlorobenzene	U		0.000579	0.00681	1	06/08/2022 08:37	WG1875887
1,3-Dichlorobenzene	U		0.000817	0.00681	1	06/08/2022 08:37	WG1875887
1,4-Dichlorobenzene	U		0.000954	0.00681	1	06/08/2022 08:37	WG1875887
Dichlorodifluoromethane	U		0.00219	0.00341	1	06/09/2022 01:30	WG1876580
1,1-Dichloroethane	U		0.000669	0.00341	1	06/08/2022 08:37	WG1875887
1,2-Dichloroethane	U		0.000884	0.00341	1	06/08/2022 08:37	WG1875887
1,1-Dichloroethene	U		0.000826	0.00341	1	06/08/2022 08:37	WG1875887
cis-1,2-Dichloroethene	U		0.00100	0.00341	1	06/08/2022 08:37	WG1875887
trans-1,2-Dichloroethene	U		0.00142	0.00681	1	06/08/2022 08:37	WG1875887
1,2-Dichloropropane	U		0.00193	0.00681	1	06/08/2022 08:37	WG1875887
1,1-Dichloropropene	U		0.00110	0.00341	1	06/08/2022 08:37	WG1875887
1,3-Dichloropropane	U		0.000682	0.00681	1	06/08/2022 08:37	WG1875887
cis-1,3-Dichloropropene	U		0.00103	0.00341	1	06/08/2022 08:37	WG1875887
trans-1,3-Dichloropropene	U		0.00155	0.00681	1	06/08/2022 08:37	WG1875887
2,2-Dichloropropane	U		0.00188	0.00341	1	06/09/2022 01:30	WG1876580
Ethylbenzene	U		0.00100	0.00341	1	06/08/2022 08:37	WG1875887
Hexachloro-1,3-butadiene	U		0.00817	0.0341	1	06/08/2022 08:37	WG1875887
n-Hexane	0.00384	J	0.00308	0.00681	1	06/09/2022 01:30	WG1876580
Isopropylbenzene	U		0.000579	0.00341	1	06/08/2022 08:37	WG1875887
p-Isopropyltoluene	U		0.00347	0.00681	1	06/08/2022 08:37	WG1875887
2-Butanone (MEK)	U		0.0865	0.136	1	06/08/2022 08:37	WG1875887
Methylene Chloride	0.0183	B J	0.00905	0.0341	1	06/08/2022 08:37	WG1875887

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	U		0.00311	0.0341	1	06/08/2022 08:37	WG1875887
Methyl tert-butyl ether	U		0.000477	0.00136	1	06/08/2022 08:37	WG1875887
Naphthalene	U		0.00665	0.0170	1	06/08/2022 08:37	WG1875887
n-Propylbenzene	U		0.00129	0.00681	1	06/08/2022 08:37	WG1875887
Styrene	U		0.000312	0.0170	1	06/08/2022 08:37	WG1875887
1,1,1,2-Tetrachloroethane	U		0.00129	0.00341	1	06/08/2022 08:37	WG1875887
1,1,2,2-Tetrachloroethane	U		0.000947	0.00341	1	06/08/2022 08:37	WG1875887
Tetrachloroethene	U		0.00122	0.00341	1	06/08/2022 08:37	WG1875887
Toluene	U		0.00177	0.00681	1	06/08/2022 08:37	WG1875887
1,2,3-Trichlorobenzene	U		0.00999	0.0170	1	06/08/2022 08:37	WG1875887
1,2,4-Trichlorobenzene	U		0.00599	0.0170	1	06/08/2022 08:37	WG1875887
1,1,1-Trichloroethane	U		0.00126	0.00341	1	06/08/2022 08:37	WG1875887
1,1,2-Trichloroethane	U		0.000813	0.00341	1	06/08/2022 08:37	WG1875887
Trichloroethene	U		0.000796	0.00136	1	06/08/2022 08:37	WG1875887
Trichlorofluoromethane	U		0.00113	0.00341	1	06/09/2022 01:30	WG1876580
1,2,3-Trichloropropane	U		0.00221	0.0170	1	06/08/2022 08:37	WG1875887
1,2,4-Trimethylbenzene	U		0.00215	0.00681	1	06/08/2022 08:37	WG1875887
1,3,5-Trimethylbenzene	U		0.00272	0.00681	1	06/08/2022 08:37	WG1875887
Vinyl chloride	U		0.00158	0.00341	1	06/09/2022 01:30	WG1876580
Xylenes, Total	U		0.00120	0.00885	1	06/08/2022 08:37	WG1875887
(S) Toluene-d8	*107*			*75.0-131*		*06/08/2022 08:37*	WG1875887
(S) Toluene-d8	*106*			*75.0-131*		*06/09/2022 01:30*	WG1876580
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*06/08/2022 08:37*	WG1875887
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*06/09/2022 01:30*	WG1876580
(S) 1,2-Dichloroethane-d4	*85.9*			*70.0-130*		*06/08/2022 08:37*	WG1875887
(S) 1,2-Dichloroethane-d4	*84.2*			*70.0-130*		*06/09/2022 01:30*	WG1876580

Semi-Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C20 Hydrocarbons	15.0	J	7.20	47.2	10	06/09/2022 11:39	WG1875981
C20-C34 Hydrocarbons	129		7.21	47.2	10	06/09/2022 11:39	WG1875981
(S) o-Terphenyl	*82.0*			*18.0-148*		*06/09/2022 11:39*	WG1875981

Sample Narrative:

L1500516-11 WG1875981: Cannot run at lower dilution due to viscosity of extract

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.0387		0.00272	0.00708	1	06/13/2022 21:59	WG1878572
Acenaphthene	0.0128		0.00247	0.00708	1	06/13/2022 21:59	WG1878572
Acenaphthylene	0.0102		0.00255	0.00708	1	06/13/2022 21:59	WG1878572
Benzo(a)anthracene	0.178		0.00204	0.00708	1	06/13/2022 21:59	WG1878572
Benzo(a)pyrene	0.179		0.00211	0.00708	1	06/13/2022 21:59	WG1878572
Benzo(b)fluoranthene	0.257		0.00181	0.00708	1	06/13/2022 21:59	WG1878572
Benzo(g,h,i)perylene	0.163		0.00209	0.00708	1	06/13/2022 21:59	WG1878572
Benzo(k)fluoranthene	0.0854		0.00254	0.00708	1	06/13/2022 21:59	WG1878572
Chrysene	0.163		0.00274	0.00708	1	06/13/2022 21:59	WG1878572
Dibenz(a,h)anthracene	0.0324		0.00203	0.00708	1	06/13/2022 21:59	WG1878572
Fluoranthene	0.337		0.00268	0.00708	1	06/13/2022 21:59	WG1878572
Fluorene	0.00986		0.00242	0.00708	1	06/13/2022 21:59	WG1878572
Indeno(1,2,3-cd)pyrene	0.144		0.00214	0.00708	1	06/13/2022 21:59	WG1878572
Naphthalene	0.0230	J	0.00482	0.0236	1	06/13/2022 21:59	WG1878572
Phenanthrene	0.182		0.00273	0.00708	1	06/13/2022 21:59	WG1878572

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Pyrene	0.331		0.00236	0.00708	1	06/13/2022 21:59	WG1878572
1-Methylnaphthalene	0.0223	J	0.00530	0.0236	1	06/13/2022 21:59	WG1878572
2-Methylnaphthalene	0.0326		0.00504	0.0236	1	06/13/2022 21:59	WG1878572
2-Chloronaphthalene	U		0.00550	0.0236	1	06/13/2022 21:59	WG1878572
(S) Nitrobenzene-d5	*85.5*			*14.0-149*		*06/13/2022 21:59*	WG1878572
(S) 2-Fluorobiphenyl	*93.5*			*34.0-125*		*06/13/2022 21:59*	WG1878572
(S) p-Terphenyl-d14	*118*			*23.0-120*		*06/13/2022 21:59*	WG1878572

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	81.3		1	06/07/2022 15:38	WG1874755

Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C6 - C12	5.83		0.0417	0.123	1	06/06/2022 12:31	WG1874734
(S) a,a,a-Trifluorotoluene(FID)	*90.0*			*77.0-120*		*06/06/2022 12:31*	WG1874734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0533	0.0730	1	06/08/2022 08:56	WG1875887
Acrylonitrile	U		0.00527	0.0182	1	06/08/2022 08:56	WG1875887
Benzene	0.00851		0.000682	0.00146	1	06/08/2022 08:56	WG1875887
Bromobenzene	U		0.00131	0.0182	1	06/08/2022 08:56	WG1875887
Bromodichloromethane	U		0.00106	0.00365	1	06/08/2022 08:56	WG1875887
Bromoform	U		0.00171	0.0365	1	06/08/2022 08:56	WG1875887
Bromomethane	U		0.00287	0.0182	1	06/09/2022 01:49	WG1876580
n-Butylbenzene	0.677		0.00766	0.0182	1	06/09/2022 01:49	WG1876580
sec-Butylbenzene	0.141		0.00420	0.0182	1	06/08/2022 08:56	WG1875887
tert-Butylbenzene	0.0136		0.00285	0.00730	1	06/08/2022 08:56	WG1875887
Carbon tetrachloride	U		0.00131	0.00730	1	06/08/2022 08:56	WG1875887
Chlorobenzene	U		0.000306	0.00365	1	06/08/2022 08:56	WG1875887
Chlorodibromomethane	U		0.000893	0.00365	1	06/08/2022 08:56	WG1875887
Chloroethane	U		0.00248	0.00730	1	06/09/2022 01:49	WG1876580
Chloroform	U		0.00150	0.00365	1	06/08/2022 08:56	WG1875887
Chloromethane	U		0.00635	0.0182	1	06/09/2022 01:49	WG1876580
2-Chlorotoluene	U		0.00126	0.00365	1	06/08/2022 08:56	WG1875887
4-Chlorotoluene	U		0.000657	0.00730	1	06/08/2022 08:56	WG1875887
1,2-Dibromo-3-Chloropropane	U		0.00569	0.0365	1	06/08/2022 08:56	WG1875887
1,2-Dibromoethane	U		0.000946	0.00365	1	06/08/2022 08:56	WG1875887
Dibromomethane	U		0.00109	0.00730	1	06/08/2022 08:56	WG1875887
1,2-Dichlorobenzene	U		0.000620	0.00730	1	06/08/2022 08:56	WG1875887
1,3-Dichlorobenzene	U		0.000876	0.00730	1	06/08/2022 08:56	WG1875887
1,4-Dichlorobenzene	U		0.00102	0.00730	1	06/08/2022 08:56	WG1875887
Dichlorodifluoromethane	U		0.00235	0.00365	1	06/09/2022 01:49	WG1876580
1,1-Dichloroethane	U		0.000717	0.00365	1	06/08/2022 08:56	WG1875887
1,2-Dichloroethane	U		0.000947	0.00365	1	06/08/2022 08:56	WG1875887
1,1-Dichloroethene	U		0.000884	0.00365	1	06/08/2022 08:56	WG1875887
cis-1,2-Dichloroethene	U		0.00107	0.00365	1	06/08/2022 08:56	WG1875887
trans-1,2-Dichloroethene	U		0.00152	0.00730	1	06/08/2022 08:56	WG1875887
1,2-Dichloropropane	U		0.00207	0.00730	1	06/08/2022 08:56	WG1875887
1,1-Dichloropropene	U		0.00118	0.00365	1	06/08/2022 08:56	WG1875887
1,3-Dichloropropane	U		0.000731	0.00730	1	06/08/2022 08:56	WG1875887
cis-1,3-Dichloropropene	U		0.00110	0.00365	1	06/08/2022 08:56	WG1875887
trans-1,3-Dichloropropene	U		0.00166	0.00730	1	06/08/2022 08:56	WG1875887
2,2-Dichloropropane	0.0226		0.00201	0.00365	1	06/09/2022 01:49	WG1876580
Ethylbenzene	0.0649		0.00108	0.00365	1	06/08/2022 08:56	WG1875887
Hexachloro-1,3-butadiene	U		0.00876	0.0365	1	06/08/2022 08:56	WG1875887
n-Hexane	0.884		0.00330	0.00730	1	06/09/2022 01:49	WG1876580
Isopropylbenzene	0.206		0.000620	0.00365	1	06/08/2022 08:56	WG1875887
p-Isopropyltoluene	0.110		0.00372	0.00730	1	06/08/2022 08:56	WG1875887
2-Butanone (MEK)	U		0.0927	0.146	1	06/08/2022 08:56	WG1875887
Methylene Chloride	U		0.00969	0.0365	1	06/08/2022 08:56	WG1875887

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	U		0.00333	0.0365	1	06/08/2022 08:56	WG1875887
Methyl tert-butyl ether	U		0.000511	0.00146	1	06/08/2022 08:56	WG1875887
Naphthalene	1.55		0.00712	0.0182	1	06/08/2022 08:56	WG1875887
n-Propylbenzene	0.241		0.00139	0.00730	1	06/08/2022 08:56	WG1875887
Styrene	U		0.000334	0.0182	1	06/08/2022 08:56	WG1875887
1,1,1,2-Tetrachloroethane	U		0.00138	0.00365	1	06/08/2022 08:56	WG1875887
1,1,2,2-Tetrachloroethane	U		0.00101	0.00365	1	06/08/2022 08:56	WG1875887
Tetrachloroethene	U		0.00131	0.00365	1	06/08/2022 08:56	WG1875887
Toluene	0.0181		0.00190	0.00730	1	06/08/2022 08:56	WG1875887
1,2,3-Trichlorobenzene	U		0.0107	0.0182	1	06/08/2022 08:56	WG1875887
1,2,4-Trichlorobenzene	U		0.00642	0.0182	1	06/08/2022 08:56	WG1875887
1,1,1-Trichloroethane	U		0.00135	0.00365	1	06/08/2022 08:56	WG1875887
1,1,2-Trichloroethane	U		0.000871	0.00365	1	06/08/2022 08:56	WG1875887
Trichloroethene	U		0.000852	0.00146	1	06/08/2022 08:56	WG1875887
Trichlorofluoromethane	U		0.00121	0.00365	1	06/09/2022 01:49	WG1876580
1,2,3-Trichloropropane	U		0.00236	0.0182	1	06/08/2022 08:56	WG1875887
1,2,4-Trimethylbenzene	0.606		0.00231	0.00730	1	06/08/2022 08:56	WG1875887
1,3,5-Trimethylbenzene	0.169		0.00292	0.00730	1	06/08/2022 08:56	WG1875887
Vinyl chloride	U		0.00169	0.00365	1	06/09/2022 01:49	WG1876580
Xylenes, Total	0.286		0.00128	0.00949	1	06/08/2022 08:56	WG1875887
(S) Toluene-d8	*110*			*75.0-131*		*06/08/2022 08:56*	WG1875887
(S) Toluene-d8	*116*			*75.0-131*		*06/09/2022 01:49*	WG1876580
(S) 4-Bromofluorobenzene	*118*			*67.0-138*		*06/08/2022 08:56*	WG1875887
(S) 4-Bromofluorobenzene	*127*			*67.0-138*		*06/09/2022 01:49*	WG1876580
(S) 1,2-Dichloroethane-d4	*95.8*			*70.0-130*		*06/08/2022 08:56*	WG1875887
(S) 1,2-Dichloroethane-d4	*86.6*			*70.0-130*		*06/09/2022 01:49*	WG1876580

Semi-Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C20 Hydrocarbons	2080		150	983	200	06/09/2022 12:05	WG1875981
C20-C34 Hydrocarbons	7970		150	983	200	06/09/2022 12:05	WG1875981
(S) o-Terphenyl	*0.000*	J7		*18.0-148*		*06/09/2022 12:05*	WG1875981

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.557		0.0141	0.0369	5	06/13/2022 22:52	WG1878572
Acenaphthene	0.339		0.0129	0.0369	5	06/13/2022 22:52	WG1878572
Acenaphthylene	0.116		0.0133	0.0369	5	06/13/2022 22:52	WG1878572
Benzo(a)anthracene	1.15		0.0106	0.0369	5	06/13/2022 22:52	WG1878572
Benzo(a)pyrene	1.20		0.0110	0.0369	5	06/13/2022 22:52	WG1878572
Benzo(b)fluoranthene	0.762		0.00940	0.0369	5	06/13/2022 22:52	WG1878572
Benzo(g,h,i)perylene	1.51		0.0109	0.0369	5	06/13/2022 22:52	WG1878572
Benzo(k)fluoranthene	0.188		0.0132	0.0369	5	06/13/2022 22:52	WG1878572
Chrysene	1.00		0.0143	0.0369	5	06/13/2022 22:52	WG1878572
Dibenz(a,h)anthracene	0.274		0.0106	0.0369	5	06/13/2022 22:52	WG1878572
Fluoranthene	1.00		0.0139	0.0369	5	06/13/2022 22:52	WG1878572
Fluorene	0.632		0.0127	0.0369	5	06/13/2022 22:52	WG1878572
Indeno(1,2,3-cd)pyrene	0.526		0.0111	0.0369	5	06/13/2022 22:52	WG1878572
Naphthalene	0.577		0.0251	0.123	5	06/13/2022 22:52	WG1878572
Phenanthrene	3.74		0.0141	0.0369	5	06/13/2022 22:52	WG1878572
Pyrene	4.81		0.0123	0.0369	5	06/13/2022 22:52	WG1878572
1-Methylnaphthalene	2.74		0.0277	0.123	5	06/13/2022 22:52	WG1878572
2-Methylnaphthalene	2.94		0.0263	0.123	5	06/13/2022 22:52	WG1878572

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
2-Chloronaphthalene	U		0.0286	0.123	5	06/13/2022 22:52	WG1878572
(S) Nitrobenzene-d5	*0.000*	J2		*14.0-149*		*06/13/2022 22:52*	WG1878572
(S) 2-Fluorobiphenyl	*58.5*			*34.0-125*		*06/13/2022 22:52*	WG1878572
(S) p-Terphenyl-d14	*83.7*			*23.0-120*		*06/13/2022 22:52*	WG1878572

Sample Narrative:

L1500516-12 WG1878572: Surrogate failure due to matrix interference

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.1		1	06/07/2022 15:38	WG1874755

Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C6 - C12	0.185		0.0385	0.114	1	06/09/2022 13:45	WG1876905
(S) a,a,a-Trifluorotoluene(FID)	*104*			*77.0-120*		*06/09/2022 13:45*	WG1876905

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0464	0.0636	1	06/08/2022 09:15	WG1875887
Acrylonitrile	U		0.00459	0.0159	1	06/08/2022 09:15	WG1875887
Benzene	0.000699	J	0.000594	0.00127	1	06/08/2022 09:15	WG1875887
Bromobenzene	U		0.00114	0.0159	1	06/08/2022 09:15	WG1875887
Bromodichloromethane	U		0.000922	0.00318	1	06/08/2022 09:15	WG1875887
Bromoform	U		0.00149	0.0318	1	06/08/2022 09:15	WG1875887
Bromomethane	U		0.00250	0.0159	1	06/09/2022 02:08	WG1876580
n-Butylbenzene	0.0168		0.00667	0.0159	1	06/09/2022 02:08	WG1876580
sec-Butylbenzene	U		0.00366	0.0159	1	06/08/2022 09:15	WG1875887
tert-Butylbenzene	U		0.00248	0.00636	1	06/08/2022 09:15	WG1875887
Carbon tetrachloride	U		0.00114	0.00636	1	06/08/2022 09:15	WG1875887
Chlorobenzene	U		0.000267	0.00318	1	06/08/2022 09:15	WG1875887
Chlorodibromomethane	U		0.000778	0.00318	1	06/08/2022 09:15	WG1875887
Chloroethane	U		0.00216	0.00636	1	06/09/2022 02:08	WG1876580
Chloroform	U		0.00131	0.00318	1	06/08/2022 09:15	WG1875887
Chloromethane	U		0.00553	0.0159	1	06/09/2022 02:08	WG1876580
2-Chlorotoluene	U		0.00110	0.00318	1	06/08/2022 09:15	WG1875887
4-Chlorotoluene	U		0.000572	0.00636	1	06/08/2022 09:15	WG1875887
1,2-Dibromo-3-Chloropropane	U		0.00496	0.0318	1	06/08/2022 09:15	WG1875887
1,2-Dibromoethane	U		0.000824	0.00318	1	06/08/2022 09:15	WG1875887
Dibromomethane	U		0.000953	0.00636	1	06/08/2022 09:15	WG1875887
1,2-Dichlorobenzene	U		0.000540	0.00636	1	06/08/2022 09:15	WG1875887
1,3-Dichlorobenzene	U		0.000763	0.00636	1	06/08/2022 09:15	WG1875887
1,4-Dichlorobenzene	U		0.000890	0.00636	1	06/08/2022 09:15	WG1875887
Dichlorodifluoromethane	U		0.00205	0.00318	1	06/09/2022 02:08	WG1876580
1,1-Dichloroethane	U		0.000624	0.00318	1	06/08/2022 09:15	WG1875887
1,2-Dichloroethane	U		0.000825	0.00318	1	06/08/2022 09:15	WG1875887
1,1-Dichloroethene	U		0.000770	0.00318	1	06/08/2022 09:15	WG1875887
cis-1,2-Dichloroethene	U		0.000933	0.00318	1	06/08/2022 09:15	WG1875887
trans-1,2-Dichloroethene	U		0.00132	0.00636	1	06/08/2022 09:15	WG1875887
1,2-Dichloropropane	U		0.00180	0.00636	1	06/08/2022 09:15	WG1875887
1,1-Dichloropropene	U		0.00103	0.00318	1	06/08/2022 09:15	WG1875887
1,3-Dichloropropane	U		0.000637	0.00636	1	06/08/2022 09:15	WG1875887
cis-1,3-Dichloropropene	U		0.000962	0.00318	1	06/08/2022 09:15	WG1875887
trans-1,3-Dichloropropene	U		0.00145	0.00636	1	06/08/2022 09:15	WG1875887
2,2-Dichloropropane	U		0.00175	0.00318	1	06/09/2022 02:08	WG1876580
Ethylbenzene	U		0.000937	0.00318	1	06/08/2022 09:15	WG1875887
Hexachloro-1,3-butadiene	U		0.00763	0.0318	1	06/08/2022 09:15	WG1875887
n-Hexane	0.0112		0.00287	0.00636	1	06/09/2022 02:08	WG1876580
Isopropylbenzene	0.00220	J	0.000540	0.00318	1	06/08/2022 09:15	WG1875887
p-Isopropyltoluene	U		0.00324	0.00636	1	06/08/2022 09:15	WG1875887
2-Butanone (MEK)	U		0.0807	0.127	1	06/08/2022 09:15	WG1875887
Methylene Chloride	0.0177	B J	0.00844	0.0318	1	06/08/2022 09:15	WG1875887

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	U		0.00290	0.0318	1	06/08/2022 09:15	WG1875887
Methyl tert-butyl ether	U		0.000445	0.00127	1	06/08/2022 09:15	WG1875887
Naphthalene	0.0520		0.00620	0.0159	1	06/08/2022 09:15	WG1875887
n-Propylbenzene	0.00375	J	0.00121	0.00636	1	06/08/2022 09:15	WG1875887
Styrene	U		0.000291	0.0159	1	06/08/2022 09:15	WG1875887
1,1,1,2-Tetrachloroethane	U		0.00120	0.00318	1	06/08/2022 09:15	WG1875887
1,1,2,2-Tetrachloroethane	U		0.000883	0.00318	1	06/08/2022 09:15	WG1875887
Tetrachloroethene	U		0.00114	0.00318	1	06/08/2022 09:15	WG1875887
Toluene	0.00207	J	0.00165	0.00636	1	06/08/2022 09:15	WG1875887
1,2,3-Trichlorobenzene	U		0.00932	0.0159	1	06/08/2022 09:15	WG1875887
1,2,4-Trichlorobenzene	U		0.00559	0.0159	1	06/08/2022 09:15	WG1875887
1,1,1-Trichloroethane	U		0.00117	0.00318	1	06/08/2022 09:15	WG1875887
1,1,2-Trichloroethane	U		0.000759	0.00318	1	06/08/2022 09:15	WG1875887
Trichloroethene	U		0.000742	0.00127	1	06/08/2022 09:15	WG1875887
Trichlorofluoromethane	U		0.00105	0.00318	1	06/09/2022 02:08	WG1876580
1,2,3-Trichloropropane	U		0.00206	0.0159	1	06/08/2022 09:15	WG1875887
1,2,4-Trimethylbenzene	0.0101		0.00201	0.00636	1	06/08/2022 09:15	WG1875887
1,3,5-Trimethylbenzene	0.00353	J	0.00254	0.00636	1	06/08/2022 09:15	WG1875887
Vinyl chloride	U		0.00147	0.00318	1	06/09/2022 02:08	WG1876580
Xylenes, Total	0.00675	J	0.00112	0.00826	1	06/08/2022 09:15	WG1875887
(S) Toluene-d8	*107*			*75.0-131*		*06/08/2022 09:15*	WG1875887
(S) Toluene-d8	*106*			*75.0-131*		*06/09/2022 02:08*	WG1876580
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*06/08/2022 09:15*	WG1875887
(S) 4-Bromofluorobenzene	*99.1*			*67.0-138*		*06/09/2022 02:08*	WG1876580
(S) 1,2-Dichloroethane-d4	*88.2*			*70.0-130*		*06/08/2022 09:15*	WG1875887
(S) 1,2-Dichloroethane-d4	*80.3*			*70.0-130*		*06/09/2022 02:08*	WG1876580

Semi-Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C20 Hydrocarbons	57.7		6.93	45.4	10	06/08/2022 12:22	WG1875981
C20-C34 Hydrocarbons	350		6.94	45.4	10	06/08/2022 12:22	WG1875981
(S) o-Terphenyl	*102*			*18.0-148*		*06/08/2022 12:22*	WG1875981

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.624		0.0131	0.0341	5	06/13/2022 22:34	WG1878572
Acenaphthene	0.277		0.0119	0.0341	5	06/13/2022 22:34	WG1878572
Acenaphthylene	0.0253	J	0.0123	0.0341	5	06/13/2022 22:34	WG1878572
Benzo(a)anthracene	1.35		0.00982	0.0341	5	06/13/2022 22:34	WG1878572
Benzo(a)pyrene	1.17		0.0102	0.0341	5	06/13/2022 22:34	WG1878572
Benzo(b)fluoranthene	1.52		0.00869	0.0341	5	06/13/2022 22:34	WG1878572
Benzo(g,h,i)perylene	0.733		0.0100	0.0341	5	06/13/2022 22:34	WG1878572
Benzo(k)fluoranthene	0.564		0.0121	0.0341	5	06/13/2022 22:34	WG1878572
Chrysene	1.23		0.0132	0.0341	5	06/13/2022 22:34	WG1878572
Dibenz(a,h)anthracene	0.171		0.00976	0.0341	5	06/13/2022 22:34	WG1878572
Fluoranthene	2.92		0.0128	0.0341	5	06/13/2022 22:34	WG1878572
Fluorene	0.279		0.0117	0.0341	5	06/13/2022 22:34	WG1878572
Indeno(1,2,3-cd)pyrene	0.789		0.0103	0.0341	5	06/13/2022 22:34	WG1878572
Naphthalene	0.159		0.0232	0.114	5	06/13/2022 22:34	WG1878572
Phenanthrene	2.13		0.0131	0.0341	5	06/13/2022 22:34	WG1878572
Pyrene	2.54		0.0114	0.0341	5	06/13/2022 22:34	WG1878572
1-Methylnaphthalene	0.0940	J	0.0255	0.114	5	06/13/2022 22:34	WG1878572
2-Methylnaphthalene	0.116		0.0243	0.114	5	06/13/2022 22:34	WG1878572

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
2-Chloronaphthalene	U		0.0265	0.114	5	06/13/2022 22:34	WG1878572
(S) Nitrobenzene-d5	*62.3*			*14.0-149*		*06/13/2022 22:34*	WG1878572
(S) 2-Fluorobiphenyl	*77.8*			*34.0-125*		*06/13/2022 22:34*	WG1878572
(S) p-Terphenyl-d14	*97.2*			*23.0-120*		*06/13/2022 22:34*	WG1878572

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	1	06/09/2022 15:31	WG1876585
Acrolein	U		0.00254	0.0500	1	06/09/2022 15:31	WG1876585
Acrylonitrile	U		0.000671	0.0100	1	06/09/2022 15:31	WG1876585
Benzene	U		0.0000941	0.00100	1	06/09/2022 15:31	WG1876585
Bromobenzene	U		0.000118	0.00100	1	06/09/2022 15:31	WG1876585
Bromodichloromethane	0.00192		0.000136	0.00100	1	06/09/2022 15:31	WG1876585
Bromoform	U		0.000129	0.00100	1	06/09/2022 15:31	WG1876585
Bromomethane	U		0.000605	0.00500	1	06/09/2022 15:31	WG1876585
n-Butylbenzene	U		0.000157	0.00100	1	06/09/2022 15:31	WG1876585
sec-Butylbenzene	U		0.000125	0.00100	1	06/09/2022 15:31	WG1876585
tert-Butylbenzene	U		0.000127	0.00100	1	06/09/2022 15:31	WG1876585
Carbon tetrachloride	U		0.000128	0.00100	1	06/09/2022 15:31	WG1876585
Chlorobenzene	U		0.000116	0.00100	1	06/09/2022 15:31	WG1876585
Chlorodibromomethane	U		0.000140	0.00100	1	06/09/2022 15:31	WG1876585
Chloroethane	U		0.000192	0.00500	1	06/09/2022 15:31	WG1876585
Chloroform	0.0117		0.000111	0.00500	1	06/09/2022 15:31	WG1876585
Chloromethane	U		0.000960	0.00250	1	06/09/2022 15:31	WG1876585
2-Chlorotoluene	U		0.000106	0.00100	1	06/09/2022 15:31	WG1876585
4-Chlorotoluene	U		0.000114	0.00100	1	06/09/2022 15:31	WG1876585
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	06/09/2022 15:31	WG1876585
1,2-Dibromoethane	U		0.000126	0.00100	1	06/09/2022 15:31	WG1876585
Dibromomethane	U		0.000122	0.00100	1	06/09/2022 15:31	WG1876585
1,2-Dichlorobenzene	U		0.000107	0.00100	1	06/09/2022 15:31	WG1876585
1,3-Dichlorobenzene	U		0.000110	0.00100	1	06/09/2022 15:31	WG1876585
1,4-Dichlorobenzene	U		0.000120	0.00100	1	06/09/2022 15:31	WG1876585
Dichlorodifluoromethane	U		0.000374	0.00500	1	06/09/2022 15:31	WG1876585
1,1-Dichloroethane	U		0.000100	0.00100	1	06/09/2022 15:31	WG1876585
1,2-Dichloroethane	U		0.0000819	0.00100	1	06/09/2022 15:31	WG1876585
1,1-Dichloroethene	U		0.000188	0.00100	1	06/09/2022 15:31	WG1876585
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	06/09/2022 15:31	WG1876585
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	06/09/2022 15:31	WG1876585
1,2-Dichloropropane	U		0.000149	0.00100	1	06/09/2022 15:31	WG1876585
1,1-Dichloropropene	U		0.000142	0.00100	1	06/09/2022 15:31	WG1876585
1,3-Dichloropropane	U		0.000110	0.00100	1	06/09/2022 15:31	WG1876585
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	06/09/2022 15:31	WG1876585
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	06/09/2022 15:31	WG1876585
2,2-Dichloropropane	U		0.000161	0.00100	1	06/09/2022 15:31	WG1876585
Ethylbenzene	U		0.000137	0.00100	1	06/09/2022 15:31	WG1876585
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	06/09/2022 15:31	WG1876585
n-Hexane	U		0.000749	0.0100	1	06/09/2022 15:31	WG1876585
Isopropylbenzene	U		0.000105	0.00100	1	06/09/2022 15:31	WG1876585
p-Isopropyltoluene	U		0.000120	0.00100	1	06/09/2022 15:31	WG1876585
2-Butanone (MEK)	U		0.00119	0.0100	1	06/09/2022 15:31	WG1876585
Methylene Chloride	U		0.000430	0.00500	1	06/09/2022 15:31	WG1876585
4-Methyl-2-pentanone (MIBK)	U	J4	0.000478	0.0100	1	06/09/2022 15:31	WG1876585
Methyl tert-butyl ether	U		0.000101	0.00100	1	06/09/2022 15:31	WG1876585
Naphthalene	U	J3	0.00100	0.00500	1	06/09/2022 15:31	WG1876585
n-Propylbenzene	U		0.0000993	0.00100	1	06/09/2022 15:31	WG1876585
Styrene	U		0.000118	0.00100	1	06/09/2022 15:31	WG1876585
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	06/09/2022 15:31	WG1876585
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	06/09/2022 15:31	WG1876585
Tetrachloroethene	U		0.000300	0.00100	1	06/09/2022 15:31	WG1876585
Toluene	U		0.000278	0.00100	1	06/09/2022 15:31	WG1876585
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	06/09/2022 15:31	WG1876585
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	06/09/2022 15:31	WG1876585
1,1,1-Trichloroethane	U		0.000149	0.00100	1	06/09/2022 15:31	WG1876585

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.000158	0.00100	1	06/09/2022 15:31	WG1876585
Trichloroethene	U		0.000190	0.00100	1	06/09/2022 15:31	WG1876585
Trichlorofluoromethane	U		0.000160	0.00500	1	06/09/2022 15:31	WG1876585
1,2,3-Trichloropropane	U		0.000237	0.00250	1	06/09/2022 15:31	WG1876585
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	06/09/2022 15:31	WG1876585
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	06/09/2022 15:31	WG1876585
Vinyl chloride	U		0.000234	0.00100	1	06/09/2022 15:31	WG1876585
Xylenes, Total	U		0.000174	0.00300	1	06/09/2022 15:31	WG1876585
(S) Toluene-d8	*104*			*80.0-120*		*06/09/2022 15:31*	WG1876585
(S) 4-Bromofluorobenzene	*91.0*			*77.0-126*		*06/09/2022 15:31*	WG1876585
(S) 1,2-Dichloroethane-d4	*135*	J1		*70.0-130*		*06/09/2022 15:31*	WG1876585

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	U		0.0000190	0.0000500	1	06/07/2022 22:39	WG1875098
Acenaphthene	U		0.0000190	0.0000500	1	06/07/2022 22:39	WG1875098
Acenaphthylene	U		0.0000171	0.0000500	1	06/07/2022 22:39	WG1875098
Benzo(a)anthracene	U		0.0000203	0.0000500	1	06/07/2022 22:39	WG1875098
Benzo(a)pyrene	U		0.0000184	0.0000500	1	06/07/2022 22:39	WG1875098
Benzo(b)fluoranthene	U		0.0000168	0.0000500	1	06/07/2022 22:39	WG1875098
Benzo(g,h,i)perylene	U		0.0000184	0.0000500	1	06/07/2022 22:39	WG1875098
Benzo(k)fluoranthene	U		0.0000202	0.0000500	1	06/07/2022 22:39	WG1875098
Chrysene	U		0.0000179	0.0000500	1	06/07/2022 22:39	WG1875098
Dibenz(a,h)anthracene	U		0.0000160	0.0000500	1	06/07/2022 22:39	WG1875098
Fluoranthene	U		0.0000270	0.000100	1	06/07/2022 22:39	WG1875098
Fluorene	U		0.0000169	0.0000500	1	06/07/2022 22:39	WG1875098
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500	1	06/07/2022 22:39	WG1875098
Naphthalene	U		0.0000917	0.000250	1	06/07/2022 22:39	WG1875098
Phenanthrene	U		0.0000180	0.0000500	1	06/07/2022 22:39	WG1875098
Pyrene	U		0.0000169	0.0000500	1	06/07/2022 22:39	WG1875098
1-Methylnaphthalene	U		0.0000687	0.000250	1	06/07/2022 22:39	WG1875098
2-Methylnaphthalene	U		0.0000674	0.000250	1	06/07/2022 22:39	WG1875098
2-Chloronaphthalene	U		0.0000682	0.000250	1	06/07/2022 22:39	WG1875098
(S) Nitrobenzene-d5	*118*			*31.0-160*		*06/07/2022 22:39*	WG1875098
(S) 2-Fluorobiphenyl	*116*			*48.0-148*		*06/07/2022 22:39*	WG1875098
(S) p-Terphenyl-d14	*143*			*37.0-146*		*06/07/2022 22:39*	WG1875098

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	1	06/09/2022 12:26	WG1876585
Acrolein	U		0.00254	0.0500	1	06/09/2022 12:26	WG1876585
Acrylonitrile	U		0.000671	0.0100	1	06/09/2022 12:26	WG1876585
Benzene	U		0.0000941	0.00100	1	06/09/2022 12:26	WG1876585
Bromobenzene	U		0.000118	0.00100	1	06/09/2022 12:26	WG1876585
Bromodichloromethane	U		0.000136	0.00100	1	06/09/2022 12:26	WG1876585
Bromoform	U		0.000129	0.00100	1	06/09/2022 12:26	WG1876585
Bromomethane	U		0.000605	0.00500	1	06/09/2022 12:26	WG1876585
n-Butylbenzene	U		0.000157	0.00100	1	06/09/2022 12:26	WG1876585
sec-Butylbenzene	U		0.000125	0.00100	1	06/09/2022 12:26	WG1876585
tert-Butylbenzene	U		0.000127	0.00100	1	06/09/2022 12:26	WG1876585
Carbon tetrachloride	U		0.000128	0.00100	1	06/09/2022 12:26	WG1876585
Chlorobenzene	U		0.000116	0.00100	1	06/09/2022 12:26	WG1876585
Chlorodibromomethane	U		0.000140	0.00100	1	06/09/2022 12:26	WG1876585
Chloroethane	U		0.000192	0.00500	1	06/09/2022 12:26	WG1876585
Chloroform	U		0.000111	0.00500	1	06/09/2022 12:26	WG1876585
Chloromethane	U		0.000960	0.00250	1	06/09/2022 12:26	WG1876585
2-Chlorotoluene	U		0.000106	0.00100	1	06/09/2022 12:26	WG1876585
4-Chlorotoluene	U		0.000114	0.00100	1	06/09/2022 12:26	WG1876585
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	06/09/2022 12:26	WG1876585
1,2-Dibromoethane	U		0.000126	0.00100	1	06/09/2022 12:26	WG1876585
Dibromomethane	U		0.000122	0.00100	1	06/09/2022 12:26	WG1876585
1,2-Dichlorobenzene	U		0.000107	0.00100	1	06/09/2022 12:26	WG1876585
1,3-Dichlorobenzene	U		0.000110	0.00100	1	06/09/2022 12:26	WG1876585
1,4-Dichlorobenzene	U		0.000120	0.00100	1	06/09/2022 12:26	WG1876585
Dichlorodifluoromethane	U		0.000374	0.00500	1	06/09/2022 12:26	WG1876585
1,1-Dichloroethane	U		0.000100	0.00100	1	06/09/2022 12:26	WG1876585
1,2-Dichloroethane	U		0.0000819	0.00100	1	06/09/2022 12:26	WG1876585
1,1-Dichloroethene	U		0.000188	0.00100	1	06/09/2022 12:26	WG1876585
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	06/09/2022 12:26	WG1876585
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	06/09/2022 12:26	WG1876585
1,2-Dichloropropane	U		0.000149	0.00100	1	06/09/2022 12:26	WG1876585
1,1-Dichloropropene	U		0.000142	0.00100	1	06/09/2022 12:26	WG1876585
1,3-Dichloropropane	U		0.000110	0.00100	1	06/09/2022 12:26	WG1876585
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	06/09/2022 12:26	WG1876585
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	06/09/2022 12:26	WG1876585
2,2-Dichloropropane	U		0.000161	0.00100	1	06/09/2022 12:26	WG1876585
Ethylbenzene	U		0.000137	0.00100	1	06/09/2022 12:26	WG1876585
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	06/09/2022 12:26	WG1876585
n-Hexane	U		0.000749	0.0100	1	06/09/2022 12:26	WG1876585
Isopropylbenzene	U		0.000105	0.00100	1	06/09/2022 12:26	WG1876585
p-Isopropyltoluene	U		0.000120	0.00100	1	06/09/2022 12:26	WG1876585
2-Butanone (MEK)	U		0.00119	0.0100	1	06/09/2022 12:26	WG1876585
Methylene Chloride	U		0.000430	0.00500	1	06/09/2022 12:26	WG1876585
4-Methyl-2-pentanone (MIBK)	U	J4	0.000478	0.0100	1	06/09/2022 12:26	WG1876585
Methyl tert-butyl ether	U		0.000101	0.00100	1	06/09/2022 12:26	WG1876585
Naphthalene	U	J3	0.00100	0.00500	1	06/09/2022 12:26	WG1876585
n-Propylbenzene	U		0.0000993	0.00100	1	06/09/2022 12:26	WG1876585
Styrene	U		0.000118	0.00100	1	06/09/2022 12:26	WG1876585
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	06/09/2022 12:26	WG1876585
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	06/09/2022 12:26	WG1876585
Tetrachloroethene	U		0.000300	0.00100	1	06/09/2022 12:26	WG1876585
Toluene	U		0.000278	0.00100	1	06/09/2022 12:26	WG1876585
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	06/09/2022 12:26	WG1876585
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	06/09/2022 12:26	WG1876585
1,1,1-Trichloroethane	U		0.000149	0.00100	1	06/09/2022 12:26	WG1876585

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
1,1,2-Trichloroethane	U		0.000158	0.00100	1	06/09/2022 12:26	WG1876585
Trichloroethene	U		0.000190	0.00100	1	06/09/2022 12:26	WG1876585
Trichlorofluoromethane	U		0.000160	0.00500	1	06/09/2022 12:26	WG1876585
1,2,3-Trichloropropane	U		0.000237	0.00250	1	06/09/2022 12:26	WG1876585
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	06/09/2022 12:26	WG1876585
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	06/09/2022 12:26	WG1876585
Vinyl chloride	U		0.000234	0.00100	1	06/09/2022 12:26	WG1876585
Xylenes, Total	U		0.000174	0.00300	1	06/09/2022 12:26	WG1876585
(S) Toluene-d8	*107*			*80.0-120*		*06/09/2022 12:26*	WG1876585
(S) 4-Bromofluorobenzene	*95.0*			*77.0-126*		*06/09/2022 12:26*	WG1876585
(S) 1,2-Dichloroethane-d4	*131*	J1		*70.0-130*		*06/09/2022 12:26*	WG1876585

Method Blank (MB)

(MB) R3800634-1 06/07/22 16:09

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1500516-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1500516-08 06/07/22 16:09 • (DUP) R3800634-3 06/07/22 16:09

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	85.9	86.5	1	0.703		10

Laboratory Control Sample (LCS)

(LCS) R3800634-2 06/07/22 16:09

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3800624-1 06/07/22 15:38

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1500628-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1500628-07 06/07/22 15:38 • (DUP) R3800624-3 06/07/22 15:38

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	76.5	77.4	1	1.10		10

Laboratory Control Sample (LCS)

(LCS) R3800624-2 06/07/22 15:38

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3799973-4 06/06/22 09:16

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPHG C6 - C12	U		0.848	2.50
(S) a,a,a-Trifluorotoluene(FID)	*109*			*77.0-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3799973-2 06/06/22 07:50 • (LCSD) R3799973-3 06/06/22 08:11

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPHG C6 - C12	5.50	4.62	4.30	84.0	78.2	71.0-124			7.17	20
(S) a,a,a-Trifluorotoluene(FID)				*99.6*	*99.0*	*77.0-120*				

L1499427-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1499427-10 06/06/22 11:47 • (MS) R3799973-7 06/06/22 20:24 • (MSD) R3799973-8 06/06/22 20:46

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPHG C6 - C12	257	U	233	236	90.9	91.9	36	10.0-149			1.10	27
(S) a,a,a-Trifluorotoluene(FID)					*99.8*	*99.3*		*77.0-120*				

Method Blank (MB)

(MB) R3801210-2 06/06/22 08:19

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPHG C6 - C12	0.0386	J	0.0339	0.100
(S) a,a,a-Trifluorotoluene(FID)	*97.2*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3801210-1 06/06/22 07:38

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPHG C6 - C12	5.50	5.93	108	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*110*	*77.0-120*	

Method Blank (MB)

(MB) R3801376-1 06/09/22 11:12

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPHG C6 - C12	U		0.0339	0.100
(S) a,a,a-Trifluorotoluene(FID)	*106*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3801376-2 06/09/22 12:12

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPHG C6 - C12	5.50	4.09	74.4	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*107*	*77.0-120*	

Method Blank (MB)

(MB) R3801308-2 06/09/22 08:07

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPHG C6 - C12	U		0.848	2.50
(S) a,a,a-Trifluorotoluene(FID)	*98.4*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3801308-1 06/09/22 06:53

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPHG C6 - C12	5.50	6.00	109	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*105*	*77.0-120*	

Method Blank (MB)

(MB) R3800647-3 06/07/22 15:55

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0365	0.0500
Acrylonitrile	U		0.00361	0.0125
Benzene	U		0.000467	0.00100
Bromobenzene	U		0.000900	0.0125
Bromodichloromethane	U		0.000725	0.00250
Bromoform	U		0.00117	0.0250
Bromomethane	U		0.00197	0.0125
n-Butylbenzene	U		0.00525	0.0125
sec-Butylbenzene	U		0.00288	0.0125
tert-Butylbenzene	U		0.00195	0.00500
Carbon tetrachloride	U		0.000898	0.00500
Chlorobenzene	U		0.000210	0.00250
Chlorodibromomethane	U		0.000612	0.00250
Chloroethane	U		0.00170	0.00500
Chloroform	U		0.00103	0.00250
Chloromethane	U		0.00435	0.0125
2-Chlorotoluene	U		0.000865	0.00250
4-Chlorotoluene	U		0.000450	0.00500
1,2-Dibromo-3-Chloropropane	U		0.00390	0.0250
1,2-Dibromoethane	U		0.000648	0.00250
Dibromomethane	U		0.000750	0.00500
1,2-Dichlorobenzene	U		0.000425	0.00500
1,3-Dichlorobenzene	U		0.000600	0.00500
1,4-Dichlorobenzene	U		0.000700	0.00500
Dichlorodifluoromethane	U		0.00161	0.00250
1,1-Dichloroethane	U		0.000491	0.00250
1,2-Dichloroethane	U		0.000649	0.00250
1,1-Dichloroethene	U		0.000606	0.00250
cis-1,2-Dichloroethene	U		0.000734	0.00250
trans-1,2-Dichloroethene	U		0.00104	0.00500
1,2-Dichloropropane	U		0.00142	0.00500
1,1-Dichloropropene	U		0.000809	0.00250
1,3-Dichloropropane	U		0.000501	0.00500
cis-1,3-Dichloropropene	U		0.000757	0.00250
trans-1,3-Dichloropropene	U		0.00114	0.00500
2,2-Dichloropropane	U		0.00138	0.00250
Ethylbenzene	U		0.000737	0.00250
Hexachloro-1,3-butadiene	U		0.00600	0.0250
n-Hexane	U		0.00226	0.00500
Isopropylbenzene	U		0.000425	0.00250

Method Blank (MB)

(MB) R3800647-3 06/07/22 15:55

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00255	0.00500
2-Butanone (MEK)	U		0.0635	0.100
Methylene Chloride	0.00790	J	0.00664	0.0250
4-Methyl-2-pentanone (MIBK)	U		0.00228	0.0250
Methyl tert-butyl ether	U		0.000350	0.00100
Naphthalene	U		0.00488	0.0125
n-Propylbenzene	U		0.000950	0.00500
Styrene	U		0.000229	0.0125
1,1,1,2-Tetrachloroethane	U		0.000948	0.00250
1,1,2,2-Tetrachloroethane	U		0.000695	0.00250
Tetrachloroethene	U		0.000896	0.00250
Toluene	U		0.00130	0.00500
1,2,3-Trichlorobenzene	U		0.00733	0.0125
1,2,4-Trichlorobenzene	U		0.00440	0.0125
1,1,1-Trichloroethane	U		0.000923	0.00250
1,1,2-Trichloroethane	U		0.000597	0.00250
Trichloroethene	U		0.000584	0.00100
Trichlorofluoromethane	U		0.000827	0.00250
1,2,3-Trichloropropane	U		0.00162	0.0125
1,2,4-Trimethylbenzene	U		0.00158	0.00500
1,3,5-Trimethylbenzene	U		0.00200	0.00500
Vinyl chloride	U		0.00116	0.00250
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	*106*			*75.0-131*
(S) 4-Bromofluorobenzene	*97.5*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3800647-1 06/07/22 14:39 • (LCSD) R3800647-2 06/07/22 14:58

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.625	0.427	0.439	68.3	70.2	10.0-160			2.77	31
Acrylonitrile	0.625	0.484	0.457	77.4	73.1	45.0-153			5.74	22
Benzene	0.125	0.114	0.106	91.2	84.8	70.0-123			7.27	20
Bromobenzene	0.125	0.125	0.125	100	100	73.0-121			0.000	20
Bromodichloromethane	0.125	0.106	0.0991	84.8	79.3	73.0-121			6.73	20
Bromoform	0.125	0.0923	0.0979	73.8	78.3	64.0-132			5.89	20
Bromomethane	0.125	0.102	0.0902	81.6	72.2	56.0-147			12.3	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3800647-1 06/07/22 14:39 • (LCSD) R3800647-2 06/07/22 14:58

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
n-Butylbenzene	0.125	0.101	0.102	80.8	81.6	68.0-135			0.985	20
sec-Butylbenzene	0.125	0.108	0.108	86.4	86.4	74.0-130			0.000	20
tert-Butylbenzene	0.125	0.112	0.111	89.6	88.8	75.0-127			0.897	20
Carbon tetrachloride	0.125	0.117	0.109	93.6	87.2	66.0-128			7.08	20
Chlorobenzene	0.125	0.113	0.109	90.4	87.2	76.0-128			3.60	20
Chlorodibromomethane	0.125	0.107	0.104	85.6	83.2	74.0-127			2.84	20
Chloroethane	0.125	0.121	0.108	96.8	86.4	61.0-134			11.4	20
Chloroform	0.125	0.115	0.107	92.0	85.6	72.0-123			7.21	20
Chloromethane	0.125	0.112	0.104	89.6	83.2	51.0-138			7.41	20
2-Chlorotoluene	0.125	0.115	0.117	92.0	93.6	75.0-124			1.72	20
4-Chlorotoluene	0.125	0.111	0.111	88.8	88.8	75.0-124			0.000	20
1,2-Dibromo-3-Chloropropane	0.125	0.0920	0.0892	73.6	71.4	59.0-130			3.09	20
1,2-Dibromoethane	0.125	0.110	0.114	88.0	91.2	74.0-128			3.57	20
Dibromomethane	0.125	0.113	0.108	90.4	86.4	75.0-122			4.52	20
1,2-Dichlorobenzene	0.125	0.109	0.108	87.2	86.4	76.0-124			0.922	20
1,3-Dichlorobenzene	0.125	0.112	0.112	89.6	89.6	76.0-125			0.000	20
1,4-Dichlorobenzene	0.125	0.111	0.115	88.8	92.0	77.0-121			3.54	20
Dichlorodifluoromethane	0.125	0.113	0.104	90.4	83.2	43.0-156			8.29	20
1,1-Dichloroethane	0.125	0.121	0.114	96.8	91.2	70.0-127			5.96	20
1,2-Dichloroethane	0.125	0.120	0.116	96.0	92.8	65.0-131			3.39	20
1,1-Dichloroethene	0.125	0.133	0.124	106	99.2	65.0-131			7.00	20
cis-1,2-Dichloroethene	0.125	0.113	0.109	90.4	87.2	73.0-125			3.60	20
trans-1,2-Dichloroethene	0.125	0.116	0.111	92.8	88.8	71.0-125			4.41	20
1,2-Dichloropropane	0.125	0.120	0.111	96.0	88.8	74.0-125			7.79	20
1,1-Dichloropropene	0.125	0.117	0.108	93.6	86.4	73.0-125			8.00	20
1,3-Dichloropropane	0.125	0.118	0.116	94.4	92.8	80.0-125			1.71	20
cis-1,3-Dichloropropene	0.125	0.115	0.111	92.0	88.8	76.0-127			3.54	20
trans-1,3-Dichloropropene	0.125	0.115	0.114	92.0	91.2	73.0-127			0.873	20
2,2-Dichloropropane	0.125	0.0967	0.0890	77.4	71.2	59.0-135			8.29	20
Ethylbenzene	0.125	0.112	0.107	89.6	85.6	74.0-126			4.57	20
Hexachloro-1,3-butadiene	0.125	0.105	0.101	84.0	80.8	57.0-150			3.88	20
n-Hexane	0.125	0.113	0.108	90.4	86.4	55.0-137			4.52	20
Isopropylbenzene	0.125	0.103	0.0992	82.4	79.4	72.0-127			3.76	20
p-Isopropyltoluene	0.125	0.106	0.106	84.8	84.8	72.0-133			0.000	20
2-Butanone (MEK)	0.625	0.545	0.545	87.2	87.2	30.0-160			0.000	24
Methylene Chloride	0.125	0.109	0.0998	87.2	79.8	68.0-123			8.81	20
4-Methyl-2-pentanone (MIBK)	0.625	0.525	0.535	84.0	85.6	56.0-143			1.89	20
Methyl tert-butyl ether	0.125	0.106	0.106	84.8	84.8	66.0-132			0.000	20
Naphthalene	0.125	0.0698	0.0720	55.8	57.6	59.0-130	J4	J4	3.10	20
n-Propylbenzene	0.125	0.109	0.109	87.2	87.2	74.0-126			0.000	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3800647-1 06/07/22 14:39 • (LCSD) R3800647-2 06/07/22 14:58

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Styrene	0.125	0.105	0.104	84.0	83.2	72.0-127			0.957	20
1,1,1,2-Tetrachloroethane	0.125	0.106	0.107	84.8	85.6	74.0-129			0.939	20
1,1,2,2-Tetrachloroethane	0.125	0.117	0.119	93.6	95.2	68.0-128			1.69	20
Tetrachloroethene	0.125	0.113	0.108	90.4	86.4	70.0-136			4.52	20
Toluene	0.125	0.112	0.109	89.6	87.2	75.0-121			2.71	20
1,2,3-Trichlorobenzene	0.125	0.0774	0.0774	61.9	61.9	59.0-139			0.000	20
1,2,4-Trichlorobenzene	0.125	0.0779	0.0786	62.3	62.9	62.0-137			0.895	20
1,1,1-Trichloroethane	0.125	0.121	0.111	96.8	88.8	69.0-126			8.62	20
1,1,2-Trichloroethane	0.125	0.114	0.111	91.2	88.8	78.0-123			2.67	20
Trichloroethene	0.125	0.109	0.103	87.2	82.4	76.0-126			5.66	20
Trichlorofluoromethane	0.125	0.110	0.0996	88.0	79.7	61.0-142			9.92	20
1,2,3-Trichloropropane	0.125	0.126	0.122	101	97.6	67.0-129			3.23	20
1,2,4-Trimethylbenzene	0.125	0.101	0.0996	80.8	79.7	70.0-126			1.40	20
1,3,5-Trimethylbenzene	0.125	0.111	0.109	88.8	87.2	73.0-127			1.82	20
Vinyl chloride	0.125	0.126	0.115	101	92.0	63.0-134			9.13	20
Xylenes, Total	0.375	0.317	0.307	84.5	81.9	72.0-127			3.21	20
(S) Toluene-d8				*104*	*104*	*75.0-131*				
(S) 4-Bromofluorobenzene				*95.7*	*95.6*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*106*	*103*	*70.0-130*				

L1499430-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1499430-07 06/07/22 20:33 • (MS) R3800647-4 06/08/22 00:21 • (MSD) R3800647-5 06/08/22 00:40

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	1.59	U	2.54	2.60	160	163	2	10.0-160		J5	1.98	40
Acrylonitrile	1.59	U	1.22	1.34	76.5	84.0	2	10.0-160			9.37	40
Benzene	0.318	1.06	1.34	1.43	87.6	116	2	10.0-149			6.45	37
Bromobenzene	0.318	U	0.316	0.331	99.2	104	2	10.0-156			4.72	38
Bromodichloromethane	0.318	U	0.202	0.252	63.6	79.2	2	10.0-143			21.8	37
Bromoform	0.318	U	0.318	0.360	100	113	2	10.0-146			12.4	36
Bromomethane	0.318	U	0.0691	0.106	21.7	33.4	2	10.0-149		J3	42.4	38
n-Butylbenzene	0.318	0.177	0.429	0.415	79.2	74.8	2	10.0-160			3.32	40
sec-Butylbenzene	0.318	0.254	0.592	0.556	106	94.8	2	10.0-159			6.21	39
tert-Butylbenzene	0.318	0.0629	0.361	0.365	93.8	95.0	2	10.0-156			1.05	39
Carbon tetrachloride	0.318	U	0.173	0.289	54.4	90.8	2	10.0-145		J3	50.1	37
Chlorobenzene	0.318	U	0.326	0.397	102	125	2	10.0-152			19.7	39
Chlorodibromomethane	0.318	U	0.295	0.354	92.8	111	2	10.0-146			18.0	37
Chloroethane	0.318	U	0.0464	0.0756	14.6	23.8	2	10.0-146		J3	47.8	40

L1499430-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1499430-07 06/07/22 20:33 • (MS) R3800647-4 06/08/22 00:21 • (MSD) R3800647-5 06/08/22 00:40

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloroform	0.318	U	0.216	0.294	68.0	92.4	2	10.0-146			30.4	37
Chloromethane	0.318	U	0.149	0.226	46.8	71.2	2	10.0-159		J3	41.4	37
2-Chlorotoluene	0.318	U	0.364	0.374	114	118	2	10.0-159			2.76	38
4-Chlorotoluene	0.318	U	0.277	0.310	87.2	97.6	2	10.0-155			11.3	39
1,2-Dibromo-3-Chloropropane	0.318	U	0.317	0.274	99.6	86.0	2	10.0-151			14.7	39
1,2-Dibromoethane	0.318	U	0.333	0.378	105	119	2	10.0-148			12.5	34
Dibromomethane	0.318	U	0.261	0.298	82.0	93.6	2	10.0-147			13.2	35
1,2-Dichlorobenzene	0.318	U	0.295	0.291	92.8	91.6	2	10.0-155			1.30	37
1,3-Dichlorobenzene	0.318	U	0.282	0.296	88.8	93.2	2	10.0-153			4.84	38
1,4-Dichlorobenzene	0.318	U	0.285	0.288	89.6	90.4	2	10.0-151			0.889	38
Dichlorodifluoromethane	0.318	U	0.125	0.224	39.2	70.4	2	10.0-160		J3	57.0	35
1,1-Dichloroethane	0.318	U	0.201	0.295	63.2	92.8	2	10.0-147		J3	37.9	37
1,2-Dichloroethane	0.318	U	0.221	0.258	69.6	81.2	2	10.0-148			15.4	35
1,1-Dichloroethene	0.318	U	0.187	0.294	58.8	92.4	2	10.0-155		J3	44.4	37
cis-1,2-Dichloroethene	0.318	U	0.212	0.291	66.8	91.6	2	10.0-149			31.3	37
trans-1,2-Dichloroethene	0.318	U	0.182	0.282	57.2	88.8	2	10.0-150		J3	43.3	37
1,2-Dichloropropane	0.318	U	0.206	0.295	64.8	92.8	2	10.0-148			35.5	37
1,1-Dichloropropene	0.318	U	0.218	0.317	68.4	99.6	2	10.0-153		J3	37.1	35
1,3-Dichloropropane	0.318	U	0.310	0.360	97.6	113	2	10.0-154			14.8	35
cis-1,3-Dichloropropene	0.318	U	0.235	0.290	74.0	91.2	2	10.0-151			20.8	37
trans-1,3-Dichloropropene	0.318	U	0.279	0.338	87.6	106	2	10.0-148			19.4	37
2,2-Dichloropropane	0.318	U	0.116	0.179	36.5	56.4	2	10.0-138		J3	42.8	36
Ethylbenzene	0.318	0.321	0.695	0.823	118	158	2	10.0-160			16.9	38
Hexachloro-1,3-butadiene	0.318	U	0.420	0.383	132	120	2	10.0-160			9.19	40
n-Hexane	0.318	0.645	0.879	0.905	73.6	81.6	2	10.0-157			2.85	37
Isopropylbenzene	0.318	0.256	0.604	0.715	110	144	2	10.0-155			16.8	38
p-Isopropyltoluene	0.318	0.115	0.503	0.485	122	116	2	10.0-160			3.61	40
2-Butanone (MEK)	1.59	U	2.20	2.23	138	140	2	10.0-160			1.15	40
Methylene Chloride	0.318	U	0.229	0.298	72.0	93.6	2	10.0-141			26.1	37
4-Methyl-2-pentanone (MIBK)	1.59	U	2.19	2.44	138	154	2	10.0-160			11.0	35
Methyl tert-butyl ether	0.318	U	0.248	0.272	78.0	85.6	2	11.0-147			9.29	35
Naphthalene	0.318	0.714	1.15	0.950	138	74.4	2	10.0-160			19.2	36
n-Propylbenzene	0.318	0.420	0.735	0.691	99.2	85.2	2	10.0-158			6.24	38
Styrene	0.318	U	0.294	0.386	92.4	121	2	10.0-160			27.0	40
1,1,1,2-Tetrachloroethane	0.318	U	0.270	0.356	84.8	112	2	10.0-149			27.6	39
1,1,2,2-Tetrachloroethane	0.318	U	3.21	2.68	1010	844	2	10.0-160	J5	J5	17.7	35
Tetrachloroethene	0.318	U	0.224	0.355	70.4	112	2	10.0-156		J3	45.3	39
Toluene	0.318	0.220	0.547	0.659	103	138	2	10.0-156			18.6	38
1,2,3-Trichlorobenzene	0.318	U	0.216	0.196	68.0	61.6	2	10.0-160			9.88	40

L1499430-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1499430-07 06/07/22 20:33 • (MS) R3800647-4 06/08/22 00:21 • (MSD) R3800647-5 06/08/22 00:40

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,2,4-Trichlorobenzene	0.318	U	0.293	0.265	92.0	83.2	2	10.0-160			10.0	40
1,1,1-Trichloroethane	0.318	U	0.178	0.288	56.0	90.4	2	10.0-144		J3	47.0	35
1,1,2-Trichloroethane	0.318	U	1.39	1.41	436	444	2	10.0-160	J5	J5	1.82	35
Trichloroethene	0.318	U	0.205	0.298	64.4	93.6	2	10.0-156			37.0	38
Trichlorofluoromethane	0.318	U	0.0802	0.117	25.2	36.8	2	10.0-160			37.3	40
1,2,3-Trichloropropane	0.318	U	0.962	0.697	302	219	2	10.0-156	J5	J5	31.9	35
1,2,4-Trimethylbenzene	0.318	1.19	1.67	1.41	150	70.4	2	10.0-160			16.5	36
1,3,5-Trimethylbenzene	0.318	0.186	0.529	0.487	108	94.8	2	10.0-160			8.26	38
Vinyl chloride	0.318	U	0.135	0.238	42.4	74.8	2	10.0-160		J3	55.3	37
Xylenes, Total	0.954	0.948	2.16	2.48	127	161	2	10.0-160		J5	13.7	38
(S) Toluene-d8					*136*	*140*		*75.0-131*	J1	J1		
(S) 4-Bromofluorobenzene					*256*	*262*		*67.0-138*	J1	J1		
(S) 1,2-Dichloroethane-d4					*90.3*	*90.2*		*70.0-130*				

Sample Narrative:

OS: Surrogate failure due to matrix interference.

Method Blank (MB)

(MB) R3800983-3 06/08/22 02:34

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0365	0.0500
Acrylonitrile	U		0.00361	0.0125
Benzene	U		0.000467	0.00100
Bromobenzene	U		0.000900	0.0125
Bromodichloromethane	U		0.000725	0.00250
Bromoform	U		0.00117	0.0250
sec-Butylbenzene	U		0.00288	0.0125
tert-Butylbenzene	U		0.00195	0.00500
Carbon tetrachloride	U		0.000898	0.00500
Chlorobenzene	U		0.000210	0.00250
Chlorodibromomethane	U		0.000612	0.00250
Chloroform	U		0.00103	0.00250
2-Chlorotoluene	U		0.000865	0.00250
4-Chlorotoluene	U		0.000450	0.00500
1,2-Dibromo-3-Chloropropane	U		0.00390	0.0250
1,2-Dibromoethane	U		0.000648	0.00250
Dibromomethane	U		0.000750	0.00500
1,2-Dichlorobenzene	U		0.000425	0.00500
1,3-Dichlorobenzene	U		0.000600	0.00500
1,4-Dichlorobenzene	U		0.000700	0.00500
1,1-Dichloroethane	U		0.000491	0.00250
1,2-Dichloroethane	U		0.000649	0.00250
1,1-Dichloroethene	U		0.000606	0.00250
cis-1,2-Dichloroethene	U		0.000734	0.00250
trans-1,2-Dichloroethene	U		0.00104	0.00500
1,2-Dichloropropane	U		0.00142	0.00500
1,1-Dichloropropene	U		0.000809	0.00250
1,3-Dichloropropane	U		0.000501	0.00500
cis-1,3-Dichloropropene	U		0.000757	0.00250
trans-1,3-Dichloropropene	U		0.00114	0.00500
Ethylbenzene	U		0.000737	0.00250
Hexachloro-1,3-butadiene	U		0.00600	0.0250
Isopropylbenzene	U		0.000425	0.00250
p-Isopropyltoluene	U		0.00255	0.00500
2-Butanone (MEK)	U		0.0635	0.100
Methylene Chloride	0.00995	J	0.00664	0.0250
4-Methyl-2-pentanone (MIBK)	U		0.00228	0.0250
Methyl tert-butyl ether	U		0.000350	0.00100
Naphthalene	U		0.00488	0.0125
n-Propylbenzene	U		0.000950	0.00500

Method Blank (MB)

(MB) R3800983-3 06/08/22 02:34

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Styrene	U		0.000229	0.0125
1,1,1,2-Tetrachloroethane	U		0.000948	0.00250
1,1,2,2-Tetrachloroethane	U		0.000695	0.00250
Tetrachloroethene	U		0.000896	0.00250
Toluene	U		0.00130	0.00500
1,2,3-Trichlorobenzene	U		0.00733	0.0125
1,2,4-Trichlorobenzene	U		0.00440	0.0125
1,1,1-Trichloroethane	U		0.000923	0.00250
1,1,2-Trichloroethane	U		0.000597	0.00250
Trichloroethene	U		0.000584	0.00100
1,2,3-Trichloropropane	U		0.00162	0.0125
1,2,4-Trimethylbenzene	U		0.00158	0.00500
1,3,5-Trimethylbenzene	U		0.00200	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	*106*			*75.0-131*
(S) 4-Bromofluorobenzene	*98.6*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*89.2*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3800983-1 06/08/22 01:18 • (LCSD) R3800983-2 06/08/22 01:37

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.625	0.775	0.856	124	137	10.0-160			9.93	31
Acrylonitrile	0.625	0.641	0.675	103	108	45.0-153			5.17	22
Benzene	0.125	0.109	0.108	87.2	86.4	70.0-123			0.922	20
Bromobenzene	0.125	0.115	0.120	92.0	96.0	73.0-121			4.26	20
Bromodichloromethane	0.125	0.101	0.0992	80.8	79.4	73.0-121			1.80	20
Bromoform	0.125	0.112	0.110	89.6	88.0	64.0-132			1.80	20
sec-Butylbenzene	0.125	0.105	0.107	84.0	85.6	74.0-130			1.89	20
tert-Butylbenzene	0.125	0.106	0.108	84.8	86.4	75.0-127			1.87	20
Carbon tetrachloride	0.125	0.113	0.110	90.4	88.0	66.0-128			2.69	20
Chlorobenzene	0.125	0.115	0.116	92.0	92.8	76.0-128			0.866	20
Chlorodibromomethane	0.125	0.111	0.113	88.8	90.4	74.0-127			1.79	20
Chloroform	0.125	0.105	0.105	84.0	84.0	72.0-123			0.000	20
2-Chlorotoluene	0.125	0.111	0.112	88.8	89.6	75.0-124			0.897	20
4-Chlorotoluene	0.125	0.101	0.104	80.8	83.2	75.0-124			2.93	20
1,2-Dibromo-3-Chloropropane	0.125	0.107	0.113	85.6	90.4	59.0-130			5.45	20
1,2-Dibromoethane	0.125	0.118	0.118	94.4	94.4	74.0-128			0.000	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3800983-1 06/08/22 01:18 • (LCSD) R3800983-2 06/08/22 01:37

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Dibromomethane	0.125	0.116	0.113	92.8	90.4	75.0-122			2.62	20
1,2-Dichlorobenzene	0.125	0.114	0.114	91.2	91.2	76.0-124			0.000	20
1,3-Dichlorobenzene	0.125	0.113	0.116	90.4	92.8	76.0-125			2.62	20
1,4-Dichlorobenzene	0.125	0.113	0.116	90.4	92.8	77.0-121			2.62	20
1,1-Dichloroethane	0.125	0.110	0.113	88.0	90.4	70.0-127			2.69	20
1,2-Dichloroethane	0.125	0.110	0.111	88.0	88.8	65.0-131			0.905	20
1,1-Dichloroethene	0.125	0.115	0.115	92.0	92.0	65.0-131			0.000	20
cis-1,2-Dichloroethene	0.125	0.114	0.116	91.2	92.8	73.0-125			1.74	20
trans-1,2-Dichloroethene	0.125	0.116	0.116	92.8	92.8	71.0-125			0.000	20
1,2-Dichloropropane	0.125	0.115	0.112	92.0	89.6	74.0-125			2.64	20
1,1-Dichloropropene	0.125	0.106	0.105	84.8	84.0	73.0-125			0.948	20
1,3-Dichloropropane	0.125	0.116	0.114	92.8	91.2	80.0-125			1.74	20
cis-1,3-Dichloropropene	0.125	0.110	0.112	88.0	89.6	76.0-127			1.80	20
trans-1,3-Dichloropropene	0.125	0.107	0.110	85.6	88.0	73.0-127			2.76	20
Ethylbenzene	0.125	0.114	0.114	91.2	91.2	74.0-126			0.000	20
Hexachloro-1,3-butadiene	0.125	0.118	0.120	94.4	96.0	57.0-150			1.68	20
Isopropylbenzene	0.125	0.112	0.111	89.6	88.8	72.0-127			0.897	20
p-Isopropyltoluene	0.125	0.106	0.109	84.8	87.2	72.0-133			2.79	20
2-Butanone (MEK)	0.625	0.620	0.643	99.2	103	30.0-160			3.64	24
Methylene Chloride	0.125	0.110	0.107	88.0	85.6	68.0-123			2.76	20
4-Methyl-2-pentanone (MIBK)	0.625	0.521	0.527	83.4	84.3	56.0-143			1.15	20
Methyl tert-butyl ether	0.125	0.117	0.116	93.6	92.8	66.0-132			0.858	20
Naphthalene	0.125	0.107	0.108	85.6	86.4	59.0-130			0.930	20
n-Propylbenzene	0.125	0.100	0.101	80.0	80.8	74.0-126			0.995	20
Styrene	0.125	0.111	0.113	88.8	90.4	72.0-127			1.79	20
1,1,1,2-Tetrachloroethane	0.125	0.116	0.116	92.8	92.8	74.0-129			0.000	20
1,1,2,2-Tetrachloroethane	0.125	0.103	0.102	82.4	81.6	68.0-128			0.976	20
Tetrachloroethene	0.125	0.113	0.114	90.4	91.2	70.0-136			0.881	20
Toluene	0.125	0.108	0.109	86.4	87.2	75.0-121			0.922	20
1,2,3-Trichlorobenzene	0.125	0.106	0.107	84.8	85.6	59.0-139			0.939	20
1,2,4-Trichlorobenzene	0.125	0.106	0.106	84.8	84.8	62.0-137			0.000	20
1,1,1-Trichloroethane	0.125	0.111	0.111	88.8	88.8	69.0-126			0.000	20
1,1,2-Trichloroethane	0.125	0.109	0.109	87.2	87.2	78.0-123			0.000	20
Trichloroethene	0.125	0.116	0.116	92.8	92.8	76.0-126			0.000	20
1,2,3-Trichloropropane	0.125	0.113	0.118	90.4	94.4	67.0-129			4.33	20
1,2,4-Trimethylbenzene	0.125	0.101	0.102	80.8	81.6	70.0-126			0.985	20
1,3,5-Trimethylbenzene	0.125	0.106	0.108	84.8	86.4	73.0-127			1.87	20
Xylenes, Total	0.375	0.339	0.340	90.4	90.7	72.0-127			0.295	20
(S) Toluene-d8				*104*	*104*	*75.0-131*				
(S) 4-Bromofluorobenzene				*105*	*105*	*67.0-138*				

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3800983-1 06/08/22 01:18 • (LCSD) R3800983-2 06/08/22 01:37

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
(S) 1,2-Dichloroethane-d4				*98.6*	*98.3*	*70.0-130*				

L1500240-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1500240-01 06/08/22 06:04 • (MS) R3800983-4 06/08/22 09:34 • (MSD) R3800983-5 06/08/22 09:53

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.520	U	0.240	0.274	46.2	52.7	1	10.0-160			13.2	40
Acrylonitrile	0.520	U	0.327	0.363	62.9	69.8	1	10.0-160			10.4	40
Benzene	0.104	U	0.0641	0.0729	61.6	70.1	1	10.0-149			12.8	37
Bromobenzene	0.104	U	0.0857	0.0923	82.4	88.8	1	10.0-156			7.42	38
Bromodichloromethane	0.104	U	0.0654	0.0732	62.9	70.4	1	10.0-143			11.3	37
Bromoform	0.104	U	0.0809	0.0841	77.8	80.9	1	10.0-146			3.88	36
sec-Butylbenzene	0.104	U	0.0626	0.0697	60.2	67.0	1	10.0-159			10.7	39
tert-Butylbenzene	0.104	U	0.0665	0.0744	63.9	71.5	1	10.0-156			11.2	39
Carbon tetrachloride	0.104	U	0.0552	0.0668	53.1	64.2	1	10.0-145			19.0	37
Chlorobenzene	0.104	U	0.0742	0.0841	71.3	80.9	1	10.0-152			12.5	39
Chlorodibromomethane	0.104	U	0.0836	0.0870	80.4	83.7	1	10.0-146			3.99	37
Chloroform	0.104	U	0.0649	0.0711	62.4	68.4	1	10.0-146			9.12	37
2-Chlorotoluene	0.104	U	0.0710	0.0793	68.3	76.3	1	10.0-159			11.0	38
4-Chlorotoluene	0.104	U	0.0680	0.0759	65.4	73.0	1	10.0-155			11.0	39
1,2-Dibromo-3-Chloropropane	0.104	U	0.0637	0.0683	61.2	65.7	1	10.0-151			6.97	39
1,2-Dibromoethane	0.104	U	0.0910	0.0972	87.5	93.5	1	10.0-148			6.59	34
Dibromomethane	0.104	U	0.0795	0.0850	76.4	81.7	1	10.0-147			6.69	35
1,2-Dichlorobenzene	0.104	U	0.0775	0.0839	74.5	80.7	1	10.0-155			7.93	37
1,3-Dichlorobenzene	0.104	U	0.0758	0.0826	72.9	79.4	1	10.0-153			8.59	38
1,4-Dichlorobenzene	0.104	U	0.0792	0.0854	76.2	82.1	1	10.0-151			7.53	38
1,1-Dichloroethane	0.104	U	0.0661	0.0753	63.6	72.4	1	10.0-147			13.0	37
1,2-Dichloroethane	0.104	U	0.0714	0.0795	68.7	76.4	1	10.0-148			10.7	35
1,1-Dichloroethene	0.104	U	0.0666	0.0793	64.0	76.3	1	10.0-155			17.4	37
cis-1,2-Dichloroethene	0.104	U	0.0698	0.0770	67.1	74.0	1	10.0-149			9.81	37
trans-1,2-Dichloroethene	0.104	U	0.0632	0.0724	60.8	69.6	1	10.0-150			13.6	37
1,2-Dichloropropane	0.104	U	0.0749	0.0786	72.0	75.6	1	10.0-148			4.82	37
1,1-Dichloropropene	0.104	U	0.0570	0.0664	54.8	63.8	1	10.0-153			15.2	35
1,3-Dichloropropane	0.104	U	0.0883	0.0964	84.9	92.7	1	10.0-154			8.77	35
cis-1,3-Dichloropropene	0.104	U	0.0768	0.0811	73.8	78.0	1	10.0-151			5.45	37
trans-1,3-Dichloropropene	0.104	U	0.0811	0.0865	78.0	83.2	1	10.0-148			6.44	37
Ethylbenzene	0.104	U	0.0671	0.0752	64.5	72.3	1	10.0-160			11.4	38
Hexachloro-1,3-butadiene	0.104	U	0.0718	0.0712	69.0	68.5	1	10.0-160			0.839	40

L1500240-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1500240-01 06/08/22 06:04 • (MS) R3800983-4 06/08/22 09:34 • (MSD) R3800983-5 06/08/22 09:53

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Isopropylbenzene	0.104	U	0.0609	0.0703	58.6	67.6	1	10.0-155			14.3	38
p-Isopropyltoluene	0.104	U	0.0636	0.0696	61.2	66.9	1	10.0-160			9.01	40
2-Butanone (MEK)	0.520	U	0.296	0.305	56.9	58.7	1	10.0-160			3.00	40
Methylene Chloride	0.104	0.0171	0.0803	0.0904	60.8	70.5	1	10.0-141			11.8	37
4-Methyl-2-pentanone (MIBK)	0.520	U	0.370	0.376	71.2	72.3	1	10.0-160			1.61	35
Methyl tert-butyl ether	0.104	U	0.0782	0.0834	75.2	80.2	1	11.0-147			6.44	35
Naphthalene	0.104	U	0.0620	0.0623	59.6	59.9	1	10.0-160			0.483	36
n-Propylbenzene	0.104	U	0.0610	0.0679	58.7	65.3	1	10.0-158			10.7	38
Styrene	0.104	U	0.0712	0.0776	68.5	74.6	1	10.0-160			8.60	40
1,1,1,2-Tetrachloroethane	0.104	U	0.0721	0.0795	69.3	76.4	1	10.0-149			9.76	39
1,1,2,2-Tetrachloroethane	0.104	U	0.0542	0.0543	52.1	52.2	1	10.0-160			0.184	35
Tetrachloroethene	0.104	U	0.0632	0.0728	60.8	70.0	1	10.0-156			14.1	39
Toluene	0.104	0.00220	0.0663	0.0754	61.6	70.4	1	10.0-156			12.8	38
1,2,3-Trichlorobenzene	0.104	U	0.0611	0.0656	58.7	63.1	1	10.0-160			7.10	40
1,2,4-Trichlorobenzene	0.104	U	0.0634	0.0648	61.0	62.3	1	10.0-160			2.18	40
1,1,1-Trichloroethane	0.104	U	0.0412	0.0497	39.6	47.8	1	10.0-144			18.7	35
1,1,2-Trichloroethane	0.104	U	0.0870	0.0911	83.7	87.6	1	10.0-160			4.60	35
Trichloroethene	0.104	U	0.0911	0.101	87.6	97.1	1	10.0-156			10.3	38
1,2,3-Trichloropropane	0.104	U	0.0936	0.0980	90.0	94.2	1	10.0-156			4.59	35
1,2,4-Trimethylbenzene	0.104	U	0.0629	0.0685	60.5	65.9	1	10.0-160			8.52	36
1,3,5-Trimethylbenzene	0.104	U	0.0640	0.0715	61.5	68.8	1	10.0-160			11.1	38
Xylenes, Total	0.312	0.00392	0.199	0.224	62.5	70.5	1	10.0-160			11.8	38
(S) Toluene-d8					*108*	*108*		*75.0-131*				
(S) 4-Bromofluorobenzene					*101*	*101*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*89.5*	*90.6*		*70.0-130*				

Method Blank (MB)

(MB) R3801137-3 06/08/22 21:04

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Bromomethane	U		0.00197	0.0125
n-Butylbenzene	U		0.00525	0.0125
Chloroethane	U		0.00170	0.00500
Chloromethane	U		0.00435	0.0125
Dichlorodifluoromethane	U		0.00161	0.00250
2,2-Dichloropropane	U		0.00138	0.00250
n-Hexane	U		0.00226	0.00500
Trichlorofluoromethane	U		0.000827	0.00250
Vinyl chloride	U		0.00116	0.00250
(S) Toluene-d8	*105*			*75.0-131*
(S) 4-Bromofluorobenzene	*95.6*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*93.8*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3801137-1 06/08/22 19:28 • (LCSD) R3801137-2 06/08/22 19:47

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromomethane	0.125	0.0969	0.0898	77.5	71.8	56.0-147			7.61	20
n-Butylbenzene	0.125	0.107	0.0962	85.6	77.0	68.0-135			10.6	20
Chloroethane	0.125	0.0995	0.0952	79.6	76.2	61.0-134			4.42	20
Chloromethane	0.125	0.0972	0.0876	77.8	70.1	51.0-138			10.4	20
Dichlorodifluoromethane	0.125	0.111	0.102	88.8	81.6	43.0-156			8.45	20
2,2-Dichloropropane	0.125	0.0990	0.0883	79.2	70.6	59.0-135			11.4	20
n-Hexane	0.125	0.108	0.0941	86.4	75.3	55.0-137			13.8	20
Trichlorofluoromethane	0.125	0.102	0.0960	81.6	76.8	61.0-142			6.06	20
Vinyl chloride	0.125	0.113	0.103	90.4	82.4	63.0-134			9.26	20
(S) Toluene-d8				*104*	*106*	*75.0-131*				
(S) 4-Bromofluorobenzene				*102*	*97.4*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*91.3*	*93.4*	*70.0-130*				

Method Blank (MB)

(MB) R3801490-4 06/09/22 11:45

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0113	0.0500
Acrolein	U		0.00254	0.0500
Acrylonitrile	U		0.000671	0.0100
Benzene	U		0.0000941	0.00100
Bromobenzene	U		0.000118	0.00100
Bromodichloromethane	U		0.000136	0.00100
Bromoform	U		0.000129	0.00100
Bromomethane	U		0.000605	0.00500
n-Butylbenzene	U		0.000157	0.00100
sec-Butylbenzene	U		0.000125	0.00100
tert-Butylbenzene	U		0.000127	0.00100
Carbon tetrachloride	U		0.000128	0.00100
Chlorobenzene	U		0.000116	0.00100
Chlorodibromomethane	U		0.000140	0.00100
Chloroethane	U		0.000192	0.00500
Chloroform	U		0.000111	0.00500
Chloromethane	U		0.000960	0.00250
2-Chlorotoluene	U		0.000106	0.00100
4-Chlorotoluene	U		0.000114	0.00100
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500
1,2-Dibromoethane	U		0.000126	0.00100
Dibromomethane	U		0.000122	0.00100
1,2-Dichlorobenzene	U		0.000107	0.00100
1,3-Dichlorobenzene	U		0.000110	0.00100
1,4-Dichlorobenzene	U		0.000120	0.00100
Dichlorodifluoromethane	U		0.000374	0.00500
1,1-Dichloroethane	U		0.000100	0.00100
1,2-Dichloroethane	U		0.0000819	0.00100
1,1-Dichloroethene	U		0.000188	0.00100
cis-1,2-Dichloroethene	U		0.000126	0.00100
trans-1,2-Dichloroethene	U		0.000149	0.00100
1,2-Dichloropropane	U		0.000149	0.00100
1,1-Dichloropropene	U		0.000142	0.00100
1,3-Dichloropropane	U		0.000110	0.00100
cis-1,3-Dichloropropene	U		0.000111	0.00100
trans-1,3-Dichloropropene	U		0.000118	0.00100
2,2-Dichloropropane	U		0.000161	0.00100
Ethylbenzene	U		0.000137	0.00100
Hexachloro-1,3-butadiene	U		0.000337	0.00100
n-Hexane	U		0.000749	0.0100

Method Blank (MB)

(MB) R3801490-4 06/09/22 11:45

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Isopropylbenzene	U		0.000105	0.00100
p-Isopropyltoluene	U		0.000120	0.00100
2-Butanone (MEK)	U		0.00119	0.0100
Methylene Chloride	U		0.000430	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100
Methyl tert-butyl ether	U		0.000101	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.0000993	0.00100
Styrene	U		0.000118	0.00100
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100
Tetrachloroethene	U		0.000300	0.00100
Toluene	U		0.000278	0.00100
1,2,3-Trichlorobenzene	U		0.000230	0.00100
1,2,4-Trichlorobenzene	U		0.000481	0.00100
1,1,1-Trichloroethane	U		0.000149	0.00100
1,1,2-Trichloroethane	U		0.000158	0.00100
Trichloroethene	U		0.000190	0.00100
Trichlorofluoromethane	U		0.000160	0.00500
1,2,3-Trichloropropane	U		0.000237	0.00250
1,2,4-Trimethylbenzene	U		0.000322	0.00100
1,3,5-Trimethylbenzene	U		0.000104	0.00100
Vinyl chloride	U		0.000234	0.00100
Xylenes, Total	U		0.000174	0.00300
(S) Toluene-d8	*105*			*80.0-120*
(S) 4-Bromofluorobenzene	*96.6*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*129*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3801490-1 06/09/22 10:23 • (LCSD) R3801490-2 06/09/22 10:43

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.0250	0.0385	0.0382	154	153	19.0-160			0.782	27
Acrolein	0.0250	0.0150	0.0163	60.0	65.2	10.0-160			8.31	26
Acrylonitrile	0.0250	0.0337	0.0337	135	135	55.0-149			0.000	20
Benzene	0.00500	0.00476	0.00486	95.2	97.2	70.0-123			2.08	20
Bromobenzene	0.00500	0.00536	0.00534	107	107	73.0-121			0.374	20
Bromodichloromethane	0.00500	0.00494	0.00527	98.8	105	75.0-120			6.46	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3801490-1 06/09/22 10:23 • (LCSD) R3801490-2 06/09/22 10:43

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromoform	0.00500	0.00441	0.00426	88.2	85.2	68.0-132			3.46	20
Bromomethane	0.00500	0.00148	0.00144	29.6	28.8	10.0-160			2.74	25
n-Butylbenzene	0.00500	0.00430	0.00447	86.0	89.4	73.0-125			3.88	20
sec-Butylbenzene	0.00500	0.00506	0.00493	101	98.6	75.0-125			2.60	20
tert-Butylbenzene	0.00500	0.00443	0.00458	88.6	91.6	76.0-124			3.33	20
Carbon tetrachloride	0.00500	0.00497	0.00509	99.4	102	68.0-126			2.39	20
Chlorobenzene	0.00500	0.00468	0.00470	93.6	94.0	80.0-121			0.426	20
Chlorodibromomethane	0.00500	0.00478	0.00456	95.6	91.2	77.0-125			4.71	20
Chloroethane	0.00500	0.00559	0.00566	112	113	47.0-150			1.24	20
Chloroform	0.00500	0.00524	0.00529	105	106	73.0-120			0.950	20
Chloromethane	0.00500	0.00544	0.00535	109	107	41.0-142			1.67	20
2-Chlorotoluene	0.00500	0.00517	0.00532	103	106	76.0-123			2.86	20
4-Chlorotoluene	0.00500	0.00497	0.00512	99.4	102	75.0-122			2.97	20
1,2-Dibromo-3-Chloropropane	0.00500	0.00362	0.00332	72.4	66.4	58.0-134			8.65	20
1,2-Dibromoethane	0.00500	0.00485	0.00474	97.0	94.8	80.0-122			2.29	20
Dibromomethane	0.00500	0.00507	0.00517	101	103	80.0-120			1.95	20
1,2-Dichlorobenzene	0.00500	0.00516	0.00523	103	105	79.0-121			1.35	20
1,3-Dichlorobenzene	0.00500	0.00510	0.00500	102	100	79.0-120			1.98	20
1,4-Dichlorobenzene	0.00500	0.00472	0.00511	94.4	102	79.0-120			7.93	20
Dichlorodifluoromethane	0.00500	0.00511	0.00499	102	99.8	51.0-149			2.38	20
1,1-Dichloroethane	0.00500	0.00554	0.00566	111	113	70.0-126			2.14	20
1,2-Dichloroethane	0.00500	0.00604	0.00588	121	118	70.0-128			2.68	20
1,1-Dichloroethene	0.00500	0.00458	0.00445	91.6	89.0	71.0-124			2.88	20
cis-1,2-Dichloroethene	0.00500	0.00480	0.00481	96.0	96.2	73.0-120			0.208	20
trans-1,2-Dichloroethene	0.00500	0.00460	0.00456	92.0	91.2	73.0-120			0.873	20
1,2-Dichloropropane	0.00500	0.00544	0.00518	109	104	77.0-125			4.90	20
1,1-Dichloropropene	0.00500	0.00493	0.00474	98.6	94.8	74.0-126			3.93	20
1,3-Dichloropropane	0.00500	0.00514	0.00519	103	104	80.0-120			0.968	20
cis-1,3-Dichloropropene	0.00500	0.00496	0.00495	99.2	99.0	80.0-123			0.202	20
trans-1,3-Dichloropropene	0.00500	0.00488	0.00494	97.6	98.8	78.0-124			1.22	20
2,2-Dichloropropane	0.00500	0.00552	0.00519	110	104	58.0-130			6.16	20
Ethylbenzene	0.00500	0.00458	0.00457	91.6	91.4	79.0-123			0.219	20
Hexachloro-1,3-butadiene	0.00500	0.00452	0.00469	90.4	93.8	54.0-138			3.69	20
n-Hexane	0.00500	0.00647	0.00635	129	127	57.0-133			1.87	20
Isopropylbenzene	0.00500	0.00421	0.00424	84.2	84.8	76.0-127			0.710	20
p-Isopropyltoluene	0.00500	0.00469	0.00481	93.8	96.2	76.0-125			2.53	20
2-Butanone (MEK)	0.0250	0.0360	0.0362	144	145	44.0-160			0.554	20
Methylene Chloride	0.00500	0.00519	0.00515	104	103	67.0-120			0.774	20
4-Methyl-2-pentanone (MIBK)	0.0250	0.0370	0.0365	148	146	68.0-142	J4	J4	1.36	20
Methyl tert-butyl ether	0.00500	0.00494	0.00502	98.8	100	68.0-125			1.61	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3801490-1 06/09/22 10:23 • (LCSD) R3801490-2 06/09/22 10:43

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Naphthalene	0.00500	0.00279	0.00360	55.8	72.0	54.0-135		J3	25.4	20
n-Propylbenzene	0.00500	0.00517	0.00519	103	104	77.0-124			0.386	20
Styrene	0.00500	0.00410	0.00390	82.0	78.0	73.0-130			5.00	20
1,1,1,2-Tetrachloroethane	0.00500	0.00466	0.00446	93.2	89.2	75.0-125			4.39	20
1,1,2,2-Tetrachloroethane	0.00500	0.00515	0.00515	103	103	65.0-130			0.000	20
Tetrachloroethene	0.00500	0.00483	0.00482	96.6	96.4	72.0-132			0.207	20
Toluene	0.00500	0.00487	0.00476	97.4	95.2	79.0-120			2.28	20
1,2,3-Trichlorobenzene	0.00500	0.00402	0.00472	80.4	94.4	50.0-138			16.0	20
1,2,4-Trichlorobenzene	0.00500	0.00392	0.00332	78.4	66.4	57.0-137			16.6	20
1,1,1-Trichloroethane	0.00500	0.00510	0.00515	102	103	73.0-124			0.976	20
1,1,2-Trichloroethane	0.00500	0.00511	0.00486	102	97.2	80.0-120			5.02	20
Trichloroethene	0.00500	0.00508	0.00495	102	99.0	78.0-124			2.59	20
Trichlorofluoromethane	0.00500	0.00540	0.00552	108	110	59.0-147			2.20	20
1,2,3-Trichloropropane	0.00500	0.00560	0.00564	112	113	73.0-130			0.712	20
1,2,4-Trimethylbenzene	0.00500	0.00475	0.00480	95.0	96.0	76.0-121			1.05	20
1,3,5-Trimethylbenzene	0.00500	0.00505	0.00518	101	104	76.0-122			2.54	20
Vinyl chloride	0.00500	0.00543	0.00538	109	108	67.0-131			0.925	20
Xylenes, Total	0.0150	0.0133	0.0134	88.7	89.3	79.0-123			0.749	20
(S) Toluene-d8				*103*	*101*	*80.0-120*				
(S) 4-Bromofluorobenzene				*97.4*	*97.0*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*125*	*130*	*70.0-130*				

Method Blank (MB)

(MB) R3800220-1 06/07/22 02:34

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C20 Hydrocarbons	U		0.610	4.00
C20-C34 Hydrocarbons	U		0.611	4.00
(S) o-Terphenyl	*58.4*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3800220-2 06/07/22 02:47

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C20 Hydrocarbons	25.0	21.0	84.0	50.0-150	
C20-C34 Hydrocarbons	25.0	22.4	89.6	50.0-150	
(S) o-Terphenyl			*85.0*	*18.0-148*	

L1499107-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1499107-03 06/07/22 04:05 • (MS) R3800220-3 06/07/22 04:18 • (MSD) R3800220-4 06/07/22 04:31

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C20 Hydrocarbons	24.5	U	13.0	12.1	53.1	49.4	1	50.0-150		J6	7.17	20
C20-C34 Hydrocarbons	24.5	1.83	15.4	16.4	55.4	59.5	1	50.0-150			6.29	20
(S) o-Terphenyl					*59.9*	*65.6*		*18.0-148*				

Method Blank (MB)

(MB) R3800931-1 06/08/22 12:25

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C20 Hydrocarbons	U		0.610	4.00
C20-C34 Hydrocarbons	U		0.611	4.00
(S) o-Terphenyl	*77.0*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3800931-2 06/08/22 12:42

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C20 Hydrocarbons	25.0	18.0	72.0	50.0-150	
C20-C34 Hydrocarbons	25.0	18.6	74.4	50.0-150	
(S) o-Terphenyl			*69.2*	*18.0-148*	

L1500791-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1500791-03 06/08/22 12:59 • (MS) R3800931-3 06/08/22 13:17 • (MSD) R3800931-4 06/08/22 13:34

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C20 Hydrocarbons	31.4	U	16.7	15.6	53.2	49.6	1	50.0-150		J6	7.00	20
C20-C34 Hydrocarbons	31.4	U	16.3	11.0	52.0	35.1	1	50.0-150		J3 J6	38.9	20
(S) o-Terphenyl					*51.4*	*41.6*		*18.0-148*				

Method Blank (MB)

(MB) R3800737-3 06/07/22 20:19

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Anthracene	U		0.0000190	0.0000500
Acenaphthene	U		0.0000190	0.0000500
Acenaphthylene	U		0.0000171	0.0000500
Benzo(a)anthracene	U		0.0000203	0.0000500
Benzo(a)pyrene	U		0.0000184	0.0000500
Benzo(b)fluoranthene	U		0.0000168	0.0000500
Benzo(g,h,i)perylene	U		0.0000184	0.0000500
Benzo(k)fluoranthene	U		0.0000202	0.0000500
Chrysene	U		0.0000179	0.0000500
Dibenz(a,h)anthracene	U		0.0000160	0.0000500
Fluoranthene	U		0.0000270	0.000100
Fluorene	U		0.0000169	0.0000500
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500
Naphthalene	U		0.0000917	0.000250
Phenanthrene	U		0.0000180	0.0000500
Pyrene	U		0.0000169	0.0000500
1-Methylnaphthalene	U		0.0000687	0.000250
2-Methylnaphthalene	U		0.0000674	0.000250
2-Chloronaphthalene	U		0.0000682	0.000250
(S) Nitrobenzene-d5	*109*			*31.0-160*
(S) 2-Fluorobiphenyl	*106*			*48.0-148*
(S) p-Terphenyl-d14	*133*			*37.0-146*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3800737-1 06/07/22 19:45 • (LCSD) R3800737-2 06/07/22 20:02

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Anthracene	0.00200	0.00198	0.00200	99.0	100	67.0-150			1.01	20
Acenaphthene	0.00200	0.00206	0.00204	103	102	65.0-138			0.976	20
Acenaphthylene	0.00200	0.00215	0.00214	107	107	66.0-140			0.466	20
Benzo(a)anthracene	0.00200	0.00200	0.00196	100	98.0	61.0-140			2.02	20
Benzo(a)pyrene	0.00200	0.00187	0.00188	93.5	94.0	60.0-143			0.533	20
Benzo(b)fluoranthene	0.00200	0.00199	0.00202	99.5	101	58.0-141			1.50	20
Benzo(g,h,i)perylene	0.00200	0.00179	0.00184	89.5	92.0	52.0-153			2.75	20
Benzo(k)fluoranthene	0.00200	0.00195	0.00191	97.5	95.5	58.0-148			2.07	20
Chrysene	0.00200	0.00201	0.00198	100	99.0	64.0-144			1.50	20
Dibenz(a,h)anthracene	0.00200	0.00171	0.00174	85.5	87.0	52.0-155			1.74	20
Fluoranthene	0.00200	0.00196	0.00197	98.0	98.5	69.0-153			0.509	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3800737-1 06/07/22 19:45 • (LCSD) R3800737-2 06/07/22 20:02

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Fluorene	0.00200	0.00213	0.00215	106	107	64.0-136			0.935	20
Indeno(1,2,3-cd)pyrene	0.00200	0.00181	0.00184	90.5	92.0	54.0-153			1.64	20
Naphthalene	0.00200	0.00203	0.00199	102	99.5	61.0-137			1.99	20
Phenanthrene	0.00200	0.00199	0.00203	99.5	102	62.0-137			1.99	20
Pyrene	0.00200	0.00213	0.00208	106	104	60.0-142			2.38	20
1-Methylnaphthalene	0.00200	0.00211	0.00206	105	103	66.0-142			2.40	20
2-Methylnaphthalene	0.00200	0.00200	0.00196	100	98.0	62.0-136			2.02	20
2-Chloronaphthalene	0.00200	0.00208	0.00207	104	104	64.0-140			0.482	20
(S) Nitrobenzene-d5				*114*	*107*	*31.0-160*				
(S) 2-Fluorobiphenyl				*109*	*106*	*48.0-148*				
(S) p-Terphenyl-d14				*132*	*127*	*37.0-146*				

Method Blank (MB)

(MB) R3802314-2 06/11/22 09:41

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Anthracene	U		0.00230	0.00600
Acenaphthene	U		0.00209	0.00600
Acenaphthylene	U		0.00216	0.00600
Benzo(a)anthracene	U		0.00173	0.00600
Benzo(a)pyrene	U		0.00179	0.00600
Benzo(b)fluoranthene	U		0.00153	0.00600
Benzo(g,h,i)perylene	U		0.00177	0.00600
Benzo(k)fluoranthene	U		0.00215	0.00600
Chrysene	U		0.00232	0.00600
Dibenz(a,h)anthracene	U		0.00172	0.00600
Fluoranthene	U		0.00227	0.00600
Fluorene	U		0.00205	0.00600
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600
Naphthalene	U		0.00408	0.0200
Phenanthrene	U		0.00231	0.00600
Pyrene	U		0.00200	0.00600
1-Methylnaphthalene	U		0.00449	0.0200
2-Methylnaphthalene	U		0.00427	0.0200
2-Chloronaphthalene	U		0.00466	0.0200
(S) Nitrobenzene-d5	*60.7*			*14.0-149*
(S) 2-Fluorobiphenyl	*68.0*			*34.0-125*
(S) p-Terphenyl-d14	*93.2*			*23.0-120*

Laboratory Control Sample (LCS)

(LCS) R3802314-1 06/11/22 09:23

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0441	55.1	50.0-126	
Acenaphthene	0.0800	0.0474	59.3	50.0-120	
Acenaphthylene	0.0800	0.0498	62.3	50.0-120	
Benzo(a)anthracene	0.0800	0.0470	58.7	45.0-120	
Benzo(a)pyrene	0.0800	0.0354	44.3	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0477	59.6	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0468	58.5	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0477	59.6	49.0-125	
Chrysene	0.0800	0.0481	60.1	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0451	56.4	47.0-125	
Fluoranthene	0.0800	0.0470	58.7	49.0-129	

Laboratory Control Sample (LCS)

(LCS) R3802314-1 06/11/22 09:23

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluorene	0.0800	0.0495	61.9	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0436	54.5	46.0-125	
Naphthalene	0.0800	0.0458	57.3	50.0-120	
Phenanthrene	0.0800	0.0458	57.3	47.0-120	
Pyrene	0.0800	0.0560	70.0	43.0-123	
1-Methylnaphthalene	0.0800	0.0485	60.6	51.0-121	
2-Methylnaphthalene	0.0800	0.0462	57.8	50.0-120	
2-Chloronaphthalene	0.0800	0.0483	60.4	50.0-120	
(S) Nitrobenzene-d5			*60.0*	*14.0-149*	
(S) 2-Fluorobiphenyl			*65.8*	*34.0-125*	
(S) p-Terphenyl-d14			*89.0*	*23.0-120*	

L1500516-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1500516-02 06/11/22 11:09 • (MS) R3802314-3 06/11/22 11:27 • (MSD) R3802314-4 06/11/22 11:45

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Anthracene	0.0893	0.493	0.356	0.413	0.000	0.000	1	10.0-145	V	V	14.8	30
Acenaphthene	0.0893	0.191	0.186	0.177	0.000	0.000	1	14.0-127	J6	J6	4.91	27
Acenaphthylene	0.0893	0.297	0.110	0.107	0.000	0.000	1	21.0-124	J6	J6	3.40	25
Benzo(a)anthracene	0.0893	1.70	1.07	1.38	0.000	0.000	1	10.0-139	V	V	25.2	30
Benzo(a)pyrene	0.0893	1.34	0.943	1.13	0.000	0.000	1	10.0-141	V	V	17.8	31
Benzo(b)fluoranthene	0.0893	1.67	1.25	1.48	0.000	0.000	1	10.0-140	V	V	17.1	36
Benzo(g,h,i)perylene	0.0893	0.770	0.619	0.739	0.000	0.000	1	10.0-140	V	V	17.6	33
Benzo(k)fluoranthene	0.0893	0.580	0.460	0.550	0.000	0.000	1	10.0-137	V	V	17.9	31
Chrysene	0.0893	1.43	1.07	1.29	0.000	0.000	1	10.0-145	V	V	19.2	30
Dibenz(a,h)anthracene	0.0893	0.198	0.199	0.231	1.25	37.5	1	10.0-132	J6		15.1	31
Fluoranthene	0.0893	3.55	1.92	2.44	0.000	0.000	1	10.0-153	V	V	24.0	33
Fluorene	0.0893	0.365	0.229	0.196	0.000	0.000	1	11.0-130	V	V	15.2	29
Indeno(1,2,3-cd)pyrene	0.0893	0.824	0.653	0.798	0.000	0.000	1	10.0-137	V	V	20.0	32
Naphthalene	0.0893	0.356	1.04	0.806	765	504	1	10.0-135	J5	J5	25.3	27
Phenanthrene	0.0893	3.43	1.65	1.67	0.000	0.000	1	10.0-144	V	V	1.34	31
Pyrene	0.0893	3.49	1.76	2.30	0.000	0.000	1	10.0-148	V	V	26.4	35
1-Methylnaphthalene	0.0893	0.410	0.980	0.726	639	355	1	10.0-142	V	J3 V	29.7	28
2-Methylnaphthalene	0.0893	0.448	1.32	0.981	974	598	1	10.0-137	V	J3 V	29.2	28
2-Chloronaphthalene	0.0893	U	0.0424	0.0448	47.5	50.1	1	29.0-120			5.38	24
(S) Nitrobenzene-d5					*62.1*	*68.2*		*14.0-149*				
(S) 2-Fluorobiphenyl					*59.0*	*66.8*		*34.0-125*				
(S) p-Terphenyl-d14					*76.5*	*85.9*		*23.0-120*				

Method Blank (MB)

(MB) R3802295-2 06/11/22 09:34

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Anthracene	U		0.00230	0.00600
Acenaphthene	U		0.00209	0.00600
Acenaphthylene	U		0.00216	0.00600
Benzo(a)anthracene	U		0.00173	0.00600
Benzo(a)pyrene	U		0.00179	0.00600
Benzo(b)fluoranthene	U		0.00153	0.00600
Benzo(g,h,i)perylene	U		0.00177	0.00600
Benzo(k)fluoranthene	U		0.00215	0.00600
Chrysene	U		0.00232	0.00600
Dibenz(a,h)anthracene	U		0.00172	0.00600
Fluoranthene	U		0.00227	0.00600
Fluorene	U		0.00205	0.00600
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600
Naphthalene	U		0.00408	0.0200
Phenanthrene	U		0.00231	0.00600
Pyrene	U		0.00200	0.00600
1-Methylnaphthalene	U		0.00449	0.0200
2-Methylnaphthalene	U		0.00427	0.0200
2-Chloronaphthalene	U		0.00466	0.0200
(S) Nitrobenzene-d5	*67.7*			*14.0-149*
(S) 2-Fluorobiphenyl	*71.2*			*34.0-125*
(S) p-Terphenyl-d14	*74.9*			*23.0-120*

Laboratory Control Sample (LCS)

(LCS) R3802295-1 06/11/22 09:14

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0461	57.6	50.0-126	
Acenaphthene	0.0800	0.0499	62.4	50.0-120	
Acenaphthylene	0.0800	0.0480	60.0	50.0-120	
Benzo(a)anthracene	0.0800	0.0472	59.0	45.0-120	
Benzo(a)pyrene	0.0800	0.0381	47.6	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0513	64.1	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0468	58.5	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0492	61.5	49.0-125	
Chrysene	0.0800	0.0505	63.1	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0482	60.3	47.0-125	
Fluoranthene	0.0800	0.0482	60.3	49.0-129	

Laboratory Control Sample (LCS)

(LCS) R3802295-1 06/11/22 09:14

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluorene	0.0800	0.0496	62.0	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0497	62.1	46.0-125	
Naphthalene	0.0800	0.0479	59.9	50.0-120	
Phenanthrene	0.0800	0.0476	59.5	47.0-120	
Pyrene	0.0800	0.0528	66.0	43.0-123	
1-Methylnaphthalene	0.0800	0.0491	61.4	51.0-121	
2-Methylnaphthalene	0.0800	0.0500	62.5	50.0-120	
2-Chloronaphthalene	0.0800	0.0490	61.3	50.0-120	
(S) Nitrobenzene-d5			*63.2*	*14.0-149*	
(S) 2-Fluorobiphenyl			*67.3*	*34.0-125*	
(S) p-Terphenyl-d14			*70.9*	*23.0-120*	

L1500516-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1500516-06 06/11/22 10:13 • (MS) R3802295-3 06/11/22 10:33 • (MSD) R3802295-4 06/11/22 10:53

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Anthracene	0.0881	0.0416	0.142	0.221	114	204	1	10.0-145		J3 J5	43.6	30
Acenaphthene	0.0881	0.0183	0.109	0.129	103	126	1	14.0-127			16.4	27
Acenaphthylene	0.0881	0.00404	0.0738	0.0743	79.2	79.8	1	21.0-124			0.743	25
Benzo(a)anthracene	0.0881	0.145	0.533	0.939	440	901	1	10.0-139	J5	J3 J5	55.2	30
Benzo(a)pyrene	0.0881	0.144	0.642	1.07	565	1050	1	10.0-141	J5	J3 J5	49.6	31
Benzo(b)fluoranthene	0.0881	0.186	0.500	0.786	356	681	1	10.0-140	J5	J3 J5	44.5	36
Benzo(g,h,i)perylene	0.0881	0.0967	0.640	0.952	617	972	1	10.0-140	J5	J3 J5	39.3	33
Benzo(k)fluoranthene	0.0881	0.0678	0.203	0.262	153	221	1	10.0-137	J5	J5	25.6	31
Chrysene	0.0881	0.133	0.477	0.739	390	688	1	10.0-145	J5	J3 J5	43.1	30
Dibenz(a,h)anthracene	0.0881	0.0216	0.253	0.404	263	434	1	10.0-132	J5	J3 J5	45.9	31
Fluoranthene	0.0881	0.335	0.605	0.978	308	730	1	10.0-153	J5	J3 J5	47.0	33
Fluorene	0.0881	0.0178	0.112	0.149	107	149	1	11.0-130		J5	27.8	29
Indeno(1,2,3-cd)pyrene	0.0881	0.107	0.434	0.634	372	599	1	10.0-137	J5	J3 J5	37.5	32
Naphthalene	0.0881	0.0122	0.137	0.195	141	207	1	10.0-135	J5	J3 J5	35.2	27
Phenanthrene	0.0881	0.192	0.437	0.716	279	595	1	10.0-144	J5	J3 J5	48.3	31
Pyrene	0.0881	0.298	0.837	1.40	611	1250	1	10.0-148	J5	J3 J5	50.2	35
1-Methylnaphthalene	0.0881	0.0120	0.189	0.317	201	346	1	10.0-142	J5	J3 J5	50.4	28
2-Methylnaphthalene	0.0881	0.0148	0.277	0.470	298	517	1	10.0-137	J5	J3 J5	51.5	28
2-Chloronaphthalene	0.0881	U	0.0565	0.0519	64.1	58.9	1	29.0-120			8.54	24
(S) Nitrobenzene-d5					*55.4*	*44.4*		*14.0-149*				
(S) 2-Fluorobiphenyl					*70.6*	*65.1*		*34.0-125*				
(S) p-Terphenyl-d14					*72.4*	*67.6*		*23.0-120*				

Method Blank (MB)

(MB) R3802769-2 06/13/22 16:36

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Anthracene	U		0.00230	0.00600
Acenaphthene	U		0.00209	0.00600
Acenaphthylene	U		0.00216	0.00600
Benzo(a)anthracene	U		0.00173	0.00600
Benzo(a)pyrene	U		0.00179	0.00600
Benzo(b)fluoranthene	U		0.00153	0.00600
Benzo(g,h,i)perylene	U		0.00177	0.00600
Benzo(k)fluoranthene	U		0.00215	0.00600
Chrysene	U		0.00232	0.00600
Dibenz(a,h)anthracene	U		0.00172	0.00600
Fluoranthene	U		0.00227	0.00600
Fluorene	U		0.00205	0.00600
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600
Naphthalene	U		0.00408	0.0200
Phenanthrene	U		0.00231	0.00600
Pyrene	U		0.00200	0.00600
1-Methylnaphthalene	U		0.00449	0.0200
2-Methylnaphthalene	U		0.00427	0.0200
2-Chloronaphthalene	U		0.00466	0.0200
(S) Nitrobenzene-d5	*81.9*			*14.0-149*
(S) 2-Fluorobiphenyl	*88.8*			*34.0-125*
(S) p-Terphenyl-d14	*120*			*23.0-120*

Laboratory Control Sample (LCS)

(LCS) R3802769-1 06/13/22 16:18

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0708	88.5	50.0-126	
Acenaphthene	0.0800	0.0692	86.5	50.0-120	
Acenaphthylene	0.0800	0.0726	90.8	50.0-120	
Benzo(a)anthracene	0.0800	0.0717	89.6	45.0-120	
Benzo(a)pyrene	0.0800	0.0619	77.4	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0768	96.0	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0734	91.8	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0750	93.8	49.0-125	
Chrysene	0.0800	0.0740	92.5	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0731	91.4	47.0-125	
Fluoranthene	0.0800	0.0714	89.3	49.0-129	

Laboratory Control Sample (LCS)

(LCS) R3802769-1 06/13/22 16:18

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluorene	0.0800	0.0712	89.0	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0716	89.5	46.0-125	
Naphthalene	0.0800	0.0685	85.6	50.0-120	
Phenanthrene	0.0800	0.0703	87.9	47.0-120	
Pyrene	0.0800	0.0784	98.0	43.0-123	
1-Methylnaphthalene	0.0800	0.0712	89.0	51.0-121	
2-Methylnaphthalene	0.0800	0.0687	85.9	50.0-120	
2-Chloronaphthalene	0.0800	0.0709	88.6	50.0-120	
(S) Nitrobenzene-d5			*89.3*	*14.0-149*	
(S) 2-Fluorobiphenyl			*91.4*	*34.0-125*	
(S) p-Terphenyl-d14			*124*	*23.0-120*	J1

L1500456-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1500456-02 06/13/22 17:12 • (MS) R3802769-3 06/13/22 17:29 • (MSD) R3802769-4 06/13/22 17:47

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Anthracene	0.0788	0.00486	0.0616	0.112	72.0	137	1	10.0-145		J3	58.1	30
Acenaphthene	0.0788	0.00228	0.0595	0.0767	72.6	94.9	1	14.0-127			25.2	27
Acenaphthylene	0.0788	U	0.0620	0.0581	78.7	74.1	1	21.0-124			6.56	25
Benzo(a)anthracene	0.0788	0.0188	0.0695	0.204	64.4	236	1	10.0-139		J3 J5	98.4	30
Benzo(a)pyrene	0.0788	0.0174	0.0667	0.217	62.6	255	1	10.0-141		J3 J5	106	31
Benzo(b)fluoranthene	0.0788	0.0229	0.0743	0.244	65.1	281	1	10.0-140		J3 J5	107	36
Benzo(g,h,i)perylene	0.0788	0.0112	0.0673	0.133	71.2	156	1	10.0-140		J3 J5	65.9	33
Benzo(k)fluoranthene	0.0788	0.00864	0.0651	0.135	71.6	162	1	10.0-137		J3 J5	70.2	31
Chrysene	0.0788	0.0238	0.0721	0.228	61.2	261	1	10.0-145		J3 J5	104	30
Dibenz(a,h)anthracene	0.0788	0.00261	0.0590	0.0752	71.6	92.6	1	10.0-132			24.1	31
Fluoranthene	0.0788	0.0305	0.0788	0.295	61.3	337	1	10.0-153		J3 J5	116	33
Fluorene	0.0788	U	0.0625	0.0694	79.2	88.5	1	11.0-130			10.6	29
Indeno(1,2,3-cd)pyrene	0.0788	0.0110	0.0633	0.143	66.3	169	1	10.0-137		J3 J5	77.6	32
Naphthalene	0.0788	U	0.0597	0.0585	75.8	74.6	1	10.0-135			2.05	27
Phenanthrene	0.0788	0.0213	0.0750	0.256	68.1	299	1	10.0-144		J3 J5	109	31
Pyrene	0.0788	0.0344	0.0817	0.315	60.0	358	1	10.0-148		J3 J5	118	35
1-Methylnaphthalene	0.0788	U	0.0613	0.0587	77.8	74.9	1	10.0-142			4.38	28
2-Methylnaphthalene	0.0788	U	0.0585	0.0559	74.2	71.3	1	10.0-137			4.59	28
2-Chloronaphthalene	0.0788	U	0.0597	0.0559	75.8	71.3	1	29.0-120			6.64	24
(S) Nitrobenzene-d5					*73.4*	*69.6*		*14.0-149*				
(S) 2-Fluorobiphenyl					*79.6*	*73.1*		*34.0-125*				
(S) p-Terphenyl-d14					*104*	*92.3*		*23.0-120*				

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.

GLOSSARY OF TERMS

Qualifier	Description
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Partners Environmental Consulting, Inc.
31100 Solon Road, Suite G
Solon, OH 44319

Billing Information:
Partners Environmental Consulting, Inc.
31100 Solon Road, Suite G
Solon, OH 44319

Pres Chk

Report to: VALERIE WEIR

Email To: TWEIR YWEIR @ PARTNERSENV.com

Project Description: 2700 TRANSPORT ROAD

City/State Collected: CLEVELAND OH

Phone: 800-763-1363
Fax:

Client Project # 2093.07

Lab Project #

Collected by (print): TOM WEIR

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y ___

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day
Date Results Needed

Quote #

Analysis / Container / Preservative

Chain of Custody Page 1 of 2

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L # 1500516

L-032

Acctnum: PARENVOH

Template:

Prelogin:

TSR:

PB:

Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOC 8260	PAHs 8270	TPH C6-C34 8015	Remarks	Sample # (lab only)
SB-111 (0-2ft)	GRAB	SS	0-2	5/31/22	1030	2	X	X	X		-01
SB-113 (0-2ft)			0-2		1130	2	X	X	X		-02
SB-112 (8-10ft)			8-10		1215	2	X	X	X		-03
SB-114 (0-2ft)			0-2		1320	2	X	X	X		-04
SB-115 (2-4ft)			2-4		1415	2	X	X	X		-05
SB-103 (4-6ft)			4-6		1455	2	X	X	X		-06
SB-102 (2-4ft)			2-4		1530	2	X	X	X		-07
SB-101 (6-8ft)			6-8	6/1/22	0810	2	X	X	X		-08
MW-101 (2-4ft)			2-4		0840	2	X	X	X		-09
SB-101 DUPLICATE (6-8ft)			6-8		0810	2	X	X	X		-10

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: OHIO VAP PROTOCOL

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking # 5349 7812 7676

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
	6/1/22	1616			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:	
PNCUH	1 JUN 22	1700	FEDEX	.4 +0 =.4 20	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:	Hold: Condition: NCF / OK
			M. Wilt	6/2/22 845	

Partners Environmental Consulting, Inc.
31100 Solon Road, Suite G
Solon, OH 44319

Billing Information:
Partners Environmental Consulting, Inc.
31100 Solon Road, Suite G
Solon, OH 44319

Report to: VALERIE WEIR
Email To: TWEIR VWEIR @PARTNERSENV.com

Project Description: 2700 TRANSPORT ROAD
City/State Collected: CLEVELAND OH

Phone: **800-763-1363**
Fax:

Client Project # 2093.07
Lab Project #

Collected by (print): TIM WEIR
Site/Facility ID #
P.O. #

Collected by (signature):
Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day
Date Results Needed

Quote #

Pres Chk

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs 8260	PAHs 8270	TPH GRO-DRO 8015								Remarks	Sample # (lab only)
MW-103 (0-2ft)	GRAB	SS	0-2	6/1/22	1110	2	X	X	X									-11
MW-103 (6-8ft)	"	"	6-8	"	1130	2	X	X	X									12
SB-106 (0-2ft)	"	"	0-2	"	1240	2	X	X	X									13
EQP-01	GRAB	OT	—	6/1/22	1500	4	X	X										14
TRIPBLANK-02	LAB	LAB	—	5/31/22	0900	1	X											15

Chain of Custody Page 2 of 2

Pace Analytical® National Center for Testing & Innovation
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 1500516
Table #
Acctnum: **PARENVOH**
Template:
Prelogin:
TSR:
PB:
Shipped Via:

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other DI WATER

Remarks: OHIO VAP PROTOCOL

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 5349 7812 7676

Sample Receipt Checklist
COC Seal Present/Intact: Y NP N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeOH TBR	If preservation required by Login: Date/Time
THOMAS W	6/1/22	1616		1	
Relinquished by : (Signature) PACOH	Date: 1JUN22	Time: 1700	Received by: (Signature) FEDEX	Temp: .4 °C Bottles Received: 10	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) M. Webb	Date: 6/2/22 Time: 0845	Hold: Condition: NCF / OK

ANALYTICAL REPORT

June 16, 2022

Partners Env. Consulting - Solon, OH

Sample Delivery Group:	L1501507
Samples Received:	06/04/2022
Project Number:	2093.07
Description:	2700 Transport Road

Report To: Valerie Weir
31100 Solon Road, Ste. G
Solon, OH 44139

Entire Report Reviewed By:

Heather J Wagner
Project Manager

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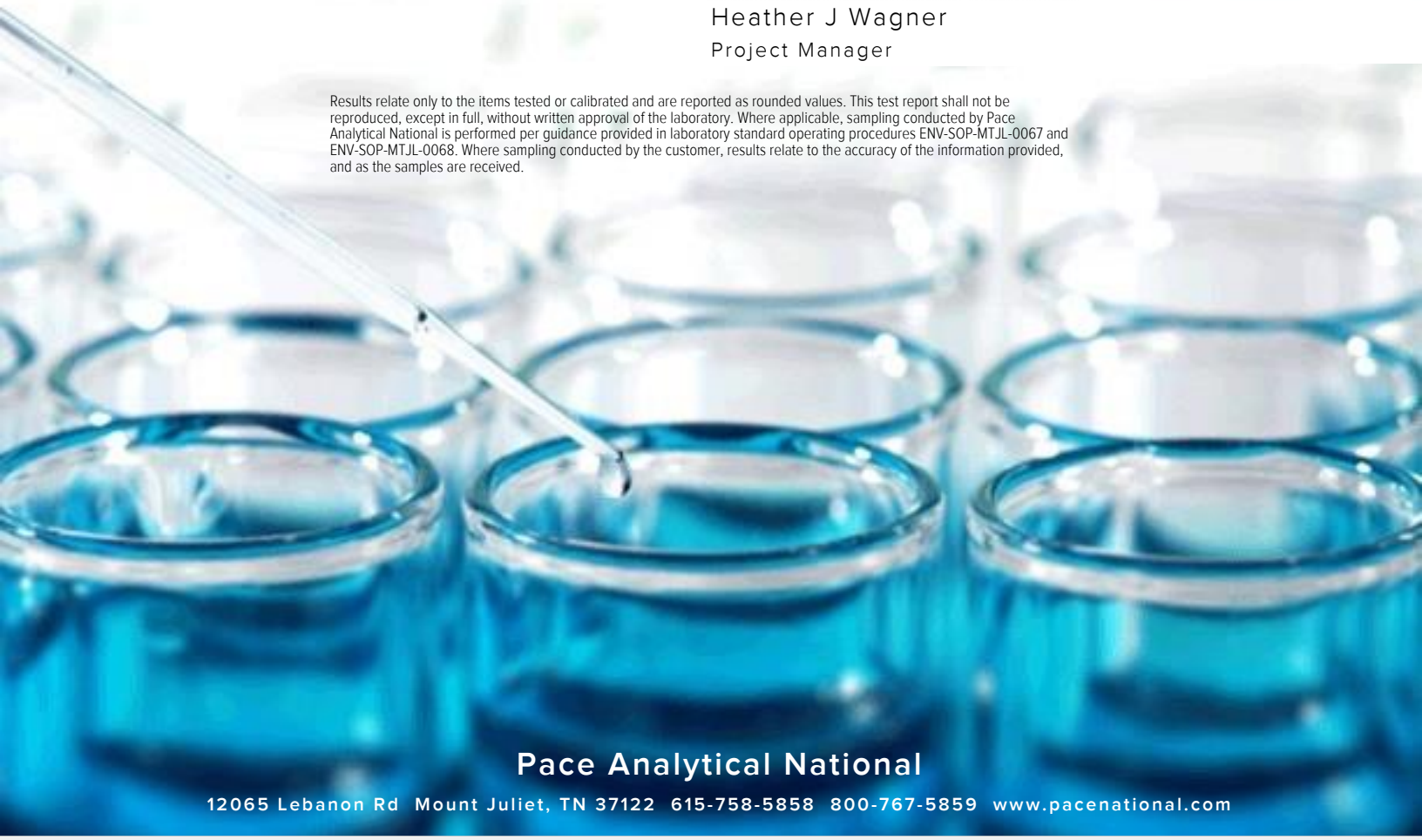

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SB-107 (4-6) L1501507-01 Solid

Collected by: Tom Weir | Collected date/time: 06/02/22 08:50 | Received date/time: 06/04/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1876047	1	06/09/22 09:21	06/09/22 09:29	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015B	WG1878662	250	06/08/22 19:26	06/14/22 00:02	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1878032	1	06/08/22 19:26	06/11/22 18:03	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015B	WG1879165	25	06/15/22 11:19	06/15/22 18:12	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1878896	1	06/14/22 11:12	06/15/22 01:48	AMG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1878896	10	06/14/22 11:12	06/15/22 15:47	AMG	Mt. Juliet, TN

MW-104 (6-8) L1501507-02 Solid

Collected by: Tom Weir | Collected date/time: 06/02/22 09:15 | Received date/time: 06/04/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1876048	1	06/09/22 09:37	06/09/22 09:43	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015B	WG1878191	1	06/08/22 19:26	06/13/22 00:19	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1878032	1	06/08/22 19:26	06/11/22 18:22	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015B	WG1879165	1	06/15/22 11:19	06/15/22 17:20	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1878896	1	06/14/22 11:12	06/14/22 23:50	AMG	Mt. Juliet, TN

SB-104 (0-2) L1501507-03 Solid

Collected by: Tom Weir | Collected date/time: 06/02/22 11:40 | Received date/time: 06/04/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1876048	1	06/09/22 09:37	06/09/22 09:43	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015B	WG1878191	1	06/08/22 19:26	06/13/22 00:41	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1878032	1	06/08/22 19:26	06/11/22 18:42	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015B	WG1879165	50	06/15/22 11:19	06/15/22 18:39	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1878896	1	06/14/22 11:12	06/15/22 01:28	AMG	Mt. Juliet, TN

SB-105 (2-4) L1501507-04 Solid

Collected by: Tom Weir | Collected date/time: 06/02/22 13:30 | Received date/time: 06/04/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1876048	1	06/09/22 09:37	06/09/22 09:43	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015B	WG1876716	1	06/08/22 19:26	06/09/22 21:08	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1878032	1	06/08/22 19:26	06/11/22 19:01	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015B	WG1879165	1	06/15/22 11:19	06/15/22 16:53	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1878896	1	06/14/22 11:12	06/14/22 22:51	AMG	Mt. Juliet, TN

SB-105 DUPLICATE (2-4) L1501507-05 Solid

Collected by: Tom Weir | Collected date/time: 06/02/22 13:30 | Received date/time: 06/04/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1876048	1	06/09/22 09:37	06/09/22 09:43	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015B	WG1876716	1	06/08/22 19:26	06/09/22 21:30	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1878032	1	06/08/22 19:26	06/11/22 19:20	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015B	WG1879165	1	06/15/22 11:19	06/15/22 16:40	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1878896	1	06/14/22 11:12	06/14/22 23:30	AMG	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

MW-102 (0-2) L1501507-06 Solid

Collected by: Tom Weir
Collected date/time: 06/02/22 14:10
Received date/time: 06/04/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1876048	1	06/09/22 09:37	06/09/22 09:43	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015B	WG1876716	1	06/08/22 19:26	06/09/22 21:51	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1878032	1	06/08/22 19:26	06/11/22 19:40	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015B	WG1879165	25	06/15/22 11:19	06/15/22 17:46	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1878896	1	06/14/22 11:12	06/15/22 01:08	AMG	Mt. Juliet, TN

EQP-02 L1501507-07 GW

Collected by: Tom Weir
Collected date/time: 06/02/22 15:30
Received date/time: 06/04/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1878288	1	06/12/22 20:01	06/12/22 20:01	JAH	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1876343	1	06/09/22 13:30	06/10/22 01:19	AO	Mt. Juliet, TN

TRIPBLANK-03 L1501507-08 GW

Collected by: Tom Weir
Collected date/time: 06/02/22 08:00
Received date/time: 06/04/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1878288	1	06/12/22 18:18	06/12/22 18:18	JAH	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Heather J Wagner
Project Manager

Project Narrative

Method 8270: Sample EQP-02 (L1501507-07) is reported from a batch where surrogates were not added to the LCS/LCSD during the extraction process due to lab error. All targets are within recovery range and data is not impacted.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.5		1	06/09/2022 09:29	WG1876047

Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C6 - C12	1710		10.7	31.5	250	06/14/2022 00:02	WG1878662
(S) a,a,a-Trifluorotoluene(FID)	*89.9*			*77.0-120*		*06/14/2022 00:02*	WG1878662

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.456		0.0460	0.0630	1	06/11/2022 18:03	WG1878032
Acrylonitrile	U		0.00455	0.0157	1	06/11/2022 18:03	WG1878032
Benzene	0.0788		0.000588	0.00126	1	06/11/2022 18:03	WG1878032
Bromobenzene	U		0.00113	0.0157	1	06/11/2022 18:03	WG1878032
Bromodichloromethane	U		0.000913	0.00315	1	06/11/2022 18:03	WG1878032
Bromoform	U		0.00147	0.0315	1	06/11/2022 18:03	WG1878032
Bromomethane	U		0.00248	0.0157	1	06/11/2022 18:03	WG1878032
n-Butylbenzene	0.141		0.00661	0.0157	1	06/11/2022 18:03	WG1878032
sec-Butylbenzene	0.208		0.00363	0.0157	1	06/11/2022 18:03	WG1878032
tert-Butylbenzene	0.0335		0.00246	0.00630	1	06/11/2022 18:03	WG1878032
Carbon tetrachloride	U		0.00113	0.00630	1	06/11/2022 18:03	WG1878032
Chlorobenzene	U		0.000264	0.00315	1	06/11/2022 18:03	WG1878032
Chlorodibromomethane	U		0.000771	0.00315	1	06/11/2022 18:03	WG1878032
Chloroethane	U		0.00214	0.00630	1	06/11/2022 18:03	WG1878032
Chloroform	U		0.00130	0.00315	1	06/11/2022 18:03	WG1878032
Chloromethane	U		0.00548	0.0157	1	06/11/2022 18:03	WG1878032
2-Chlorotoluene	U		0.00109	0.00315	1	06/11/2022 18:03	WG1878032
4-Chlorotoluene	U		0.000567	0.00630	1	06/11/2022 18:03	WG1878032
1,2-Dibromo-3-Chloropropane	U		0.00491	0.0315	1	06/11/2022 18:03	WG1878032
1,2-Dibromoethane	U		0.000816	0.00315	1	06/11/2022 18:03	WG1878032
Dibromomethane	U		0.000945	0.00630	1	06/11/2022 18:03	WG1878032
1,2-Dichlorobenzene	U		0.000535	0.00630	1	06/11/2022 18:03	WG1878032
1,3-Dichlorobenzene	U		0.000756	0.00630	1	06/11/2022 18:03	WG1878032
1,4-Dichlorobenzene	U		0.000882	0.00630	1	06/11/2022 18:03	WG1878032
Dichlorodifluoromethane	U		0.00203	0.00315	1	06/11/2022 18:03	WG1878032
1,1-Dichloroethane	U		0.000618	0.00315	1	06/11/2022 18:03	WG1878032
1,2-Dichloroethane	U		0.000817	0.00315	1	06/11/2022 18:03	WG1878032
1,1-Dichloroethene	U		0.000763	0.00315	1	06/11/2022 18:03	WG1878032
cis-1,2-Dichloroethene	U		0.000924	0.00315	1	06/11/2022 18:03	WG1878032
trans-1,2-Dichloroethene	U		0.00131	0.00630	1	06/11/2022 18:03	WG1878032
1,2-Dichloropropane	U		0.00179	0.00630	1	06/11/2022 18:03	WG1878032
1,1-Dichloropropene	U		0.00102	0.00315	1	06/11/2022 18:03	WG1878032
1,3-Dichloropropane	U		0.000631	0.00630	1	06/11/2022 18:03	WG1878032
cis-1,3-Dichloropropene	U		0.000953	0.00315	1	06/11/2022 18:03	WG1878032
trans-1,3-Dichloropropene	U		0.00144	0.00630	1	06/11/2022 18:03	WG1878032
2,2-Dichloropropane	U		0.00174	0.00315	1	06/11/2022 18:03	WG1878032
Ethylbenzene	0.0147		0.000928	0.00315	1	06/11/2022 18:03	WG1878032
Hexachloro-1,3-butadiene	U		0.00756	0.0315	1	06/11/2022 18:03	WG1878032
n-Hexane	U		0.00285	0.00630	1	06/11/2022 18:03	WG1878032
Isopropylbenzene	0.191		0.000535	0.00315	1	06/11/2022 18:03	WG1878032
p-Isopropyltoluene	0.0559		0.00321	0.00630	1	06/11/2022 18:03	WG1878032
2-Butanone (MEK)	U		0.0800	0.126	1	06/11/2022 18:03	WG1878032
Methylene Chloride	U		0.00836	0.0315	1	06/11/2022 18:03	WG1878032

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	1.02		0.00287	0.0315	1	06/11/2022 18:03	WG1878032
Methyl tert-butyl ether	U		0.000441	0.00126	1	06/11/2022 18:03	WG1878032
Naphthalene	0.0574		0.00615	0.0157	1	06/11/2022 18:03	WG1878032
n-Propylbenzene	0.258		0.00120	0.00630	1	06/11/2022 18:03	WG1878032
Styrene	U		0.000288	0.0157	1	06/11/2022 18:03	WG1878032
1,1,1,2-Tetrachloroethane	U		0.00119	0.00315	1	06/11/2022 18:03	WG1878032
1,1,2,2-Tetrachloroethane	U		0.000875	0.00315	1	06/11/2022 18:03	WG1878032
Tetrachloroethene	U		0.00113	0.00315	1	06/11/2022 18:03	WG1878032
Toluene	0.0222		0.00164	0.00630	1	06/11/2022 18:03	WG1878032
1,2,3-Trichlorobenzene	U		0.00923	0.0157	1	06/11/2022 18:03	WG1878032
1,2,4-Trichlorobenzene	U		0.00554	0.0157	1	06/11/2022 18:03	WG1878032
1,1,1-Trichloroethane	U		0.00116	0.00315	1	06/11/2022 18:03	WG1878032
1,1,2-Trichloroethane	U		0.000752	0.00315	1	06/11/2022 18:03	WG1878032
Trichloroethene	U		0.000736	0.00126	1	06/11/2022 18:03	WG1878032
Trichlorofluoromethane	U	J3	0.00104	0.00315	1	06/11/2022 18:03	WG1878032
1,2,3-Trichloropropane	U		0.00204	0.0157	1	06/11/2022 18:03	WG1878032
1,2,4-Trimethylbenzene	0.0383		0.00199	0.00630	1	06/11/2022 18:03	WG1878032
1,3,5-Trimethylbenzene	0.0218		0.00252	0.00630	1	06/11/2022 18:03	WG1878032
Vinyl chloride	U		0.00146	0.00315	1	06/11/2022 18:03	WG1878032
Xylenes, Total	0.0846		0.00111	0.00819	1	06/11/2022 18:03	WG1878032
(S) Toluene-d8	*81.9*			*75.0-131*		*06/11/2022 18:03*	WG1878032
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*06/11/2022 18:03*	WG1878032
(S) 1,2-Dichloroethane-d4	*93.8*			*70.0-130*		*06/11/2022 18:03*	WG1878032

Semi-Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C20 Hydrocarbons	884		17.3	113	25	06/15/2022 18:12	WG1879165
C20-C34 Hydrocarbons	1310		17.3	113	25	06/15/2022 18:12	WG1879165
(S) o-Terphenyl	*0.000*	J7		*18.0-148*		*06/15/2022 18:12*	WG1879165

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.287		0.00260	0.00678	1	06/15/2022 01:48	WG1878896
Acenaphthene	0.246		0.00236	0.00678	1	06/15/2022 01:48	WG1878896
Acenaphthylene	0.0979		0.00244	0.00678	1	06/15/2022 01:48	WG1878896
Benzo(a)anthracene	1.64		0.00195	0.00678	1	06/15/2022 01:48	WG1878896
Benzo(a)pyrene	4.50		0.00202	0.00678	1	06/15/2022 01:48	WG1878896
Benzo(b)fluoranthene	2.15		0.00173	0.00678	1	06/15/2022 01:48	WG1878896
Benzo(g,h,i)perylene	8.32		0.0200	0.0678	10	06/15/2022 15:47	WG1878896
Benzo(k)fluoranthene	0.471		0.00243	0.00678	1	06/15/2022 01:48	WG1878896
Chrysene	1.50		0.00262	0.00678	1	06/15/2022 01:48	WG1878896
Dibenz(a,h)anthracene	3.29		0.00194	0.00678	1	06/15/2022 01:48	WG1878896
Fluoranthene	1.32		0.00256	0.00678	1	06/15/2022 01:48	WG1878896
Fluorene	0.337		0.00232	0.00678	1	06/15/2022 01:48	WG1878896
Indeno(1,2,3-cd)pyrene	3.44		0.00204	0.00678	1	06/15/2022 01:48	WG1878896
Naphthalene	0.823		0.00461	0.0226	1	06/15/2022 01:48	WG1878896
Phenanthrene	1.36		0.00261	0.00678	1	06/15/2022 01:48	WG1878896
Pyrene	2.01		0.00226	0.00678	1	06/15/2022 01:48	WG1878896
1-Methylnaphthalene	1.02		0.00507	0.0226	1	06/15/2022 01:48	WG1878896
2-Methylnaphthalene	1.13		0.00482	0.0226	1	06/15/2022 01:48	WG1878896
2-Chloronaphthalene	U		0.00526	0.0226	1	06/15/2022 01:48	WG1878896
(S) Nitrobenzene-d5	*0.000*	J2		*14.0-149*		*06/15/2022 15:47*	WG1878896
(S) Nitrobenzene-d5	*0.000*	J2		*14.0-149*		*06/15/2022 01:48*	WG1878896

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
(S) 2-Fluorobiphenyl	*78.7*			*34.0-125*		*06/15/2022 15:47*	WG1878896
(S) 2-Fluorobiphenyl	*74.2*			*34.0-125*		*06/15/2022 01:48*	WG1878896
(S) p-Terphenyl-d14	*75.8*			*23.0-120*		*06/15/2022 01:48*	WG1878896
(S) p-Terphenyl-d14	*91.1*			*23.0-120*		*06/15/2022 15:47*	WG1878896

Sample Narrative:

L1501507-01 WG1878896: Surrogate failure due to matrix interference

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	85.3		1	06/09/2022 09:43	WG1876048

Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C6 - C12	0.954		0.0397	0.117	1	06/13/2022 00:19	WG1878191
(S) a,a,a-Trifluorotoluene(FID)	*106*			*77.0-120*		*06/13/2022 00:19*	WG1878191

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0491	0.0672	1	06/11/2022 18:22	WG1878032
Acrylonitrile	U		0.00486	0.0168	1	06/11/2022 18:22	WG1878032
Benzene	0.000699	J	0.000628	0.00134	1	06/11/2022 18:22	WG1878032
Bromobenzene	U		0.00121	0.0168	1	06/11/2022 18:22	WG1878032
Bromodichloromethane	U		0.000975	0.00336	1	06/11/2022 18:22	WG1878032
Bromoform	U		0.00157	0.0336	1	06/11/2022 18:22	WG1878032
Bromomethane	U		0.00265	0.0168	1	06/11/2022 18:22	WG1878032
n-Butylbenzene	U		0.00706	0.0168	1	06/11/2022 18:22	WG1878032
sec-Butylbenzene	U		0.00387	0.0168	1	06/11/2022 18:22	WG1878032
tert-Butylbenzene	U		0.00262	0.00672	1	06/11/2022 18:22	WG1878032
Carbon tetrachloride	U		0.00121	0.00672	1	06/11/2022 18:22	WG1878032
Chlorobenzene	U		0.000282	0.00336	1	06/11/2022 18:22	WG1878032
Chlorodibromomethane	U		0.000823	0.00336	1	06/11/2022 18:22	WG1878032
Chloroethane	U		0.00229	0.00672	1	06/11/2022 18:22	WG1878032
Chloroform	U		0.00139	0.00336	1	06/11/2022 18:22	WG1878032
Chloromethane	U		0.00585	0.0168	1	06/11/2022 18:22	WG1878032
2-Chlorotoluene	U		0.00116	0.00336	1	06/11/2022 18:22	WG1878032
4-Chlorotoluene	U		0.000605	0.00672	1	06/11/2022 18:22	WG1878032
1,2-Dibromo-3-Chloropropane	U		0.00525	0.0336	1	06/11/2022 18:22	WG1878032
1,2-Dibromoethane	U		0.000872	0.00336	1	06/11/2022 18:22	WG1878032
Dibromomethane	U		0.00101	0.00672	1	06/11/2022 18:22	WG1878032
1,2-Dichlorobenzene	U		0.000572	0.00672	1	06/11/2022 18:22	WG1878032
1,3-Dichlorobenzene	U		0.000807	0.00672	1	06/11/2022 18:22	WG1878032
1,4-Dichlorobenzene	U		0.000941	0.00672	1	06/11/2022 18:22	WG1878032
Dichlorodifluoromethane	U		0.00217	0.00336	1	06/11/2022 18:22	WG1878032
1,1-Dichloroethane	U		0.000660	0.00336	1	06/11/2022 18:22	WG1878032
1,2-Dichloroethane	U		0.000873	0.00336	1	06/11/2022 18:22	WG1878032
1,1-Dichloroethene	U		0.000815	0.00336	1	06/11/2022 18:22	WG1878032
cis-1,2-Dichloroethene	U		0.000987	0.00336	1	06/11/2022 18:22	WG1878032
trans-1,2-Dichloroethene	U		0.00140	0.00672	1	06/11/2022 18:22	WG1878032
1,2-Dichloropropane	U		0.00191	0.00672	1	06/11/2022 18:22	WG1878032
1,1-Dichloropropene	U		0.00109	0.00336	1	06/11/2022 18:22	WG1878032
1,3-Dichloropropane	U		0.000674	0.00672	1	06/11/2022 18:22	WG1878032
cis-1,3-Dichloropropene	U		0.00102	0.00336	1	06/11/2022 18:22	WG1878032
trans-1,3-Dichloropropene	U		0.00153	0.00672	1	06/11/2022 18:22	WG1878032
2,2-Dichloropropane	U		0.00186	0.00336	1	06/11/2022 18:22	WG1878032
Ethylbenzene	U		0.000991	0.00336	1	06/11/2022 18:22	WG1878032
Hexachloro-1,3-butadiene	U		0.00807	0.0336	1	06/11/2022 18:22	WG1878032
n-Hexane	U		0.00304	0.00672	1	06/11/2022 18:22	WG1878032
Isopropylbenzene	0.00194	J	0.000572	0.00336	1	06/11/2022 18:22	WG1878032
p-Isopropyltoluene	U		0.00343	0.00672	1	06/11/2022 18:22	WG1878032
2-Butanone (MEK)	U		0.0854	0.134	1	06/11/2022 18:22	WG1878032
Methylene Chloride	U		0.00893	0.0336	1	06/11/2022 18:22	WG1878032

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	0.0344		0.00307	0.0336	1	06/11/2022 18:22	WG1878032
Methyl tert-butyl ether	U		0.000471	0.00134	1	06/11/2022 18:22	WG1878032
Naphthalene	0.0194		0.00656	0.0168	1	06/11/2022 18:22	WG1878032
n-Propylbenzene	0.00343	J	0.00128	0.00672	1	06/11/2022 18:22	WG1878032
Styrene	U		0.000308	0.0168	1	06/11/2022 18:22	WG1878032
1,1,1,2-Tetrachloroethane	U		0.00128	0.00336	1	06/11/2022 18:22	WG1878032
1,1,2,2-Tetrachloroethane	U		0.000935	0.00336	1	06/11/2022 18:22	WG1878032
Tetrachloroethene	U		0.00121	0.00336	1	06/11/2022 18:22	WG1878032
Toluene	0.00303	J	0.00175	0.00672	1	06/11/2022 18:22	WG1878032
1,2,3-Trichlorobenzene	U		0.00986	0.0168	1	06/11/2022 18:22	WG1878032
1,2,4-Trichlorobenzene	U		0.00592	0.0168	1	06/11/2022 18:22	WG1878032
1,1,1-Trichloroethane	U		0.00124	0.00336	1	06/11/2022 18:22	WG1878032
1,1,2-Trichloroethane	U		0.000803	0.00336	1	06/11/2022 18:22	WG1878032
Trichloroethene	U		0.000785	0.00134	1	06/11/2022 18:22	WG1878032
Trichlorofluoromethane	U	J3	0.00111	0.00336	1	06/11/2022 18:22	WG1878032
1,2,3-Trichloropropane	U		0.00218	0.0168	1	06/11/2022 18:22	WG1878032
1,2,4-Trimethylbenzene	0.00379	J	0.00213	0.00672	1	06/11/2022 18:22	WG1878032
1,3,5-Trimethylbenzene	U		0.00269	0.00672	1	06/11/2022 18:22	WG1878032
Vinyl chloride	U		0.00156	0.00336	1	06/11/2022 18:22	WG1878032
Xylenes, Total	0.00463	J	0.00118	0.00874	1	06/11/2022 18:22	WG1878032
(S) Toluene-d8	*103*			*75.0-131*		*06/11/2022 18:22*	WG1878032
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*06/11/2022 18:22*	WG1878032
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*06/11/2022 18:22*	WG1878032

Semi-Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C20 Hydrocarbons	33.7		0.715	4.69	1	06/15/2022 17:20	WG1879165
C20-C34 Hydrocarbons	52.4		0.716	4.69	1	06/15/2022 17:20	WG1879165
(S) o-Terphenyl	*52.3*			*18.0-148*		*06/15/2022 17:20*	WG1879165

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.0407		0.00270	0.00703	1	06/14/2022 23:50	WG1878896
Acenaphthene	0.0386		0.00245	0.00703	1	06/14/2022 23:50	WG1878896
Acenaphthylene	0.0150		0.00253	0.00703	1	06/14/2022 23:50	WG1878896
Benzo(a)anthracene	0.182	J6	0.00203	0.00703	1	06/14/2022 23:50	WG1878896
Benzo(a)pyrene	0.236	J6	0.00210	0.00703	1	06/14/2022 23:50	WG1878896
Benzo(b)fluoranthene	0.185	J6	0.00179	0.00703	1	06/14/2022 23:50	WG1878896
Benzo(g,h,i)perylene	0.250	J6	0.00207	0.00703	1	06/14/2022 23:50	WG1878896
Benzo(k)fluoranthene	0.0625		0.00252	0.00703	1	06/14/2022 23:50	WG1878896
Chrysene	0.164		0.00272	0.00703	1	06/14/2022 23:50	WG1878896
Dibenz(a,h)anthracene	0.0932	J6	0.00202	0.00703	1	06/14/2022 23:50	WG1878896
Fluoranthene	0.252	J6	0.00266	0.00703	1	06/14/2022 23:50	WG1878896
Fluorene	0.0509		0.00240	0.00703	1	06/14/2022 23:50	WG1878896
Indeno(1,2,3-cd)pyrene	0.150	J6	0.00212	0.00703	1	06/14/2022 23:50	WG1878896
Naphthalene	0.0982		0.00478	0.0234	1	06/14/2022 23:50	WG1878896
Phenanthrene	0.236	J6	0.00271	0.00703	1	06/14/2022 23:50	WG1878896
Pyrene	0.336	J6	0.00234	0.00703	1	06/14/2022 23:50	WG1878896
1-Methylnaphthalene	0.132		0.00526	0.0234	1	06/14/2022 23:50	WG1878896
2-Methylnaphthalene	0.171	J6	0.00500	0.0234	1	06/14/2022 23:50	WG1878896
2-Chloronaphthalene	U		0.00546	0.0234	1	06/14/2022 23:50	WG1878896
(S) Nitrobenzene-d5	*52.2*			*14.0-149*		*06/14/2022 23:50*	WG1878896
(S) 2-Fluorobiphenyl	*70.1*			*34.0-125*		*06/14/2022 23:50*	WG1878896

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
(S) p-Terphenyl-d14	*69.2*			*23.0-120*		*06/14/2022 23:50*	WG1878896

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.8		1	06/09/2022 09:43	WG1876048

Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C6 - C12	0.103	J	0.0382	0.113	1	06/13/2022 00:41	WG1878191
(S) a,a,a-Trifluorotoluene(FID)	*108*			*77.0-120*		*06/13/2022 00:41*	WG1878191

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0457	0.0626	1	06/11/2022 18:42	WG1878032
Acrylonitrile	U		0.00452	0.0157	1	06/11/2022 18:42	WG1878032
Benzene	U		0.000585	0.00125	1	06/11/2022 18:42	WG1878032
Bromobenzene	U		0.00113	0.0157	1	06/11/2022 18:42	WG1878032
Bromodichloromethane	U		0.000908	0.00313	1	06/11/2022 18:42	WG1878032
Bromoform	U		0.00146	0.0313	1	06/11/2022 18:42	WG1878032
Bromomethane	U		0.00247	0.0157	1	06/11/2022 18:42	WG1878032
n-Butylbenzene	U		0.00657	0.0157	1	06/11/2022 18:42	WG1878032
sec-Butylbenzene	U		0.00361	0.0157	1	06/11/2022 18:42	WG1878032
tert-Butylbenzene	U		0.00244	0.00626	1	06/11/2022 18:42	WG1878032
Carbon tetrachloride	U		0.00112	0.00626	1	06/11/2022 18:42	WG1878032
Chlorobenzene	U		0.000263	0.00313	1	06/11/2022 18:42	WG1878032
Chlorodibromomethane	U		0.000766	0.00313	1	06/11/2022 18:42	WG1878032
Chloroethane	U		0.00213	0.00626	1	06/11/2022 18:42	WG1878032
Chloroform	U		0.00129	0.00313	1	06/11/2022 18:42	WG1878032
Chloromethane	U		0.00545	0.0157	1	06/11/2022 18:42	WG1878032
2-Chlorotoluene	U		0.00108	0.00313	1	06/11/2022 18:42	WG1878032
4-Chlorotoluene	U		0.000563	0.00626	1	06/11/2022 18:42	WG1878032
1,2-Dibromo-3-Chloropropane	U		0.00488	0.0313	1	06/11/2022 18:42	WG1878032
1,2-Dibromoethane	U		0.000811	0.00313	1	06/11/2022 18:42	WG1878032
Dibromomethane	U		0.000939	0.00626	1	06/11/2022 18:42	WG1878032
1,2-Dichlorobenzene	U		0.000532	0.00626	1	06/11/2022 18:42	WG1878032
1,3-Dichlorobenzene	U		0.000751	0.00626	1	06/11/2022 18:42	WG1878032
1,4-Dichlorobenzene	U		0.000876	0.00626	1	06/11/2022 18:42	WG1878032
Dichlorodifluoromethane	U		0.00202	0.00313	1	06/11/2022 18:42	WG1878032
1,1-Dichloroethane	U		0.000615	0.00313	1	06/11/2022 18:42	WG1878032
1,2-Dichloroethane	U		0.000813	0.00313	1	06/11/2022 18:42	WG1878032
1,1-Dichloroethene	U		0.000759	0.00313	1	06/11/2022 18:42	WG1878032
cis-1,2-Dichloroethene	U		0.000919	0.00313	1	06/11/2022 18:42	WG1878032
trans-1,2-Dichloroethene	U		0.00130	0.00626	1	06/11/2022 18:42	WG1878032
1,2-Dichloropropane	U		0.00178	0.00626	1	06/11/2022 18:42	WG1878032
1,1-Dichloropropene	U		0.00101	0.00313	1	06/11/2022 18:42	WG1878032
1,3-Dichloropropane	U		0.000627	0.00626	1	06/11/2022 18:42	WG1878032
cis-1,3-Dichloropropene	U		0.000948	0.00313	1	06/11/2022 18:42	WG1878032
trans-1,3-Dichloropropene	U		0.00143	0.00626	1	06/11/2022 18:42	WG1878032
2,2-Dichloropropane	U		0.00173	0.00313	1	06/11/2022 18:42	WG1878032
Ethylbenzene	U		0.000923	0.00313	1	06/11/2022 18:42	WG1878032
Hexachloro-1,3-butadiene	U		0.00751	0.0313	1	06/11/2022 18:42	WG1878032
n-Hexane	U		0.00283	0.00626	1	06/11/2022 18:42	WG1878032
Isopropylbenzene	0.000626	J	0.000532	0.00313	1	06/11/2022 18:42	WG1878032
p-Isopropyltoluene	U		0.00319	0.00626	1	06/11/2022 18:42	WG1878032
2-Butanone (MEK)	U		0.0795	0.125	1	06/11/2022 18:42	WG1878032
Methylene Chloride	U		0.00831	0.0313	1	06/11/2022 18:42	WG1878032

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	0.00942	J	0.00285	0.0313	1	06/11/2022 18:42	WG1878032
Methyl tert-butyl ether	U		0.000438	0.00125	1	06/11/2022 18:42	WG1878032
Naphthalene	0.0249		0.00611	0.0157	1	06/11/2022 18:42	WG1878032
n-Propylbenzene	0.00146	J	0.00119	0.00626	1	06/11/2022 18:42	WG1878032
Styrene	U		0.000287	0.0157	1	06/11/2022 18:42	WG1878032
1,1,1,2-Tetrachloroethane	U		0.00119	0.00313	1	06/11/2022 18:42	WG1878032
1,1,2,2-Tetrachloroethane	U		0.000870	0.00313	1	06/11/2022 18:42	WG1878032
Tetrachloroethene	U		0.00112	0.00313	1	06/11/2022 18:42	WG1878032
Toluene	0.00369	J	0.00163	0.00626	1	06/11/2022 18:42	WG1878032
1,2,3-Trichlorobenzene	U		0.00918	0.0157	1	06/11/2022 18:42	WG1878032
1,2,4-Trichlorobenzene	U		0.00551	0.0157	1	06/11/2022 18:42	WG1878032
1,1,1-Trichloroethane	U		0.00116	0.00313	1	06/11/2022 18:42	WG1878032
1,1,2-Trichloroethane	U		0.000747	0.00313	1	06/11/2022 18:42	WG1878032
Trichloroethene	U		0.000731	0.00125	1	06/11/2022 18:42	WG1878032
Trichlorofluoromethane	U	J3	0.00104	0.00313	1	06/11/2022 18:42	WG1878032
1,2,3-Trichloropropane	U		0.00203	0.0157	1	06/11/2022 18:42	WG1878032
1,2,4-Trimethylbenzene	0.00682		0.00198	0.00626	1	06/11/2022 18:42	WG1878032
1,3,5-Trimethylbenzene	U		0.00250	0.00626	1	06/11/2022 18:42	WG1878032
Vinyl chloride	U		0.00145	0.00313	1	06/11/2022 18:42	WG1878032
Xylenes, Total	0.00714	J	0.00110	0.00814	1	06/11/2022 18:42	WG1878032
(S) Toluene-d8	*102*			*75.0-131*		*06/11/2022 18:42*	WG1878032
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*06/11/2022 18:42*	WG1878032
(S) 1,2-Dichloroethane-d4	*94.9*			*70.0-130*		*06/11/2022 18:42*	WG1878032

Semi-Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C20 Hydrocarbons	53.4	J	34.3	225	50	06/15/2022 18:39	WG1879165
C20-C34 Hydrocarbons	645		34.4	225	50	06/15/2022 18:39	WG1879165
(S) o-Terphenyl	*0.000*	J7		*18.0-148*		*06/15/2022 18:39*	WG1879165

Sample Narrative:

L1501507-03 WG1879165: Cannot run at lower dilution due to viscosity of extract

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.217		0.00259	0.00675	1	06/15/2022 01:28	WG1878896
Acenaphthene	0.0852		0.00235	0.00675	1	06/15/2022 01:28	WG1878896
Acenaphthylene	0.0323		0.00243	0.00675	1	06/15/2022 01:28	WG1878896
Benzo(a)anthracene	0.519		0.00195	0.00675	1	06/15/2022 01:28	WG1878896
Benzo(a)pyrene	0.469		0.00202	0.00675	1	06/15/2022 01:28	WG1878896
Benzo(b)fluoranthene	0.549		0.00172	0.00675	1	06/15/2022 01:28	WG1878896
Benzo(g,h,i)perylene	0.270		0.00199	0.00675	1	06/15/2022 01:28	WG1878896
Benzo(k)fluoranthene	0.191		0.00242	0.00675	1	06/15/2022 01:28	WG1878896
Chrysene	0.417		0.00261	0.00675	1	06/15/2022 01:28	WG1878896
Dibenz(a,h)anthracene	0.0638		0.00194	0.00675	1	06/15/2022 01:28	WG1878896
Fluoranthene	1.12		0.00256	0.00675	1	06/15/2022 01:28	WG1878896
Fluorene	0.0990		0.00231	0.00675	1	06/15/2022 01:28	WG1878896
Indeno(1,2,3-cd)pyrene	0.304		0.00204	0.00675	1	06/15/2022 01:28	WG1878896
Naphthalene	0.0956		0.00459	0.0225	1	06/15/2022 01:28	WG1878896
Phenanthrene	0.797		0.00260	0.00675	1	06/15/2022 01:28	WG1878896
Pyrene	0.833		0.00225	0.00675	1	06/15/2022 01:28	WG1878896
1-Methylnaphthalene	0.0655		0.00505	0.0225	1	06/15/2022 01:28	WG1878896
2-Methylnaphthalene	0.0942		0.00481	0.0225	1	06/15/2022 01:28	WG1878896

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
2-Chloronaphthalene	U		0.00525	0.0225	1	06/15/2022 01:28	WG1878896
(S) Nitrobenzene-d5	*85.8*			*14.0-149*		*06/15/2022 01:28*	WG1878896
(S) 2-Fluorobiphenyl	*72.5*			*34.0-125*		*06/15/2022 01:28*	WG1878896
(S) p-Terphenyl-d14	*74.8*			*23.0-120*		*06/15/2022 01:28*	WG1878896

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.6		1	06/09/2022 09:43	WG1876048

Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C6 - C12	0.683		0.0387	0.114	1	06/09/2022 21:08	WG1876716
(S) a,a,a-Trifluorotoluene(FID)	*92.2*			*77.0-120*		*06/09/2022 21:08*	WG1876716

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.123		0.0469	0.0642	1	06/11/2022 19:01	WG1878032
Acrylonitrile	U		0.00463	0.0160	1	06/11/2022 19:01	WG1878032
Benzene	0.00259		0.000600	0.00128	1	06/11/2022 19:01	WG1878032
Bromobenzene	U		0.00116	0.0160	1	06/11/2022 19:01	WG1878032
Bromodichloromethane	U		0.000931	0.00321	1	06/11/2022 19:01	WG1878032
Bromoform	U		0.00150	0.0321	1	06/11/2022 19:01	WG1878032
Bromomethane	U		0.00253	0.0160	1	06/11/2022 19:01	WG1878032
n-Butylbenzene	0.00979	J	0.00674	0.0160	1	06/11/2022 19:01	WG1878032
sec-Butylbenzene	0.00492	J	0.00370	0.0160	1	06/11/2022 19:01	WG1878032
tert-Butylbenzene	U		0.00250	0.00642	1	06/11/2022 19:01	WG1878032
Carbon tetrachloride	U		0.00115	0.00642	1	06/11/2022 19:01	WG1878032
Chlorobenzene	U		0.000270	0.00321	1	06/11/2022 19:01	WG1878032
Chlorodibromomethane	U		0.000786	0.00321	1	06/11/2022 19:01	WG1878032
Chloroethane	U		0.00218	0.00642	1	06/11/2022 19:01	WG1878032
Chloroform	U		0.00132	0.00321	1	06/11/2022 19:01	WG1878032
Chloromethane	U		0.00558	0.0160	1	06/11/2022 19:01	WG1878032
2-Chlorotoluene	U		0.00111	0.00321	1	06/11/2022 19:01	WG1878032
4-Chlorotoluene	U		0.000578	0.00642	1	06/11/2022 19:01	WG1878032
1,2-Dibromo-3-Chloropropane	U		0.00501	0.0321	1	06/11/2022 19:01	WG1878032
1,2-Dibromoethane	U		0.000832	0.00321	1	06/11/2022 19:01	WG1878032
Dibromomethane	U		0.000963	0.00642	1	06/11/2022 19:01	WG1878032
1,2-Dichlorobenzene	U		0.000546	0.00642	1	06/11/2022 19:01	WG1878032
1,3-Dichlorobenzene	U		0.000770	0.00642	1	06/11/2022 19:01	WG1878032
1,4-Dichlorobenzene	U		0.000899	0.00642	1	06/11/2022 19:01	WG1878032
Dichlorodifluoromethane	U		0.00207	0.00321	1	06/11/2022 19:01	WG1878032
1,1-Dichloroethane	U		0.000630	0.00321	1	06/11/2022 19:01	WG1878032
1,2-Dichloroethane	U		0.000833	0.00321	1	06/11/2022 19:01	WG1878032
1,1-Dichloroethene	U		0.000778	0.00321	1	06/11/2022 19:01	WG1878032
cis-1,2-Dichloroethene	U		0.000942	0.00321	1	06/11/2022 19:01	WG1878032
trans-1,2-Dichloroethene	U		0.00134	0.00642	1	06/11/2022 19:01	WG1878032
1,2-Dichloropropane	U		0.00182	0.00642	1	06/11/2022 19:01	WG1878032
1,1-Dichloropropene	U		0.00104	0.00321	1	06/11/2022 19:01	WG1878032
1,3-Dichloropropane	U		0.000643	0.00642	1	06/11/2022 19:01	WG1878032
cis-1,3-Dichloropropene	U		0.000972	0.00321	1	06/11/2022 19:01	WG1878032
trans-1,3-Dichloropropene	U		0.00146	0.00642	1	06/11/2022 19:01	WG1878032
2,2-Dichloropropane	U		0.00177	0.00321	1	06/11/2022 19:01	WG1878032
Ethylbenzene	0.0336		0.000946	0.00321	1	06/11/2022 19:01	WG1878032
Hexachloro-1,3-butadiene	U		0.00770	0.0321	1	06/11/2022 19:01	WG1878032
n-Hexane	0.171		0.00290	0.00642	1	06/11/2022 19:01	WG1878032
Isopropylbenzene	0.00944		0.000546	0.00321	1	06/11/2022 19:01	WG1878032
p-Isopropyltoluene	0.0101		0.00327	0.00642	1	06/11/2022 19:01	WG1878032
2-Butanone (MEK)	U		0.0815	0.128	1	06/11/2022 19:01	WG1878032
Methylene Chloride	U		0.00852	0.0321	1	06/11/2022 19:01	WG1878032

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	0.0237	J	0.00293	0.0321	1	06/11/2022 19:01	WG1878032
Methyl tert-butyl ether	U		0.000449	0.00128	1	06/11/2022 19:01	WG1878032
Naphthalene	0.0254		0.00626	0.0160	1	06/11/2022 19:01	WG1878032
n-Propylbenzene	0.0175		0.00122	0.00642	1	06/11/2022 19:01	WG1878032
Styrene	U		0.000294	0.0160	1	06/11/2022 19:01	WG1878032
1,1,1,2-Tetrachloroethane	U		0.00122	0.00321	1	06/11/2022 19:01	WG1878032
1,1,2,2-Tetrachloroethane	U		0.000892	0.00321	1	06/11/2022 19:01	WG1878032
Tetrachloroethene	U		0.00115	0.00321	1	06/11/2022 19:01	WG1878032
Toluene	0.0585		0.00167	0.00642	1	06/11/2022 19:01	WG1878032
1,2,3-Trichlorobenzene	U		0.00941	0.0160	1	06/11/2022 19:01	WG1878032
1,2,4-Trichlorobenzene	U		0.00565	0.0160	1	06/11/2022 19:01	WG1878032
1,1,1-Trichloroethane	U		0.00118	0.00321	1	06/11/2022 19:01	WG1878032
1,1,2-Trichloroethane	U		0.000766	0.00321	1	06/11/2022 19:01	WG1878032
Trichloroethene	U		0.000750	0.00128	1	06/11/2022 19:01	WG1878032
Trichlorofluoromethane	U	J3	0.00106	0.00321	1	06/11/2022 19:01	WG1878032
1,2,3-Trichloropropane	U		0.00208	0.0160	1	06/11/2022 19:01	WG1878032
1,2,4-Trimethylbenzene	0.0867		0.00203	0.00642	1	06/11/2022 19:01	WG1878032
1,3,5-Trimethylbenzene	0.0130		0.00257	0.00642	1	06/11/2022 19:01	WG1878032
Vinyl chloride	U		0.00149	0.00321	1	06/11/2022 19:01	WG1878032
Xylenes, Total	0.166		0.00113	0.00834	1	06/11/2022 19:01	WG1878032
(S) Toluene-d8	*101*			*75.0-131*		*06/11/2022 19:01*	WG1878032
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*06/11/2022 19:01*	WG1878032
(S) 1,2-Dichloroethane-d4	*99.2*			*70.0-130*		*06/11/2022 19:01*	WG1878032

Semi-Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C20 Hydrocarbons	130		0.696	4.57	1	06/15/2022 16:53	WG1879165
C20-C34 Hydrocarbons	92.7		0.698	4.57	1	06/15/2022 16:53	WG1879165
(S) o-Terphenyl	*35.8*			*18.0-148*		*06/15/2022 16:53*	WG1879165

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.00915		0.00263	0.00685	1	06/14/2022 22:51	WG1878896
Acenaphthene	0.0408		0.00239	0.00685	1	06/14/2022 22:51	WG1878896
Acenaphthylene	U		0.00247	0.00685	1	06/14/2022 22:51	WG1878896
Benzo(a)anthracene	0.0242		0.00198	0.00685	1	06/14/2022 22:51	WG1878896
Benzo(a)pyrene	0.0329		0.00204	0.00685	1	06/14/2022 22:51	WG1878896
Benzo(b)fluoranthene	0.0264		0.00175	0.00685	1	06/14/2022 22:51	WG1878896
Benzo(g,h,i)perylene	0.0470		0.00202	0.00685	1	06/14/2022 22:51	WG1878896
Benzo(k)fluoranthene	0.00611	J	0.00245	0.00685	1	06/14/2022 22:51	WG1878896
Chrysene	0.0313		0.00265	0.00685	1	06/14/2022 22:51	WG1878896
Dibenz(a,h)anthracene	0.0108		0.00196	0.00685	1	06/14/2022 22:51	WG1878896
Fluoranthene	0.0322		0.00259	0.00685	1	06/14/2022 22:51	WG1878896
Fluorene	0.0258		0.00234	0.00685	1	06/14/2022 22:51	WG1878896
Indeno(1,2,3-cd)pyrene	0.0200		0.00207	0.00685	1	06/14/2022 22:51	WG1878896
Naphthalene	0.299		0.00466	0.0228	1	06/14/2022 22:51	WG1878896
Phenanthrene	0.101		0.00264	0.00685	1	06/14/2022 22:51	WG1878896
Pyrene	0.0674		0.00228	0.00685	1	06/14/2022 22:51	WG1878896
1-Methylnaphthalene	0.466		0.00513	0.0228	1	06/14/2022 22:51	WG1878896
2-Methylnaphthalene	0.571		0.00488	0.0228	1	06/14/2022 22:51	WG1878896
2-Chloronaphthalene	U		0.00532	0.0228	1	06/14/2022 22:51	WG1878896
(S) Nitrobenzene-d5	*28.3*			*14.0-149*		*06/14/2022 22:51*	WG1878896
(S) 2-Fluorobiphenyl	*61.4*			*34.0-125*		*06/14/2022 22:51*	WG1878896

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
(S) p-Terphenyl-d14	*61.0*			*23.0-120*		*06/14/2022 22:51*	WG1878896

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	85.6		1	06/09/2022 09:43	WG1876048

Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C6 - C12	0.555		0.0396	0.117	1	06/09/2022 21:30	WG1876716
(S) a,a,a-Trifluorotoluene(FID)	*95.5*			*77.0-120*		*06/09/2022 21:30*	WG1876716

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0488	0.0669	1	06/11/2022 19:20	WG1878032
Acrylonitrile	U		0.00483	0.0167	1	06/11/2022 19:20	WG1878032
Benzene	0.00231		0.000624	0.00134	1	06/11/2022 19:20	WG1878032
Bromobenzene	U		0.00120	0.0167	1	06/11/2022 19:20	WG1878032
Bromodichloromethane	U		0.000969	0.00334	1	06/11/2022 19:20	WG1878032
Bromoform	U		0.00156	0.0334	1	06/11/2022 19:20	WG1878032
Bromomethane	U		0.00263	0.0167	1	06/11/2022 19:20	WG1878032
n-Butylbenzene	0.00849	J	0.00702	0.0167	1	06/11/2022 19:20	WG1878032
sec-Butylbenzene	U		0.00385	0.0167	1	06/11/2022 19:20	WG1878032
tert-Butylbenzene	U		0.00261	0.00669	1	06/11/2022 19:20	WG1878032
Carbon tetrachloride	U		0.00120	0.00669	1	06/11/2022 19:20	WG1878032
Chlorobenzene	U		0.000281	0.00334	1	06/11/2022 19:20	WG1878032
Chlorodibromomethane	U		0.000818	0.00334	1	06/11/2022 19:20	WG1878032
Chloroethane	U		0.00227	0.00669	1	06/11/2022 19:20	WG1878032
Chloroform	U		0.00138	0.00334	1	06/11/2022 19:20	WG1878032
Chloromethane	U		0.00582	0.0167	1	06/11/2022 19:20	WG1878032
2-Chlorotoluene	U		0.00116	0.00334	1	06/11/2022 19:20	WG1878032
4-Chlorotoluene	U		0.000602	0.00669	1	06/11/2022 19:20	WG1878032
1,2-Dibromo-3-Chloropropane	U		0.00521	0.0334	1	06/11/2022 19:20	WG1878032
1,2-Dibromoethane	U		0.000866	0.00334	1	06/11/2022 19:20	WG1878032
Dibromomethane	U		0.00100	0.00669	1	06/11/2022 19:20	WG1878032
1,2-Dichlorobenzene	U		0.000568	0.00669	1	06/11/2022 19:20	WG1878032
1,3-Dichlorobenzene	U		0.000802	0.00669	1	06/11/2022 19:20	WG1878032
1,4-Dichlorobenzene	U		0.000936	0.00669	1	06/11/2022 19:20	WG1878032
Dichlorodifluoromethane	U		0.00215	0.00334	1	06/11/2022 19:20	WG1878032
1,1-Dichloroethane	U		0.000657	0.00334	1	06/11/2022 19:20	WG1878032
1,2-Dichloroethane	U		0.000868	0.00334	1	06/11/2022 19:20	WG1878032
1,1-Dichloroethene	U		0.000810	0.00334	1	06/11/2022 19:20	WG1878032
cis-1,2-Dichloroethene	U		0.000981	0.00334	1	06/11/2022 19:20	WG1878032
trans-1,2-Dichloroethene	U		0.00139	0.00669	1	06/11/2022 19:20	WG1878032
1,2-Dichloropropane	U		0.00190	0.00669	1	06/11/2022 19:20	WG1878032
1,1-Dichloropropene	U		0.00108	0.00334	1	06/11/2022 19:20	WG1878032
1,3-Dichloropropane	U		0.000670	0.00669	1	06/11/2022 19:20	WG1878032
cis-1,3-Dichloropropene	U		0.00101	0.00334	1	06/11/2022 19:20	WG1878032
trans-1,3-Dichloropropene	U		0.00152	0.00669	1	06/11/2022 19:20	WG1878032
2,2-Dichloropropane	U		0.00185	0.00334	1	06/11/2022 19:20	WG1878032
Ethylbenzene	0.0274		0.000985	0.00334	1	06/11/2022 19:20	WG1878032
Hexachloro-1,3-butadiene	U		0.00802	0.0334	1	06/11/2022 19:20	WG1878032
n-Hexane	0.159		0.00302	0.00669	1	06/11/2022 19:20	WG1878032
Isopropylbenzene	0.00782		0.000568	0.00334	1	06/11/2022 19:20	WG1878032
p-Isopropyltoluene	0.00776		0.00341	0.00669	1	06/11/2022 19:20	WG1878032
2-Butanone (MEK)	U		0.0849	0.134	1	06/11/2022 19:20	WG1878032
Methylene Chloride	U		0.00888	0.0334	1	06/11/2022 19:20	WG1878032

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	0.0193	J	0.00305	0.0334	1	06/11/2022 19:20	WG1878032
Methyl tert-butyl ether	U		0.000468	0.00134	1	06/11/2022 19:20	WG1878032
Naphthalene	0.0205		0.00653	0.0167	1	06/11/2022 19:20	WG1878032
n-Propylbenzene	0.0133		0.00127	0.00669	1	06/11/2022 19:20	WG1878032
Styrene	U		0.000306	0.0167	1	06/11/2022 19:20	WG1878032
1,1,1,2-Tetrachloroethane	U		0.00127	0.00334	1	06/11/2022 19:20	WG1878032
1,1,2,2-Tetrachloroethane	U		0.000929	0.00334	1	06/11/2022 19:20	WG1878032
Tetrachloroethene	U		0.00120	0.00334	1	06/11/2022 19:20	WG1878032
Toluene	0.0464		0.00174	0.00669	1	06/11/2022 19:20	WG1878032
1,2,3-Trichlorobenzene	U		0.00980	0.0167	1	06/11/2022 19:20	WG1878032
1,2,4-Trichlorobenzene	U		0.00588	0.0167	1	06/11/2022 19:20	WG1878032
1,1,1-Trichloroethane	U		0.00123	0.00334	1	06/11/2022 19:20	WG1878032
1,1,2-Trichloroethane	U		0.000798	0.00334	1	06/11/2022 19:20	WG1878032
Trichloroethene	U		0.000781	0.00134	1	06/11/2022 19:20	WG1878032
Trichlorofluoromethane	U	J3	0.00111	0.00334	1	06/11/2022 19:20	WG1878032
1,2,3-Trichloropropane	U		0.00217	0.0167	1	06/11/2022 19:20	WG1878032
1,2,4-Trimethylbenzene	0.0647		0.00211	0.00669	1	06/11/2022 19:20	WG1878032
1,3,5-Trimethylbenzene	0.00903		0.00267	0.00669	1	06/11/2022 19:20	WG1878032
Vinyl chloride	U		0.00155	0.00334	1	06/11/2022 19:20	WG1878032
Xylenes, Total	0.127		0.00118	0.00869	1	06/11/2022 19:20	WG1878032
(S) Toluene-d8	*101*			*75.0-131*		*06/11/2022 19:20*	WG1878032
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*06/11/2022 19:20*	WG1878032
(S) 1,2-Dichloroethane-d4	*98.1*			*70.0-130*		*06/11/2022 19:20*	WG1878032

Semi-Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C20 Hydrocarbons	54.6		0.713	4.67	1	06/15/2022 16:40	WG1879165
C20-C34 Hydrocarbons	49.9		0.714	4.67	1	06/15/2022 16:40	WG1879165
(S) o-Terphenyl	*41.5*			*18.0-148*		*06/15/2022 16:40*	WG1879165

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.00714		0.00269	0.00701	1	06/14/2022 23:30	WG1878896
Acenaphthene	0.0146		0.00244	0.00701	1	06/14/2022 23:30	WG1878896
Acenaphthylene	0.00742		0.00252	0.00701	1	06/14/2022 23:30	WG1878896
Benzo(a)anthracene	0.0236		0.00202	0.00701	1	06/14/2022 23:30	WG1878896
Benzo(a)pyrene	0.0321		0.00209	0.00701	1	06/14/2022 23:30	WG1878896
Benzo(b)fluoranthene	0.0276		0.00179	0.00701	1	06/14/2022 23:30	WG1878896
Benzo(g,h,i)perylene	0.0537		0.00207	0.00701	1	06/14/2022 23:30	WG1878896
Benzo(k)fluoranthene	0.00875		0.00251	0.00701	1	06/14/2022 23:30	WG1878896
Chrysene	0.0264		0.00271	0.00701	1	06/14/2022 23:30	WG1878896
Dibenz(a,h)anthracene	0.00862		0.00201	0.00701	1	06/14/2022 23:30	WG1878896
Fluoranthene	0.0365		0.00265	0.00701	1	06/14/2022 23:30	WG1878896
Fluorene	0.0113		0.00240	0.00701	1	06/14/2022 23:30	WG1878896
Indeno(1,2,3-cd)pyrene	0.0234		0.00211	0.00701	1	06/14/2022 23:30	WG1878896
Naphthalene	0.0737		0.00477	0.0234	1	06/14/2022 23:30	WG1878896
Phenanthrene	0.0504		0.00270	0.00701	1	06/14/2022 23:30	WG1878896
Pyrene	0.0697		0.00234	0.00701	1	06/14/2022 23:30	WG1878896
1-Methylnaphthalene	0.109		0.00525	0.0234	1	06/14/2022 23:30	WG1878896
2-Methylnaphthalene	0.138		0.00499	0.0234	1	06/14/2022 23:30	WG1878896
2-Chloronaphthalene	U		0.00544	0.0234	1	06/14/2022 23:30	WG1878896
(S) Nitrobenzene-d5	*95.8*			*14.0-149*		*06/14/2022 23:30*	WG1878896
(S) 2-Fluorobiphenyl	*67.2*			*34.0-125*		*06/14/2022 23:30*	WG1878896

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
(S) p-Terphenyl-d14	*65.6*			*23.0-120*		*06/14/2022 23:30*	WG1878896

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.1		1	06/09/2022 09:43	WG1876048

Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C6 - C12	0.0974	J	0.0380	0.112	1	06/09/2022 21:51	WG1876716
(S) a,a,a-Trifluorotoluene(FID)	*106*			*77.0-120*		*06/09/2022 21:51*	WG1876716

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0454	0.0622	1	06/11/2022 19:40	WG1878032
Acrylonitrile	U		0.00449	0.0155	1	06/11/2022 19:40	WG1878032
Benzene	U		0.000581	0.00124	1	06/11/2022 19:40	WG1878032
Bromobenzene	U		0.00112	0.0155	1	06/11/2022 19:40	WG1878032
Bromodichloromethane	U		0.000902	0.00311	1	06/11/2022 19:40	WG1878032
Bromoform	U		0.00146	0.0311	1	06/11/2022 19:40	WG1878032
Bromomethane	U		0.00245	0.0155	1	06/11/2022 19:40	WG1878032
n-Butylbenzene	U		0.00653	0.0155	1	06/11/2022 19:40	WG1878032
sec-Butylbenzene	U		0.00358	0.0155	1	06/11/2022 19:40	WG1878032
tert-Butylbenzene	U		0.00243	0.00622	1	06/11/2022 19:40	WG1878032
Carbon tetrachloride	U		0.00112	0.00622	1	06/11/2022 19:40	WG1878032
Chlorobenzene	U		0.000261	0.00311	1	06/11/2022 19:40	WG1878032
Chlorodibromomethane	U		0.000761	0.00311	1	06/11/2022 19:40	WG1878032
Chloroethane	U		0.00211	0.00622	1	06/11/2022 19:40	WG1878032
Chloroform	U		0.00128	0.00311	1	06/11/2022 19:40	WG1878032
Chloromethane	U		0.00541	0.0155	1	06/11/2022 19:40	WG1878032
2-Chlorotoluene	U		0.00108	0.00311	1	06/11/2022 19:40	WG1878032
4-Chlorotoluene	U		0.000560	0.00622	1	06/11/2022 19:40	WG1878032
1,2-Dibromo-3-Chloropropane	U		0.00485	0.0311	1	06/11/2022 19:40	WG1878032
1,2-Dibromoethane	U		0.000806	0.00311	1	06/11/2022 19:40	WG1878032
Dibromomethane	U		0.000933	0.00622	1	06/11/2022 19:40	WG1878032
1,2-Dichlorobenzene	U		0.000529	0.00622	1	06/11/2022 19:40	WG1878032
1,3-Dichlorobenzene	U		0.000746	0.00622	1	06/11/2022 19:40	WG1878032
1,4-Dichlorobenzene	U		0.000871	0.00622	1	06/11/2022 19:40	WG1878032
Dichlorodifluoromethane	U		0.00200	0.00311	1	06/11/2022 19:40	WG1878032
1,1-Dichloroethane	U		0.000611	0.00311	1	06/11/2022 19:40	WG1878032
1,2-Dichloroethane	U		0.000807	0.00311	1	06/11/2022 19:40	WG1878032
1,1-Dichloroethene	U		0.000754	0.00311	1	06/11/2022 19:40	WG1878032
cis-1,2-Dichloroethene	U		0.000913	0.00311	1	06/11/2022 19:40	WG1878032
trans-1,2-Dichloroethene	U		0.00129	0.00622	1	06/11/2022 19:40	WG1878032
1,2-Dichloropropane	U		0.00177	0.00622	1	06/11/2022 19:40	WG1878032
1,1-Dichloropropene	U		0.00101	0.00311	1	06/11/2022 19:40	WG1878032
1,3-Dichloropropane	U		0.000623	0.00622	1	06/11/2022 19:40	WG1878032
cis-1,3-Dichloropropene	U		0.000942	0.00311	1	06/11/2022 19:40	WG1878032
trans-1,3-Dichloropropene	U		0.00142	0.00622	1	06/11/2022 19:40	WG1878032
2,2-Dichloropropane	U		0.00172	0.00311	1	06/11/2022 19:40	WG1878032
Ethylbenzene	U		0.000917	0.00311	1	06/11/2022 19:40	WG1878032
Hexachloro-1,3-butadiene	U		0.00746	0.0311	1	06/11/2022 19:40	WG1878032
n-Hexane	U		0.00281	0.00622	1	06/11/2022 19:40	WG1878032
Isopropylbenzene	U		0.000529	0.00311	1	06/11/2022 19:40	WG1878032
p-Isopropyltoluene	0.00601	J	0.00317	0.00622	1	06/11/2022 19:40	WG1878032
2-Butanone (MEK)	U		0.0790	0.124	1	06/11/2022 19:40	WG1878032
Methylene Chloride	U		0.00826	0.0311	1	06/11/2022 19:40	WG1878032

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	U		0.00284	0.0311	1	06/11/2022 19:40	WG1878032
Methyl tert-butyl ether	U		0.000435	0.00124	1	06/11/2022 19:40	WG1878032
Naphthalene	0.0396		0.00607	0.0155	1	06/11/2022 19:40	WG1878032
n-Propylbenzene	U		0.00118	0.00622	1	06/11/2022 19:40	WG1878032
Styrene	U		0.000285	0.0155	1	06/11/2022 19:40	WG1878032
1,1,1,2-Tetrachloroethane	U		0.00118	0.00311	1	06/11/2022 19:40	WG1878032
1,1,2,2-Tetrachloroethane	U		0.000864	0.00311	1	06/11/2022 19:40	WG1878032
Tetrachloroethene	U		0.00111	0.00311	1	06/11/2022 19:40	WG1878032
Toluene	0.00340	J	0.00162	0.00622	1	06/11/2022 19:40	WG1878032
1,2,3-Trichlorobenzene	U		0.00912	0.0155	1	06/11/2022 19:40	WG1878032
1,2,4-Trichlorobenzene	U		0.00547	0.0155	1	06/11/2022 19:40	WG1878032
1,1,1-Trichloroethane	U		0.00115	0.00311	1	06/11/2022 19:40	WG1878032
1,1,2-Trichloroethane	U		0.000743	0.00311	1	06/11/2022 19:40	WG1878032
Trichloroethene	U		0.000726	0.00124	1	06/11/2022 19:40	WG1878032
Trichlorofluoromethane	U	J3	0.00103	0.00311	1	06/11/2022 19:40	WG1878032
1,2,3-Trichloropropane	U		0.00201	0.0155	1	06/11/2022 19:40	WG1878032
1,2,4-Trimethylbenzene	0.00626		0.00197	0.00622	1	06/11/2022 19:40	WG1878032
1,3,5-Trimethylbenzene	U		0.00249	0.00622	1	06/11/2022 19:40	WG1878032
Vinyl chloride	U		0.00144	0.00311	1	06/11/2022 19:40	WG1878032
Xylenes, Total	0.00775	J	0.00109	0.00808	1	06/11/2022 19:40	WG1878032
(S) Toluene-d8	*102*			*75.0-131*		*06/11/2022 19:40*	WG1878032
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*06/11/2022 19:40*	WG1878032
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*06/11/2022 19:40*	WG1878032

Semi-Volatile Organic Compounds (GC) by Method 8015B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C20 Hydrocarbons	36.2	J	17.2	112	25	06/15/2022 17:46	WG1879165
C20-C34 Hydrocarbons	267		17.2	112	25	06/15/2022 17:46	WG1879165
(S) o-Terphenyl	*0.000*	J7		*18.0-148*		*06/15/2022 17:46*	WG1879165

Sample Narrative:

L1501507-06 WG1879165: Cannot run at lower dilution due to viscosity of extract

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.524		0.00258	0.00673	1	06/15/2022 01:08	WG1878896
Acenaphthene	0.168		0.00234	0.00673	1	06/15/2022 01:08	WG1878896
Acenaphthylene	0.0238		0.00242	0.00673	1	06/15/2022 01:08	WG1878896
Benzo(a)anthracene	1.41		0.00194	0.00673	1	06/15/2022 01:08	WG1878896
Benzo(a)pyrene	1.18		0.00201	0.00673	1	06/15/2022 01:08	WG1878896
Benzo(b)fluoranthene	1.32		0.00172	0.00673	1	06/15/2022 01:08	WG1878896
Benzo(g,h,i)perylene	0.600		0.00199	0.00673	1	06/15/2022 01:08	WG1878896
Benzo(k)fluoranthene	0.446		0.00241	0.00673	1	06/15/2022 01:08	WG1878896
Chrysene	1.12		0.00260	0.00673	1	06/15/2022 01:08	WG1878896
Dibenz(a,h)anthracene	0.165		0.00193	0.00673	1	06/15/2022 01:08	WG1878896
Fluoranthene	2.54		0.00255	0.00673	1	06/15/2022 01:08	WG1878896
Fluorene	0.192		0.00230	0.00673	1	06/15/2022 01:08	WG1878896
Indeno(1,2,3-cd)pyrene	0.725		0.00203	0.00673	1	06/15/2022 01:08	WG1878896
Naphthalene	0.261		0.00458	0.0224	1	06/15/2022 01:08	WG1878896
Phenanthrene	1.71		0.00259	0.00673	1	06/15/2022 01:08	WG1878896
Pyrene	2.05		0.00224	0.00673	1	06/15/2022 01:08	WG1878896
1-Methylnaphthalene	0.110		0.00504	0.0224	1	06/15/2022 01:08	WG1878896
2-Methylnaphthalene	0.166		0.00479	0.0224	1	06/15/2022 01:08	WG1878896

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
2-Chloronaphthalene	U		0.00523	0.0224	1	06/15/2022 01:08	WG1878896
(S) Nitrobenzene-d5	*88.9*			*14.0-149*		*06/15/2022 01:08*	WG1878896
(S) 2-Fluorobiphenyl	*76.4*			*34.0-125*		*06/15/2022 01:08*	WG1878896
(S) p-Terphenyl-d14	*81.4*			*23.0-120*		*06/15/2022 01:08*	WG1878896

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U		0.0113	0.0500	1	06/12/2022 20:01	WG1878288
Acrolein	U		0.00254	0.0500	1	06/12/2022 20:01	WG1878288
Acrylonitrile	U		0.000671	0.0100	1	06/12/2022 20:01	WG1878288
Benzene	U		0.0000941	0.00100	1	06/12/2022 20:01	WG1878288
Bromobenzene	U		0.000118	0.00100	1	06/12/2022 20:01	WG1878288
Bromodichloromethane	0.00158		0.000136	0.00100	1	06/12/2022 20:01	WG1878288
Bromoform	U		0.000129	0.00100	1	06/12/2022 20:01	WG1878288
Bromomethane	U		0.000605	0.00500	1	06/12/2022 20:01	WG1878288
n-Butylbenzene	U		0.000157	0.00100	1	06/12/2022 20:01	WG1878288
sec-Butylbenzene	U		0.000125	0.00100	1	06/12/2022 20:01	WG1878288
tert-Butylbenzene	U		0.000127	0.00100	1	06/12/2022 20:01	WG1878288
Carbon tetrachloride	U		0.000128	0.00100	1	06/12/2022 20:01	WG1878288
Chlorobenzene	U		0.000116	0.00100	1	06/12/2022 20:01	WG1878288
Chlorodibromomethane	U		0.000140	0.00100	1	06/12/2022 20:01	WG1878288
Chloroethane	U		0.000192	0.00500	1	06/12/2022 20:01	WG1878288
Chloroform	0.00944		0.000111	0.00500	1	06/12/2022 20:01	WG1878288
Chloromethane	U		0.000960	0.00250	1	06/12/2022 20:01	WG1878288
2-Chlorotoluene	U		0.000106	0.00100	1	06/12/2022 20:01	WG1878288
4-Chlorotoluene	U		0.000114	0.00100	1	06/12/2022 20:01	WG1878288
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	06/12/2022 20:01	WG1878288
1,2-Dibromoethane	U		0.000126	0.00100	1	06/12/2022 20:01	WG1878288
Dibromomethane	U		0.000122	0.00100	1	06/12/2022 20:01	WG1878288
1,2-Dichlorobenzene	U		0.000107	0.00100	1	06/12/2022 20:01	WG1878288
1,3-Dichlorobenzene	U		0.000110	0.00100	1	06/12/2022 20:01	WG1878288
1,4-Dichlorobenzene	U		0.000120	0.00100	1	06/12/2022 20:01	WG1878288
Dichlorodifluoromethane	U		0.000374	0.00500	1	06/12/2022 20:01	WG1878288
1,1-Dichloroethane	U		0.000100	0.00100	1	06/12/2022 20:01	WG1878288
1,2-Dichloroethane	U		0.0000819	0.00100	1	06/12/2022 20:01	WG1878288
1,1-Dichloroethene	U		0.000188	0.00100	1	06/12/2022 20:01	WG1878288
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	06/12/2022 20:01	WG1878288
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	06/12/2022 20:01	WG1878288
1,2-Dichloropropane	U		0.000149	0.00100	1	06/12/2022 20:01	WG1878288
1,1-Dichloropropene	U		0.000142	0.00100	1	06/12/2022 20:01	WG1878288
1,3-Dichloropropane	U		0.000110	0.00100	1	06/12/2022 20:01	WG1878288
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	06/12/2022 20:01	WG1878288
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	06/12/2022 20:01	WG1878288
2,2-Dichloropropane	U		0.000161	0.00100	1	06/12/2022 20:01	WG1878288
Ethylbenzene	U		0.000137	0.00100	1	06/12/2022 20:01	WG1878288
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	06/12/2022 20:01	WG1878288
n-Hexane	U		0.000749	0.0100	1	06/12/2022 20:01	WG1878288
Isopropylbenzene	U		0.000105	0.00100	1	06/12/2022 20:01	WG1878288
p-Isopropyltoluene	U		0.000120	0.00100	1	06/12/2022 20:01	WG1878288
2-Butanone (MEK)	0.00205	J	0.00119	0.0100	1	06/12/2022 20:01	WG1878288
Methylene Chloride	U		0.000430	0.00500	1	06/12/2022 20:01	WG1878288
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	06/12/2022 20:01	WG1878288
Methyl tert-butyl ether	U		0.000101	0.00100	1	06/12/2022 20:01	WG1878288
Naphthalene	U		0.00100	0.00500	1	06/12/2022 20:01	WG1878288
n-Propylbenzene	U		0.0000993	0.00100	1	06/12/2022 20:01	WG1878288
Styrene	U		0.000118	0.00100	1	06/12/2022 20:01	WG1878288
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	06/12/2022 20:01	WG1878288
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	06/12/2022 20:01	WG1878288
Tetrachloroethene	0.000328	J	0.000300	0.00100	1	06/12/2022 20:01	WG1878288
Toluene	U		0.000278	0.00100	1	06/12/2022 20:01	WG1878288
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	06/12/2022 20:01	WG1878288
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	06/12/2022 20:01	WG1878288
1,1,1-Trichloroethane	U		0.000149	0.00100	1	06/12/2022 20:01	WG1878288

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.000158	0.00100	1	06/12/2022 20:01	WG1878288
Trichloroethene	U		0.000190	0.00100	1	06/12/2022 20:01	WG1878288
Trichlorofluoromethane	U		0.000160	0.00500	1	06/12/2022 20:01	WG1878288
1,2,3-Trichloropropane	U		0.000237	0.00250	1	06/12/2022 20:01	WG1878288
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	06/12/2022 20:01	WG1878288
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	06/12/2022 20:01	WG1878288
Vinyl chloride	U		0.000234	0.00100	1	06/12/2022 20:01	WG1878288
Xylenes, Total	U		0.000174	0.00300	1	06/12/2022 20:01	WG1878288
(S) Toluene-d8	*118*			*80.0-120*		*06/12/2022 20:01*	WG1878288
(S) 4-Bromofluorobenzene	*97.5*			*77.0-126*		*06/12/2022 20:01*	WG1878288
(S) 1,2-Dichloroethane-d4	*126*			*70.0-130*		*06/12/2022 20:01*	WG1878288

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	U		0.0000190	0.0000500	1	06/10/2022 01:19	WG1876343
Acenaphthene	U		0.0000190	0.0000500	1	06/10/2022 01:19	WG1876343
Acenaphthylene	U		0.0000171	0.0000500	1	06/10/2022 01:19	WG1876343
Benzo(a)anthracene	U		0.0000203	0.0000500	1	06/10/2022 01:19	WG1876343
Benzo(a)pyrene	U		0.0000184	0.0000500	1	06/10/2022 01:19	WG1876343
Benzo(b)fluoranthene	U		0.0000168	0.0000500	1	06/10/2022 01:19	WG1876343
Benzo(g,h,i)perylene	U		0.0000184	0.0000500	1	06/10/2022 01:19	WG1876343
Benzo(k)fluoranthene	U		0.0000202	0.0000500	1	06/10/2022 01:19	WG1876343
Chrysene	U		0.0000179	0.0000500	1	06/10/2022 01:19	WG1876343
Dibenz(a,h)anthracene	U		0.0000160	0.0000500	1	06/10/2022 01:19	WG1876343
Fluoranthene	U		0.0000270	0.000100	1	06/10/2022 01:19	WG1876343
Fluorene	U		0.0000169	0.0000500	1	06/10/2022 01:19	WG1876343
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500	1	06/10/2022 01:19	WG1876343
Naphthalene	U		0.0000917	0.000250	1	06/10/2022 01:19	WG1876343
Phenanthrene	U		0.0000180	0.0000500	1	06/10/2022 01:19	WG1876343
Pyrene	U		0.0000169	0.0000500	1	06/10/2022 01:19	WG1876343
1-Methylnaphthalene	U		0.0000687	0.000250	1	06/10/2022 01:19	WG1876343
2-Methylnaphthalene	U		0.0000674	0.000250	1	06/10/2022 01:19	WG1876343
2-Chloronaphthalene	U		0.0000682	0.000250	1	06/10/2022 01:19	WG1876343
(S) Nitrobenzene-d5	*86.3*			*31.0-160*		*06/10/2022 01:19*	WG1876343
(S) 2-Fluorobiphenyl	*81.1*			*48.0-148*		*06/10/2022 01:19*	WG1876343
(S) p-Terphenyl-d14	*98.9*			*37.0-146*		*06/10/2022 01:19*	WG1876343

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	1	06/12/2022 18:18	WG1878288
Acrolein	U		0.00254	0.0500	1	06/12/2022 18:18	WG1878288
Acrylonitrile	U		0.000671	0.0100	1	06/12/2022 18:18	WG1878288
Benzene	U		0.0000941	0.00100	1	06/12/2022 18:18	WG1878288
Bromobenzene	U		0.000118	0.00100	1	06/12/2022 18:18	WG1878288
Bromodichloromethane	U		0.000136	0.00100	1	06/12/2022 18:18	WG1878288
Bromoform	U		0.000129	0.00100	1	06/12/2022 18:18	WG1878288
Bromomethane	U		0.000605	0.00500	1	06/12/2022 18:18	WG1878288
n-Butylbenzene	U		0.000157	0.00100	1	06/12/2022 18:18	WG1878288
sec-Butylbenzene	U		0.000125	0.00100	1	06/12/2022 18:18	WG1878288
tert-Butylbenzene	U		0.000127	0.00100	1	06/12/2022 18:18	WG1878288
Carbon tetrachloride	U		0.000128	0.00100	1	06/12/2022 18:18	WG1878288
Chlorobenzene	U		0.000116	0.00100	1	06/12/2022 18:18	WG1878288
Chlorodibromomethane	U		0.000140	0.00100	1	06/12/2022 18:18	WG1878288
Chloroethane	U		0.000192	0.00500	1	06/12/2022 18:18	WG1878288
Chloroform	U		0.000111	0.00500	1	06/12/2022 18:18	WG1878288
Chloromethane	U		0.000960	0.00250	1	06/12/2022 18:18	WG1878288
2-Chlorotoluene	U		0.000106	0.00100	1	06/12/2022 18:18	WG1878288
4-Chlorotoluene	U		0.000114	0.00100	1	06/12/2022 18:18	WG1878288
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	06/12/2022 18:18	WG1878288
1,2-Dibromoethane	U		0.000126	0.00100	1	06/12/2022 18:18	WG1878288
Dibromomethane	U		0.000122	0.00100	1	06/12/2022 18:18	WG1878288
1,2-Dichlorobenzene	U		0.000107	0.00100	1	06/12/2022 18:18	WG1878288
1,3-Dichlorobenzene	U		0.000110	0.00100	1	06/12/2022 18:18	WG1878288
1,4-Dichlorobenzene	U		0.000120	0.00100	1	06/12/2022 18:18	WG1878288
Dichlorodifluoromethane	U		0.000374	0.00500	1	06/12/2022 18:18	WG1878288
1,1-Dichloroethane	U		0.000100	0.00100	1	06/12/2022 18:18	WG1878288
1,2-Dichloroethane	U		0.0000819	0.00100	1	06/12/2022 18:18	WG1878288
1,1-Dichloroethene	U		0.000188	0.00100	1	06/12/2022 18:18	WG1878288
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	06/12/2022 18:18	WG1878288
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	06/12/2022 18:18	WG1878288
1,2-Dichloropropane	U		0.000149	0.00100	1	06/12/2022 18:18	WG1878288
1,1-Dichloropropene	U		0.000142	0.00100	1	06/12/2022 18:18	WG1878288
1,3-Dichloropropane	U		0.000110	0.00100	1	06/12/2022 18:18	WG1878288
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	06/12/2022 18:18	WG1878288
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	06/12/2022 18:18	WG1878288
2,2-Dichloropropane	U		0.000161	0.00100	1	06/12/2022 18:18	WG1878288
Ethylbenzene	U		0.000137	0.00100	1	06/12/2022 18:18	WG1878288
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	06/12/2022 18:18	WG1878288
n-Hexane	U		0.000749	0.0100	1	06/12/2022 18:18	WG1878288
Isopropylbenzene	U		0.000105	0.00100	1	06/12/2022 18:18	WG1878288
p-Isopropyltoluene	U		0.000120	0.00100	1	06/12/2022 18:18	WG1878288
2-Butanone (MEK)	U		0.00119	0.0100	1	06/12/2022 18:18	WG1878288
Methylene Chloride	U		0.000430	0.00500	1	06/12/2022 18:18	WG1878288
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	06/12/2022 18:18	WG1878288
Methyl tert-butyl ether	U		0.000101	0.00100	1	06/12/2022 18:18	WG1878288
Naphthalene	U		0.00100	0.00500	1	06/12/2022 18:18	WG1878288
n-Propylbenzene	U		0.0000993	0.00100	1	06/12/2022 18:18	WG1878288
Styrene	U		0.000118	0.00100	1	06/12/2022 18:18	WG1878288
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	06/12/2022 18:18	WG1878288
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	06/12/2022 18:18	WG1878288
Tetrachloroethene	U		0.000300	0.00100	1	06/12/2022 18:18	WG1878288
Toluene	U		0.000278	0.00100	1	06/12/2022 18:18	WG1878288
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	06/12/2022 18:18	WG1878288
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	06/12/2022 18:18	WG1878288
1,1,1-Trichloroethane	U		0.000149	0.00100	1	06/12/2022 18:18	WG1878288

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.000158	0.00100	1	06/12/2022 18:18	WG1878288
Trichloroethene	U		0.000190	0.00100	1	06/12/2022 18:18	WG1878288
Trichlorofluoromethane	U		0.000160	0.00500	1	06/12/2022 18:18	WG1878288
1,2,3-Trichloropropane	U		0.000237	0.00250	1	06/12/2022 18:18	WG1878288
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	06/12/2022 18:18	WG1878288
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	06/12/2022 18:18	WG1878288
Vinyl chloride	U		0.000234	0.00100	1	06/12/2022 18:18	WG1878288
Xylenes, Total	U		0.000174	0.00300	1	06/12/2022 18:18	WG1878288
(S) Toluene-d8	*116*			*80.0-120*		*06/12/2022 18:18*	WG1878288
(S) 4-Bromofluorobenzene	*91.3*			*77.0-126*		*06/12/2022 18:18*	WG1878288
(S) 1,2-Dichloroethane-d4	*128*			*70.0-130*		*06/12/2022 18:18*	WG1878288

Method Blank (MB)

(MB) R3801665-1 06/09/22 09:29

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00300			

L1501448-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1501448-03 06/09/22 09:29 • (DUP) R3801665-3 06/09/22 09:29

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	86.3	86.4	1	0.0570		10

Laboratory Control Sample (LCS)

(LCS) R3801665-2 06/09/22 09:29

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3801669-1 06/09/22 09:43

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1501566-17 Original Sample (OS) • Duplicate (DUP)

(OS) L1501566-17 06/09/22 09:43 • (DUP) R3801669-3 06/09/22 09:43

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	87.6	88.0	1	0.536		10

Laboratory Control Sample (LCS)

(LCS) R3801669-2 06/09/22 09:43

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3802154-2 06/09/22 14:08

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPHG C6 - C12	U		0.0339	0.100
(S) a,a,a-Trifluorotoluene(FID)	*110*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3802154-1 06/09/22 13:25

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPHG C6 - C12	5.50	4.38	79.6	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*102*	*77.0-120*	

L1501501-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1501501-12 06/09/22 19:42 • (MS) R3802154-3 06/09/22 22:13 • (MSD) R3802154-4 06/09/22 22:35

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPHG C6 - C12	5.50	0.0407	1.04	1.05	18.2	18.5	1	10.0-149			0.957	27
(S) a,a,a-Trifluorotoluene(FID)					*106*	*107*		*77.0-120*				

Method Blank (MB)

(MB) R3802492-3 06/12/22 23:26

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPHG C6 - C12	U		0.0339	0.100
(S) a,a,a-Trifluorotoluene(FID)	*111*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3802492-1 06/12/22 19:31

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPHG C6 - C12	5.50	4.26	77.5	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*99.4*	*77.0-120*	

Method Blank (MB)

(MB) R3802775-3 06/13/22 21:42

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPHG C6 - C12	U		0.848	2.50
(S) a,a,a-Trifluorotoluene(FID)	*112*			*77.0-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3802775-1 06/13/22 18:57 • (LCSD) R3802775-4 06/14/22 04:42

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPHG C6 - C12	5.50	5.44	5.11	98.9	92.9	71.0-124			6.26	20
(S) a,a,a-Trifluorotoluene(FID)				*98.2*	*100*	*77.0-120*				

Method Blank (MB)

(MB) R3802189-3 06/11/22 11:49

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0365	0.0500
Acrylonitrile	U		0.00361	0.0125
Benzene	U		0.000467	0.00100
Bromobenzene	U		0.000900	0.0125
Bromodichloromethane	U		0.000725	0.00250
Bromoform	U		0.00117	0.0250
Bromomethane	U		0.00197	0.0125
n-Butylbenzene	U		0.00525	0.0125
sec-Butylbenzene	U		0.00288	0.0125
tert-Butylbenzene	U		0.00195	0.00500
Carbon tetrachloride	U		0.000898	0.00500
Chlorobenzene	U		0.000210	0.00250
Chlorodibromomethane	U		0.000612	0.00250
Chloroethane	U		0.00170	0.00500
Chloroform	U		0.00103	0.00250
Chloromethane	U		0.00435	0.0125
2-Chlorotoluene	U		0.000865	0.00250
4-Chlorotoluene	U		0.000450	0.00500
1,2-Dibromo-3-Chloropropane	U		0.00390	0.0250
1,2-Dibromoethane	U		0.000648	0.00250
Dibromomethane	U		0.000750	0.00500
1,2-Dichlorobenzene	U		0.000425	0.00500
1,3-Dichlorobenzene	U		0.000600	0.00500
1,4-Dichlorobenzene	U		0.000700	0.00500
Dichlorodifluoromethane	U		0.00161	0.00250
1,1-Dichloroethane	U		0.000491	0.00250
1,2-Dichloroethane	U		0.000649	0.00250
1,1-Dichloroethene	U		0.000606	0.00250
cis-1,2-Dichloroethene	U		0.000734	0.00250
trans-1,2-Dichloroethene	U		0.00104	0.00500
1,2-Dichloropropane	U		0.00142	0.00500
1,1-Dichloropropene	U		0.000809	0.00250
1,3-Dichloropropane	U		0.000501	0.00500
cis-1,3-Dichloropropene	U		0.000757	0.00250
trans-1,3-Dichloropropene	U		0.00114	0.00500
2,2-Dichloropropane	U		0.00138	0.00250
Ethylbenzene	U		0.000737	0.00250
Hexachloro-1,3-butadiene	U		0.00600	0.0250
n-Hexane	U		0.00226	0.00500
Isopropylbenzene	U		0.000425	0.00250

Method Blank (MB)

(MB) R3802189-3 06/11/22 11:49

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00255	0.00500
2-Butanone (MEK)	U		0.0635	0.100
Methylene Chloride	0.00768	J	0.00664	0.0250
4-Methyl-2-pentanone (MIBK)	U		0.00228	0.0250
Methyl tert-butyl ether	U		0.000350	0.00100
Naphthalene	U		0.00488	0.0125
n-Propylbenzene	U		0.000950	0.00500
Styrene	U		0.000229	0.0125
1,1,1,2-Tetrachloroethane	U		0.000948	0.00250
1,1,2,2-Tetrachloroethane	U		0.000695	0.00250
Tetrachloroethene	U		0.000896	0.00250
Toluene	U		0.00130	0.00500
1,2,3-Trichlorobenzene	U		0.00733	0.0125
1,2,4-Trichlorobenzene	U		0.00440	0.0125
1,1,1-Trichloroethane	U		0.000923	0.00250
1,1,2-Trichloroethane	U		0.000597	0.00250
Trichloroethene	U		0.000584	0.00100
Trichlorofluoromethane	U		0.000827	0.00250
1,2,3-Trichloropropane	U		0.00162	0.0125
1,2,4-Trimethylbenzene	U		0.00158	0.00500
1,3,5-Trimethylbenzene	U		0.00200	0.00500
Vinyl chloride	U		0.00116	0.00250
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	*104*			*75.0-131*
(S) 4-Bromofluorobenzene	*97.6*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3802189-1 06/11/22 10:31 • (LCSD) R3802189-2 06/11/22 10:51

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.625	0.753	0.937	120	150	10.0-160			21.8	31
Acrylonitrile	0.625	0.672	0.732	108	117	45.0-153			8.55	22
Benzene	0.125	0.120	0.113	96.0	90.4	70.0-123			6.01	20
Bromobenzene	0.125	0.125	0.113	100	90.4	73.0-121			10.1	20
Bromodichloromethane	0.125	0.118	0.122	94.4	97.6	73.0-121			3.33	20
Bromoform	0.125	0.124	0.125	99.2	100	64.0-132			0.803	20
Bromomethane	0.125	0.128	0.114	102	91.2	56.0-147			11.6	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3802189-1 06/11/22 10:31 • (LCSD) R3802189-2 06/11/22 10:51

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
n-Butylbenzene	0.125	0.114	0.113	91.2	90.4	68.0-135			0.881	20
sec-Butylbenzene	0.125	0.119	0.111	95.2	88.8	74.0-130			6.96	20
tert-Butylbenzene	0.125	0.122	0.109	97.6	87.2	75.0-127			11.3	20
Carbon tetrachloride	0.125	0.139	0.128	111	102	66.0-128			8.24	20
Chlorobenzene	0.125	0.121	0.112	96.8	89.6	76.0-128			7.73	20
Chlorodibromomethane	0.125	0.123	0.122	98.4	97.6	74.0-127			0.816	20
Chloroethane	0.125	0.129	0.108	103	86.4	61.0-134			17.7	20
Chloroform	0.125	0.127	0.119	102	95.2	72.0-123			6.50	20
Chloromethane	0.125	0.118	0.108	94.4	86.4	51.0-138			8.85	20
2-Chlorotoluene	0.125	0.125	0.117	100	93.6	75.0-124			6.61	20
4-Chlorotoluene	0.125	0.120	0.113	96.0	90.4	75.0-124			6.01	20
1,2-Dibromo-3-Chloropropane	0.125	0.106	0.108	84.8	86.4	59.0-130			1.87	20
1,2-Dibromoethane	0.125	0.126	0.129	101	103	74.0-128			2.35	20
Dibromomethane	0.125	0.130	0.137	104	110	75.0-122			5.24	20
1,2-Dichlorobenzene	0.125	0.119	0.115	95.2	92.0	76.0-124			3.42	20
1,3-Dichlorobenzene	0.125	0.114	0.116	91.2	92.8	76.0-125			1.74	20
1,4-Dichlorobenzene	0.125	0.121	0.116	96.8	92.8	77.0-121			4.22	20
Dichlorodifluoromethane	0.125	0.120	0.115	96.0	92.0	43.0-156			4.26	20
1,1-Dichloroethane	0.125	0.127	0.122	102	97.6	70.0-127			4.02	20
1,2-Dichloroethane	0.125	0.123	0.119	98.4	95.2	65.0-131			3.31	20
1,1-Dichloroethene	0.125	0.123	0.113	98.4	90.4	65.0-131			8.47	20
cis-1,2-Dichloroethene	0.125	0.129	0.125	103	100	73.0-125			3.15	20
trans-1,2-Dichloroethene	0.125	0.125	0.117	100	93.6	71.0-125			6.61	20
1,2-Dichloropropane	0.125	0.126	0.122	101	97.6	74.0-125			3.23	20
1,1-Dichloropropene	0.125	0.128	0.124	102	99.2	73.0-125			3.17	20
1,3-Dichloropropane	0.125	0.126	0.120	101	96.0	80.0-125			4.88	20
cis-1,3-Dichloropropene	0.125	0.127	0.121	102	96.8	76.0-127			4.84	20
trans-1,3-Dichloropropene	0.125	0.128	0.123	102	98.4	73.0-127			3.98	20
2,2-Dichloropropane	0.125	0.134	0.121	107	96.8	59.0-135			10.2	20
Ethylbenzene	0.125	0.120	0.110	96.0	88.0	74.0-126			8.70	20
Hexachloro-1,3-butadiene	0.125	0.108	0.0891	86.4	71.3	57.0-150			19.2	20
n-Hexane	0.125	0.129	0.127	103	102	55.0-137			1.56	20
Isopropylbenzene	0.125	0.114	0.112	91.2	89.6	72.0-127			1.77	20
p-Isopropyltoluene	0.125	0.119	0.113	95.2	90.4	72.0-133			5.17	20
2-Butanone (MEK)	0.625	0.759	0.839	121	134	30.0-160			10.0	24
Methylene Chloride	0.125	0.119	0.118	95.2	94.4	68.0-123			0.844	20
4-Methyl-2-pentanone (MIBK)	0.625	0.626	0.620	100	99.2	56.0-143			0.963	20
Methyl tert-butyl ether	0.125	0.124	0.134	99.2	107	66.0-132			7.75	20
Naphthalene	0.125	0.0878	0.0943	70.2	75.4	59.0-130			7.14	20
n-Propylbenzene	0.125	0.116	0.109	92.8	87.2	74.0-126			6.22	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3802189-1 06/11/22 10:31 • (LCSD) R3802189-2 06/11/22 10:51

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Styrene	0.125	0.113	0.111	90.4	88.8	72.0-127			1.79	20
1,1,1,2-Tetrachloroethane	0.125	0.123	0.119	98.4	95.2	74.0-129			3.31	20
1,1,2,2-Tetrachloroethane	0.125	0.127	0.121	102	96.8	68.0-128			4.84	20
Tetrachloroethene	0.125	0.127	0.119	102	95.2	70.0-136			6.50	20
Toluene	0.125	0.116	0.107	92.8	85.6	75.0-121			8.07	20
1,2,3-Trichlorobenzene	0.125	0.0739	0.0800	59.1	64.0	59.0-139			7.93	20
1,2,4-Trichlorobenzene	0.125	0.104	0.103	83.2	82.4	62.0-137			0.966	20
1,1,1-Trichloroethane	0.125	0.129	0.123	103	98.4	69.0-126			4.76	20
1,1,2-Trichloroethane	0.125	0.127	0.117	102	93.6	78.0-123			8.20	20
Trichloroethene	0.125	0.121	0.115	96.8	92.0	76.0-126			5.08	20
Trichlorofluoromethane	0.125	0.133	0.105	106	84.0	61.0-142		J3	23.5	20
1,2,3-Trichloropropane	0.125	0.141	0.136	113	109	67.0-129			3.61	20
1,2,4-Trimethylbenzene	0.125	0.115	0.109	92.0	87.2	70.0-126			5.36	20
1,3,5-Trimethylbenzene	0.125	0.115	0.109	92.0	87.2	73.0-127			5.36	20
Vinyl chloride	0.125	0.123	0.123	98.4	98.4	63.0-134			0.000	20
Xylenes, Total	0.375	0.365	0.348	97.3	92.8	72.0-127			4.77	20
(S) Toluene-d8				*99.9*	*97.6*	*75.0-131*				
(S) 4-Bromofluorobenzene				*97.9*	*101*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*109*	*112*	*70.0-130*				

Method Blank (MB)

(MB) R3802431-2 06/12/22 17:30

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0113	0.0500
Acrolein	U		0.00254	0.0500
Acrylonitrile	U		0.000671	0.0100
Benzene	U		0.0000941	0.00100
Bromobenzene	U		0.000118	0.00100
Bromodichloromethane	U		0.000136	0.00100
Bromoform	U		0.000129	0.00100
Bromomethane	U		0.000605	0.00500
n-Butylbenzene	U		0.000157	0.00100
sec-Butylbenzene	U		0.000125	0.00100
tert-Butylbenzene	U		0.000127	0.00100
Carbon tetrachloride	U		0.000128	0.00100
Chlorobenzene	U		0.000116	0.00100
Chlorodibromomethane	U		0.000140	0.00100
Chloroethane	U		0.000192	0.00500
Chloroform	U		0.000111	0.00500
Chloromethane	U		0.000960	0.00250
2-Chlorotoluene	U		0.000106	0.00100
4-Chlorotoluene	U		0.000114	0.00100
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500
1,2-Dibromoethane	U		0.000126	0.00100
Dibromomethane	U		0.000122	0.00100
1,2-Dichlorobenzene	U		0.000107	0.00100
1,3-Dichlorobenzene	U		0.000110	0.00100
1,4-Dichlorobenzene	U		0.000120	0.00100
Dichlorodifluoromethane	U		0.000374	0.00500
1,1-Dichloroethane	U		0.000100	0.00100
1,2-Dichloroethane	U		0.0000819	0.00100
1,1-Dichloroethene	U		0.000188	0.00100
cis-1,2-Dichloroethene	U		0.000126	0.00100
trans-1,2-Dichloroethene	U		0.000149	0.00100
1,2-Dichloropropane	U		0.000149	0.00100
1,1-Dichloropropene	U		0.000142	0.00100
1,3-Dichloropropane	U		0.000110	0.00100
cis-1,3-Dichloropropene	U		0.000111	0.00100
trans-1,3-Dichloropropene	U		0.000118	0.00100
2,2-Dichloropropane	U		0.000161	0.00100
Ethylbenzene	U		0.000137	0.00100
Hexachloro-1,3-butadiene	U		0.000337	0.00100
n-Hexane	U		0.000749	0.0100

Method Blank (MB)

(MB) R3802431-2 06/12/22 17:30

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Isopropylbenzene	U		0.000105	0.00100
p-Isopropyltoluene	U		0.000120	0.00100
2-Butanone (MEK)	U		0.00119	0.0100
Methylene Chloride	U		0.000430	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100
Methyl tert-butyl ether	U		0.000101	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.0000993	0.00100
Styrene	U		0.000118	0.00100
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100
Tetrachloroethene	U		0.000300	0.00100
Toluene	U		0.000278	0.00100
1,2,3-Trichlorobenzene	U		0.000230	0.00100
1,2,4-Trichlorobenzene	U		0.000481	0.00100
1,1,1-Trichloroethane	U		0.000149	0.00100
1,1,2-Trichloroethane	U		0.000158	0.00100
Trichloroethene	U		0.000190	0.00100
Trichlorofluoromethane	U		0.000160	0.00500
1,2,3-Trichloropropane	U		0.000237	0.00250
1,2,4-Trimethylbenzene	U		0.000322	0.00100
1,3,5-Trimethylbenzene	U		0.000104	0.00100
Vinyl chloride	U		0.000234	0.00100
Xylenes, Total	U		0.000174	0.00300
(S) Toluene-d8	*113*			*80.0-120*
(S) 4-Bromofluorobenzene	*97.1*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*129*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3802431-1 06/12/22 16:47

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.0250	0.0318	127	19.0-160	
Acrolein	0.0250	0.0167	66.8	10.0-160	
Acrylonitrile	0.0250	0.0283	113	55.0-149	
Benzene	0.00500	0.00449	89.8	70.0-123	
Bromobenzene	0.00500	0.00533	107	73.0-121	
Bromodichloromethane	0.00500	0.00458	91.6	75.0-120	

Laboratory Control Sample (LCS)

(LCS) R3802431-1 06/12/22 16:47

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Bromoform	0.00500	0.00458	91.6	68.0-132	
Bromomethane	0.00500	0.00134	26.8	10.0-160	
n-Butylbenzene	0.00500	0.00438	87.6	73.0-125	
sec-Butylbenzene	0.00500	0.00501	100	75.0-125	
tert-Butylbenzene	0.00500	0.00490	98.0	76.0-124	
Carbon tetrachloride	0.00500	0.00534	107	68.0-126	
Chlorobenzene	0.00500	0.00499	99.8	80.0-121	
Chlorodibromomethane	0.00500	0.00498	99.6	77.0-125	
Chloroethane	0.00500	0.00541	108	47.0-150	
Chloroform	0.00500	0.00481	96.2	73.0-120	
Chloromethane	0.00500	0.00497	99.4	41.0-142	
2-Chlorotoluene	0.00500	0.00540	108	76.0-123	
4-Chlorotoluene	0.00500	0.00506	101	75.0-122	
1,2-Dibromo-3-Chloropropane	0.00500	0.00331	66.2	58.0-134	
1,2-Dibromoethane	0.00500	0.00490	98.0	80.0-122	
Dibromomethane	0.00500	0.00452	90.4	80.0-120	
1,2-Dichlorobenzene	0.00500	0.00518	104	79.0-121	
1,3-Dichlorobenzene	0.00500	0.00506	101	79.0-120	
1,4-Dichlorobenzene	0.00500	0.00514	103	79.0-120	
Dichlorodifluoromethane	0.00500	0.00416	83.2	51.0-149	
1,1-Dichloroethane	0.00500	0.00528	106	70.0-126	
1,2-Dichloroethane	0.00500	0.00543	109	70.0-128	
1,1-Dichloroethene	0.00500	0.00449	89.8	71.0-124	
cis-1,2-Dichloroethene	0.00500	0.00469	93.8	73.0-120	
trans-1,2-Dichloroethene	0.00500	0.00455	91.0	73.0-120	
1,2-Dichloropropane	0.00500	0.00503	101	77.0-125	
1,1-Dichloropropene	0.00500	0.00480	96.0	74.0-126	
1,3-Dichloropropane	0.00500	0.00534	107	80.0-120	
cis-1,3-Dichloropropene	0.00500	0.00444	88.8	80.0-123	
trans-1,3-Dichloropropene	0.00500	0.00480	96.0	78.0-124	
2,2-Dichloropropane	0.00500	0.00417	83.4	58.0-130	
Ethylbenzene	0.00500	0.00489	97.8	79.0-123	
Hexachloro-1,3-butadiene	0.00500	0.00511	102	54.0-138	
n-Hexane	0.00500	0.00488	97.6	57.0-133	
Isopropylbenzene	0.00500	0.00461	92.2	76.0-127	
p-Isopropyltoluene	0.00500	0.00501	100	76.0-125	
2-Butanone (MEK)	0.0250	0.0298	119	44.0-160	
Methylene Chloride	0.00500	0.00467	93.4	67.0-120	
4-Methyl-2-pentanone (MIBK)	0.0250	0.0345	138	68.0-142	
Methyl tert-butyl ether	0.00500	0.00456	91.2	68.0-125	

Laboratory Control Sample (LCS)

(LCS) R3802431-1 06/12/22 16:47

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Naphthalene	0.00500	0.00270	54.0	54.0-135	
n-Propylbenzene	0.00500	0.00517	103	77.0-124	
Styrene	0.00500	0.00427	85.4	73.0-130	
1,1,1,2-Tetrachloroethane	0.00500	0.00487	97.4	75.0-125	
1,1,2,2-Tetrachloroethane	0.00500	0.00463	92.6	65.0-130	
Tetrachloroethene	0.00500	0.00532	106	72.0-132	
Toluene	0.00500	0.00518	104	79.0-120	
1,2,3-Trichlorobenzene	0.00500	0.00370	74.0	50.0-138	
1,2,4-Trichlorobenzene	0.00500	0.00351	70.2	57.0-137	
1,1,1-Trichloroethane	0.00500	0.00500	100	73.0-124	
1,1,2-Trichloroethane	0.00500	0.00503	101	80.0-120	
Trichloroethene	0.00500	0.00512	102	78.0-124	
Trichlorofluoromethane	0.00500	0.00548	110	59.0-147	
1,2,3-Trichloropropane	0.00500	0.00548	110	73.0-130	
1,2,4-Trimethylbenzene	0.00500	0.00478	95.6	76.0-121	
1,3,5-Trimethylbenzene	0.00500	0.00536	107	76.0-122	
Vinyl chloride	0.00500	0.00519	104	67.0-131	
Xylenes, Total	0.0150	0.0141	94.0	79.0-123	
(S) Toluene-d8			*111*	*80.0-120*	
(S) 4-Bromofluorobenzene			*101*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*127*	*70.0-130*	

L1501349-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1501349-14 06/13/22 00:10 • (MS) R3802431-3 06/13/22 01:12 • (MSD) R3802431-4 06/13/22 01:33

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	2.50	U	3.08	2.34	123	93.6	100	10.0-160			27.3	35
Acrolein	2.50	U	2.00	1.46	80.0	58.4	100	10.0-160			31.2	39
Acrylonitrile	2.50	U	2.87	2.14	115	85.6	100	21.0-160			29.1	32
Benzene	0.500	U	0.434	0.325	86.8	65.0	100	17.0-158		J3	28.7	27
Bromobenzene	0.500	U	0.460	0.358	92.0	71.6	100	30.0-149			24.9	28
Bromodichloromethane	0.500	U	0.445	0.314	89.0	62.8	100	31.0-150		J3	34.5	27
Bromoform	0.500	U	0.447	0.327	89.4	65.4	100	29.0-150		J3	31.0	29
Bromomethane	0.500	U	0.0983	0.0764	19.7	15.3	100	10.0-160			25.1	38
n-Butylbenzene	0.500	U	0.348	0.252	69.6	50.4	100	31.0-150		J3	32.0	30
sec-Butylbenzene	0.500	U	0.440	0.381	88.0	76.2	100	33.0-155			14.4	29
tert-Butylbenzene	0.500	U	0.444	0.367	88.8	73.4	100	34.0-153			19.0	28
Carbon tetrachloride	0.500	U	0.503	0.388	101	77.6	100	23.0-159			25.8	28

L1501349-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1501349-14 06/13/22 00:10 • (MS) R3802431-3 06/13/22 01:12 • (MSD) R3802431-4 06/13/22 01:33

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chlorobenzene	0.500	U	0.459	0.363	91.8	72.6	100	33.0-152			23.4	27
Chlorodibromomethane	0.500	U	0.490	0.348	98.0	69.6	100	37.0-149		J3	33.9	27
Chloroethane	0.500	U	0.541	0.395	108	79.0	100	10.0-160		J3	31.2	30
Chloroform	0.500	U	0.485	0.351	97.0	70.2	100	29.0-154		J3	32.1	28
Chloromethane	0.500	U	0.456	0.358	91.2	71.6	100	10.0-160			24.1	29
2-Chlorotoluene	0.500	U	0.470	0.387	94.0	77.4	100	32.0-153			19.4	28
4-Chlorotoluene	0.500	U	0.438	0.361	87.6	72.2	100	32.0-150			19.3	28
1,2-Dibromo-3-Chloropropane	0.500	U	0.302	0.276	60.4	55.2	100	22.0-151			9.00	34
1,2-Dibromoethane	0.500	U	0.469	0.337	93.8	67.4	100	34.0-147		J3	32.8	27
Dibromomethane	0.500	U	0.438	0.335	87.6	67.0	100	30.0-151			26.6	27
1,2-Dichlorobenzene	0.500	U	0.469	0.360	93.8	72.0	100	34.0-149			26.3	28
1,3-Dichlorobenzene	0.500	U	0.432	0.369	86.4	73.8	100	36.0-146			15.7	27
1,4-Dichlorobenzene	0.500	U	0.451	0.358	90.2	71.6	100	35.0-142			23.0	27
Dichlorodifluoromethane	0.500	U	0.377	0.308	75.4	61.6	100	10.0-160			20.1	29
1,1-Dichloroethane	0.500	U	0.496	0.380	99.2	76.0	100	25.0-158			26.5	27
1,2-Dichloroethane	0.500	U	0.515	0.380	103	76.0	100	29.0-151		J3	30.2	27
1,1-Dichloroethene	0.500	U	0.443	0.333	88.6	66.6	100	11.0-160			28.4	29
cis-1,2-Dichloroethene	0.500	1.82	2.34	2.19	104	74.0	100	10.0-160			6.62	27
trans-1,2-Dichloroethene	0.500	U	0.426	0.323	85.2	64.6	100	17.0-153		J3	27.5	27
1,2-Dichloropropane	0.500	U	0.472	0.359	94.4	71.8	100	30.0-156		J3	27.2	27
1,1-Dichloropropene	0.500	U	0.431	0.312	86.2	62.4	100	25.0-158		J3	32.0	27
1,3-Dichloropropane	0.500	U	0.499	0.352	99.8	70.4	100	38.0-147		J3	34.5	27
cis-1,3-Dichloropropene	0.500	U	0.427	0.297	85.4	59.4	100	34.0-149		J3	35.9	28
trans-1,3-Dichloropropene	0.500	U	0.464	0.334	92.8	66.8	100	32.0-149		J3	32.6	28
2,2-Dichloropropane	0.500	U	0.494	0.366	98.8	73.2	100	24.0-152		J3	29.8	29
Ethylbenzene	0.500	U	0.437	0.341	87.4	68.2	100	30.0-155			24.7	27
Hexachloro-1,3-butadiene	0.500	U	0.388	0.326	77.6	65.2	100	20.0-154			17.4	34
n-Hexane	0.500	U	0.419	0.340	83.8	68.0	100	10.0-153			20.8	28
Isopropylbenzene	0.500	U	0.421	0.330	84.2	66.0	100	28.0-157			24.2	27
p-Isopropyltoluene	0.500	U	0.422	0.353	84.4	70.6	100	30.0-154			17.8	29
2-Butanone (MEK)	2.50	U	2.99	2.17	120	86.8	100	10.0-160			31.8	32
Methylene Chloride	0.500	U	0.436	0.345	87.2	69.0	100	23.0-144			23.3	28
4-Methyl-2-pentanone (MIBK)	2.50	U	3.39	2.34	136	93.6	100	29.0-160		J3	36.6	29
Methyl tert-butyl ether	0.500	U	0.412	0.290	82.4	58.0	100	28.0-150		J3	34.8	29
Naphthalene	0.500	U	0.191	0.202	38.2	40.4	100	12.0-156			5.60	35
n-Propylbenzene	0.500	U	0.441	0.368	88.2	73.6	100	31.0-154			18.0	28
Styrene	0.500	U	0.393	0.286	78.6	57.2	100	33.0-155		J3	31.5	28
1,1,1,2-Tetrachloroethane	0.500	U	0.488	0.364	97.6	72.8	100	36.0-151		J3	29.1	29
1,1,2,2-Tetrachloroethane	0.500	U	0.485	0.368	97.0	73.6	100	33.0-150			27.4	28
Tetrachloroethene	0.500	3.06	3.52	3.36	92.0	60.0	100	10.0-160			4.65	27

L1501349-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1501349-14 06/13/22 00:10 • (MS) R3802431-3 06/13/22 01:12 • (MSD) R3802431-4 06/13/22 01:33

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Toluene	0.500	U	0.471	0.363	94.2	72.6	100	26.0-154			25.9	28
1,2,3-Trichlorobenzene	0.500	U	0.336	0.303	67.2	60.6	100	17.0-150			10.3	36
1,2,4-Trichlorobenzene	0.500	U	0.284	0.233	56.8	46.6	100	24.0-150			19.7	33
1,1,1-Trichloroethane	0.500	U	0.503	0.382	101	76.4	100	23.0-160			27.3	28
1,1,2-Trichloroethane	0.500	U	0.493	0.363	98.6	72.6	100	35.0-147		J3	30.4	27
Trichloroethene	0.500	1.38	1.86	1.71	96.0	66.0	100	10.0-160			8.40	25
Trichlorofluoromethane	0.500	U	0.506	0.392	101	78.4	100	17.0-160			25.4	31
1,2,3-Trichloropropane	0.500	U	0.523	0.376	105	75.2	100	34.0-151		J3	32.7	29
1,2,4-Trimethylbenzene	0.500	U	0.415	0.332	83.0	66.4	100	26.0-154			22.2	27
1,3,5-Trimethylbenzene	0.500	U	0.449	0.396	89.8	79.2	100	28.0-153			12.5	27
Vinyl chloride	0.500	0.0867	0.577	0.477	98.1	78.1	100	10.0-160			19.0	27
Xylenes, Total	1.50	U	1.33	0.955	88.7	63.7	100	29.0-154		J3	32.8	28
(S) Toluene-d8					*111*	*111*		*80.0-120*				
(S) 4-Bromofluorobenzene					*99.2*	*97.9*		*77.0-126*				
(S) 1,2-Dichloroethane-d4					*125*	*123*		*70.0-130*				

Method Blank (MB)

(MB) R3803827-2 06/15/22 16:27

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C20 Hydrocarbons	U		0.610	4.00
C20-C34 Hydrocarbons	U		0.611	4.00
(S) o-Terphenyl	*79.6*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3803827-1 06/15/22 16:14

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C20 Hydrocarbons	25.0	18.8	75.2	50.0-150	
C20-C34 Hydrocarbons	25.0	17.0	68.0	50.0-150	
(S) o-Terphenyl			*68.5*	*18.0-148*	

Method Blank (MB)

(MB) R3801823-3 06/10/22 00:44

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Anthracene	U		0.0000190	0.0000500
Acenaphthene	U		0.0000190	0.0000500
Acenaphthylene	U		0.0000171	0.0000500
Benzo(a)anthracene	U		0.0000203	0.0000500
Benzo(a)pyrene	U		0.0000184	0.0000500
Benzo(b)fluoranthene	U		0.0000168	0.0000500
Benzo(g,h,i)perylene	U		0.0000184	0.0000500
Benzo(k)fluoranthene	U		0.0000202	0.0000500
Chrysene	U		0.0000179	0.0000500
Dibenz(a,h)anthracene	U		0.0000160	0.0000500
Fluoranthene	U		0.0000270	0.000100
Fluorene	U		0.0000169	0.0000500
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500
Naphthalene	U		0.0000917	0.000250
Phenanthrene	U		0.0000180	0.0000500
Pyrene	U		0.0000169	0.0000500
1-Methylnaphthalene	U		0.0000687	0.000250
2-Methylnaphthalene	U		0.0000674	0.000250
2-Chloronaphthalene	U		0.0000682	0.000250
(S) Nitrobenzene-d5	*119*			*31.0-160*
(S) 2-Fluorobiphenyl	*117*			*48.0-148*
(S) p-Terphenyl-d14	*136*			*37.0-146*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3801823-1 06/10/22 00:10 • (LCSD) R3801823-2 06/10/22 00:27

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Anthracene	0.00200	0.00176	0.00185	88.0	92.5	67.0-150			4.99	20
Acenaphthene	0.00200	0.00179	0.00187	89.5	93.5	65.0-138			4.37	20
Acenaphthylene	0.00200	0.00190	0.00198	95.0	99.0	66.0-140			4.12	20
Benzo(a)anthracene	0.00200	0.00177	0.00183	88.5	91.5	61.0-140			3.33	20
Benzo(a)pyrene	0.00200	0.00176	0.00183	88.0	91.5	60.0-143			3.90	20
Benzo(b)fluoranthene	0.00200	0.00175	0.00186	87.5	93.0	58.0-141			6.09	20
Benzo(g,h,i)perylene	0.00200	0.00162	0.00167	81.0	83.5	52.0-153			3.04	20
Benzo(k)fluoranthene	0.00200	0.00180	0.00184	90.0	92.0	58.0-148			2.20	20
Chrysene	0.00200	0.00179	0.00190	89.5	95.0	64.0-144			5.96	20
Dibenz(a,h)anthracene	0.00200	0.00151	0.00160	75.5	80.0	52.0-155			5.79	20
Fluoranthene	0.00200	0.00168	0.00178	84.0	89.0	69.0-153			5.78	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3801823-1 06/10/22 00:10 • (LCSD) R3801823-2 06/10/22 00:27

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Fluorene	0.00200	0.00182	0.00190	91.0	95.0	64.0-136			4.30	20
Indeno(1,2,3-cd)pyrene	0.00200	0.00164	0.00166	82.0	83.0	54.0-153			1.21	20
Naphthalene	0.00200	0.00174	0.00180	87.0	90.0	61.0-137			3.39	20
Phenanthrene	0.00200	0.00173	0.00184	86.5	92.0	62.0-137			6.16	20
Pyrene	0.00200	0.00187	0.00195	93.5	97.5	60.0-142			4.19	20
1-Methylnaphthalene	0.00200	0.00175	0.00181	87.5	90.5	66.0-142			3.37	20
2-Methylnaphthalene	0.00200	0.00169	0.00173	84.5	86.5	62.0-136			2.34	20
2-Chloronaphthalene	0.00200	0.00185	0.00192	92.5	96.0	64.0-140			3.71	20
(S) Nitrobenzene-d5				*0.000*	*0.000*	*31.0-160*	J2	J2		
(S) 2-Fluorobiphenyl				*0.000*	*0.000*	*48.0-148*	J2	J2		
(S) p-Terphenyl-d14				*0.000*	*0.000*	*37.0-146*	J2	J2		

Method Blank (MB)

(MB) R3803406-2 06/14/22 18:35

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Anthracene	U		0.00230	0.00600
Acenaphthene	U		0.00209	0.00600
Acenaphthylene	U		0.00216	0.00600
Benzo(a)anthracene	U		0.00173	0.00600
Benzo(a)pyrene	U		0.00179	0.00600
Benzo(b)fluoranthene	U		0.00153	0.00600
Benzo(g,h,i)perylene	U		0.00177	0.00600
Benzo(k)fluoranthene	U		0.00215	0.00600
Chrysene	U		0.00232	0.00600
Dibenz(a,h)anthracene	U		0.00172	0.00600
Fluoranthene	U		0.00227	0.00600
Fluorene	U		0.00205	0.00600
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600
Naphthalene	U		0.00408	0.0200
Phenanthrene	U		0.00231	0.00600
Pyrene	U		0.00200	0.00600
1-Methylnaphthalene	U		0.00449	0.0200
2-Methylnaphthalene	U		0.00427	0.0200
2-Chloronaphthalene	U		0.00466	0.0200
(S) Nitrobenzene-d5	*74.7*			*14.0-149*
(S) 2-Fluorobiphenyl	*78.7*			*34.0-125*
(S) p-Terphenyl-d14	*83.8*			*23.0-120*

Laboratory Control Sample (LCS)

(LCS) R3803406-1 06/14/22 18:15

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0603	75.4	50.0-126	
Acenaphthene	0.0800	0.0631	78.9	50.0-120	
Acenaphthylene	0.0800	0.0611	76.4	50.0-120	
Benzo(a)anthracene	0.0800	0.0590	73.8	45.0-120	
Benzo(a)pyrene	0.0800	0.0630	78.8	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0645	80.6	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0612	76.5	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0649	81.1	49.0-125	
Chrysene	0.0800	0.0648	81.0	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0614	76.8	47.0-125	
Fluoranthene	0.0800	0.0630	78.8	49.0-129	

Laboratory Control Sample (LCS)

(LCS) R3803406-1 06/14/22 18:15

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluorene	0.0800	0.0627	78.4	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0621	77.6	46.0-125	
Naphthalene	0.0800	0.0606	75.8	50.0-120	
Phenanthrene	0.0800	0.0591	73.9	47.0-120	
Pyrene	0.0800	0.0645	80.6	43.0-123	
1-Methylnaphthalene	0.0800	0.0613	76.6	51.0-121	
2-Methylnaphthalene	0.0800	0.0635	79.4	50.0-120	
2-Chloronaphthalene	0.0800	0.0621	77.6	50.0-120	
(S) Nitrobenzene-d5			*82.9*	*14.0-149*	
(S) 2-Fluorobiphenyl			*84.8*	*34.0-125*	
(S) p-Terphenyl-d14			*87.4*	*23.0-120*	

L1501507-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1501507-02 06/14/22 23:50 • (MS) R3803406-3 06/15/22 00:09 • (MSD) R3803406-4 06/15/22 00:29

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Anthracene	0.0933	0.0407	0.0878	0.0913	50.5	54.3	1	10.0-145			3.93	30
Acenaphthene	0.0933	0.0386	0.0926	0.0991	57.9	64.9	1	14.0-127			6.85	27
Acenaphthylene	0.0933	0.0150	0.0787	0.0805	68.3	70.2	1	21.0-124			2.21	25
Benzo(a)anthracene	0.0933	0.182	0.187	0.197	6.28	16.3	1	10.0-139	J6		4.88	30
Benzo(a)pyrene	0.0933	0.236	0.198	0.200	0.000	0.000	1	10.0-141	J6	J6	1.18	31
Benzo(b)fluoranthene	0.0933	0.185	0.182	0.178	0.000	0.000	1	10.0-140	J6	J6	1.95	36
Benzo(g,h,i)perylene	0.0933	0.250	0.173	0.186	0.000	0.000	1	10.0-140	J6	J6	7.17	33
Benzo(k)fluoranthene	0.0933	0.0625	0.103	0.0962	44.0	36.2	1	10.0-137			7.28	31
Chrysene	0.0933	0.164	0.180	0.184	17.6	21.4	1	10.0-145			1.93	30
Dibenz(a,h)anthracene	0.0933	0.0932	0.0872	0.0919	0.000	0.000	1	10.0-132	J6	J6	5.24	31
Fluoranthene	0.0933	0.252	0.254	0.248	2.51	0.000	1	10.0-153	J6	J6	2.33	33
Fluorene	0.0933	0.0509	0.0977	0.101	50.3	53.8	1	11.0-130			3.30	29
Indeno(1,2,3-cd)pyrene	0.0933	0.150	0.151	0.146	1.26	0.000	1	10.0-137	J6	J6	3.15	32
Naphthalene	0.0933	0.0982	0.124	0.125	27.9	29.1	1	10.0-135			0.939	27
Phenanthrene	0.0933	0.236	0.211	0.211	0.000	0.000	1	10.0-144	J6	J6	0.000	31
Pyrene	0.0933	0.336	0.284	0.323	0.000	0.000	1	10.0-148	J6	J6	13.1	35
1-Methylnaphthalene	0.0933	0.132	0.143	0.142	11.3	10.1	1	10.0-142			0.823	28
2-Methylnaphthalene	0.0933	0.171	0.162	0.163	0.000	0.000	1	10.0-137	J6	J6	0.722	28
2-Chloronaphthalene	0.0933	U	0.0623	0.0642	66.8	68.8	1	29.0-120			2.96	24
(S) Nitrobenzene-d5					*87.2*	*91.7*		*14.0-149*				
(S) 2-Fluorobiphenyl					*70.2*	*74.1*		*34.0-125*				
(S) p-Terphenyl-d14					*72.2*	*77.6*		*23.0-120*				

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Partners Environmental Consulting, Inc.
31100 Solon Road, Suite G
Solon, OH 44319

Billing Information:
Partners Environmental Consulting, Inc.
31100 Solon Road, Suite G
Solon, OH 44319

Report to: VALERIE WEIR
Email To: TWEIR VWEIR@PARTNERSENV.COM

Project Description: 2700 TRANSPORT ROAD
City/State Collected: CLEVELAND OH

Phone: **800-763-1363**
Fax:

Client Project # 2093.07
Lab Project #

Collected by (print): TOM WEIR
Site/Facility ID #
P.O. #

Collected by (signature):
Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day
Date Results Needed
Quote #

Pres Chk

Analysis / Container / Preservative: VOCs 8260 | PAHs 8270 | TPHC6-C34 8015

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs 8260	PAHs 8270	TPHC6-C34 8015	Remarks	Sample # (lab only)
SB-107 (4-6FT)	GRAB	SS	4-6	6/2/22	0850	2	X	X	X		01
MW-104 (6-8FT)			6-8		0915	2	X	X	X		02
SB-104 (0-2FT)			0-2		1140	2	X	X	X		03
SB-105 (2-4FT)			2-4		1330	2	X	X	X		04
SB-105 DUPLICATE (2-4FT)			2-4		1330	2	X	X	X		05
MW-102 (0-2FT)			0-2		1410	2	X	X	X		06
EQP-02		OT	—		1530	4	X	X			07
TRIP BLANK-03	LAB	LAB	—		0800	1	X				08

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other DI WATER

Remarks: OHIO VAP PROTOCOL

pH ____ Temp ____
Flow ____ Other ____

Samples returned via:
__ UPS __ FedEx __ Courier __ ____

Tracking # 5349 7812 8672

Relinquished by : (Signature) — Date: 6/3/22 — Time: 1505 — Received by: (Signature)

Relinquished by : (Signature) PNCOH — Date: 3JUN22 — Time: 1700 — Received by: (Signature) FEDEX

Relinquished by : (Signature) — Date: — Time: — Received for lab by: (Signature) Matt Lin — Date: 6/4/22 — Time: 0930

Trip Blank Received: (Yes) / No — (HCl) / MeOH — TBR — 1

Temp: RRA7 °C — Bottles Received: 1.0+0=1.0 16

If preservation required by Login: Date/Time

Hold:

Condition: NCF / (OK)

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N

Chain of Custody Page 1 of 1

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# L1501567
E109

Acctnum: **PARENVOH**
Template:
Prelogin:
TSR:
PB:
Shipped Via:

ANALYTICAL REPORT

June 19, 2022

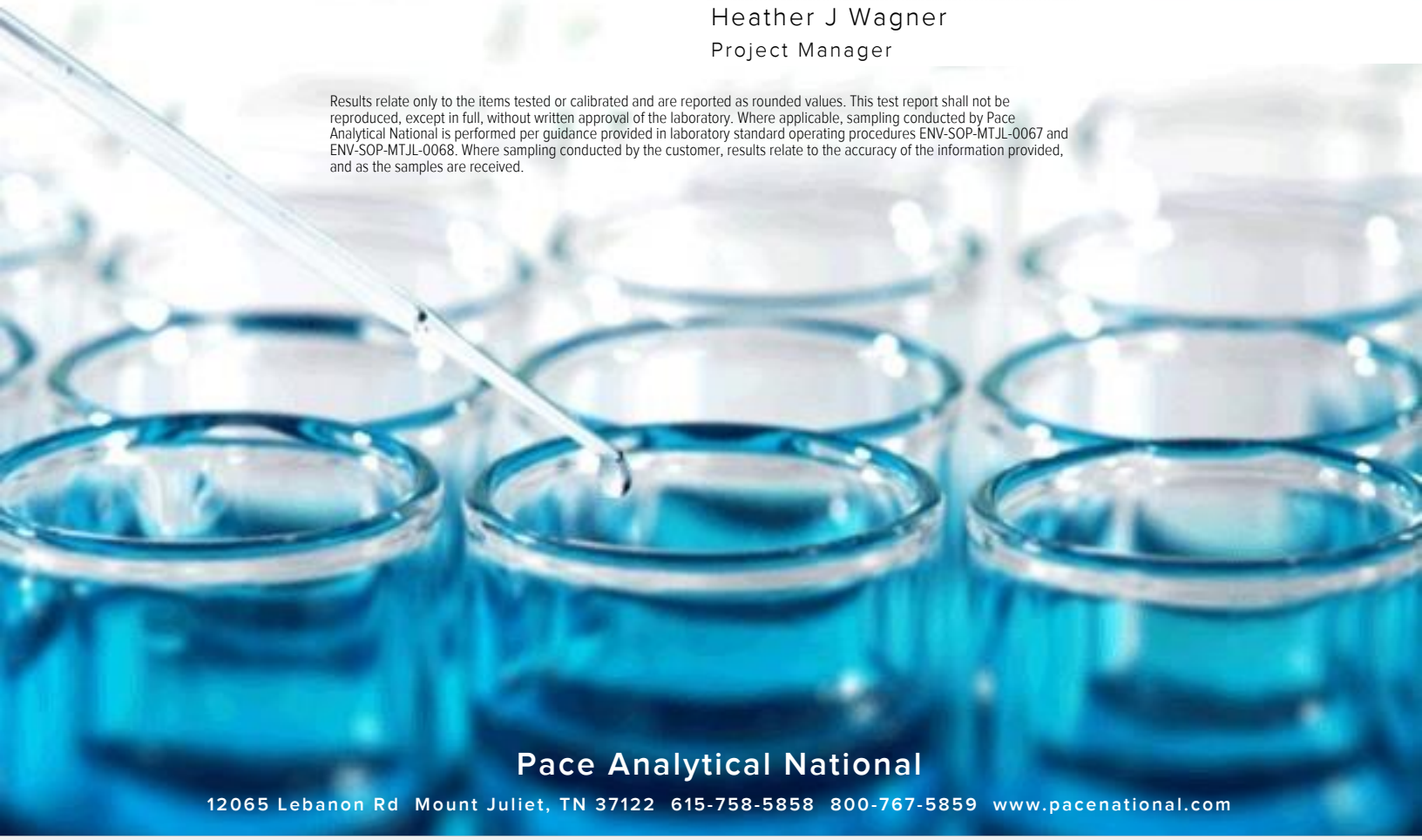
Partners Env. Consulting - Solon, OH

Sample Delivery Group:	L1503859
Samples Received:	06/10/2022
Project Number:	2093.07
Description:	2700 Transport Road

Report To: Valerie Weir
31100 Solon Road, Ste. G
Solon, OH 44139

Entire Report Reviewed By:

Heather J Wagner
Project Manager



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MW-104 L1503859-01 GW

Collected by: Tom Weir | Collected date/time: 06/08/22 15:00 | Received date/time: 06/10/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1880869	1	06/17/22 05:21	06/17/22 05:21	ACG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1879115	10	06/15/22 16:28	06/16/22 13:59	ADF	Mt. Juliet, TN

MW-103 L1503859-02 GW

Collected by: Tom Weir | Collected date/time: 06/08/22 15:10 | Received date/time: 06/10/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1880869	1	06/17/22 05:43	06/17/22 05:43	ACG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1879115	1	06/15/22 16:28	06/16/22 10:42	ADF	Mt. Juliet, TN

MW-101 L1503859-03 GW

Collected by: Tom Weir | Collected date/time: 06/08/22 15:25 | Received date/time: 06/10/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1880869	1	06/17/22 06:05	06/17/22 06:05	ACG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1879115	1	06/15/22 16:28	06/16/22 13:23	AMM	Mt. Juliet, TN

MW-102 L1503859-04 GW

Collected by: Tom Weir | Collected date/time: 06/08/22 15:40 | Received date/time: 06/10/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1880869	1	06/17/22 06:27	06/17/22 06:27	ACG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1879115	1	06/15/22 16:28	06/17/22 10:36	AMM	Mt. Juliet, TN

MW-108 L1503859-05 GW

Collected by: Tom Weir | Collected date/time: 06/09/22 12:30 | Received date/time: 06/10/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1880869	1	06/17/22 06:49	06/17/22 06:49	ACG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1879813	1	06/15/22 16:32	06/16/22 13:14	AMG	Mt. Juliet, TN

MW-109 L1503859-06 GW

Collected by: Tom Weir | Collected date/time: 06/09/22 12:40 | Received date/time: 06/10/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1880869	1	06/17/22 07:11	06/17/22 07:11	ACG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1879813	1	06/15/22 16:32	06/16/22 13:31	AMG	Mt. Juliet, TN

MW-110 L1503859-07 GW

Collected by: Tom Weir | Collected date/time: 06/09/22 12:55 | Received date/time: 06/10/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1881176	1	06/17/22 15:35	06/17/22 15:35	ADM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1879813	1	06/15/22 16:32	06/16/22 13:49	AMG	Mt. Juliet, TN

MW-107 L1503859-08 GW

Collected by: Tom Weir | Collected date/time: 06/09/22 13:05 | Received date/time: 06/10/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1880869	1	06/17/22 07:32	06/17/22 07:32	ACG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1879813	1	06/15/22 16:32	06/16/22 14:06	AMG	Mt. Juliet, TN

MW-106 L1503859-09 GW

Collected by: Tom Weir | Collected date/time: 06/09/22 13:20 | Received date/time: 06/10/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1880869	20	06/17/22 08:59	06/17/22 08:59	ACG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1879813	1	06/15/22 16:32	06/16/22 14:23	AMM	Mt. Juliet, TN

MW-108 DUPLICATE L1503859-10 GW

Collected by: Tom Weir | Collected date/time: 06/09/22 12:30 | Received date/time: 06/10/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1880869	1	06/17/22 07:54	06/17/22 07:54	ACG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1879813	1	06/15/22 16:32	06/16/22 14:41	AMG	Mt. Juliet, TN

EQP-03 L1503859-11 GW

Collected by: Tom Weir | Collected date/time: 06/09/22 13:50 | Received date/time: 06/10/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1880869	1	06/17/22 08:16	06/17/22 08:16	ACG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1879813	1	06/15/22 16:32	06/16/22 14:58	AMM	Mt. Juliet, TN

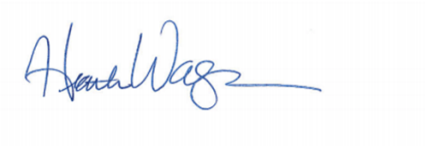
TRIP BLANK-04 L1503859-12 GW

Collected by: Tom Weir | Collected date/time: 06/08/22 14:30 | Received date/time: 06/10/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1880869	1	06/17/22 02:49	06/17/22 02:49	ACG	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Heather J Wagner
Project Manager

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U		0.0113	0.0500	1	06/17/2022 05:21	WG1880869
Acrolein	U		0.00254	0.0500	1	06/17/2022 05:21	WG1880869
Acrylonitrile	U		0.000671	0.0100	1	06/17/2022 05:21	WG1880869
Benzene	0.00321		0.0000941	0.00100	1	06/17/2022 05:21	WG1880869
Bromobenzene	U		0.000118	0.00100	1	06/17/2022 05:21	WG1880869
Bromodichloromethane	U		0.000136	0.00100	1	06/17/2022 05:21	WG1880869
Bromoform	U		0.000129	0.00100	1	06/17/2022 05:21	WG1880869
Bromomethane	U		0.000605	0.00500	1	06/17/2022 05:21	WG1880869
n-Butylbenzene	U		0.000157	0.00100	1	06/17/2022 05:21	WG1880869
sec-Butylbenzene	0.000342	J	0.000125	0.00100	1	06/17/2022 05:21	WG1880869
tert-Butylbenzene	0.00114		0.000127	0.00100	1	06/17/2022 05:21	WG1880869
Carbon tetrachloride	U		0.000128	0.00100	1	06/17/2022 05:21	WG1880869
Chlorobenzene	U		0.000116	0.00100	1	06/17/2022 05:21	WG1880869
Chlorodibromomethane	U		0.000140	0.00100	1	06/17/2022 05:21	WG1880869
Chloroethane	U		0.000192	0.00500	1	06/17/2022 05:21	WG1880869
Chloroform	U		0.000111	0.00500	1	06/17/2022 05:21	WG1880869
Chloromethane	U		0.000960	0.00250	1	06/17/2022 05:21	WG1880869
2-Chlorotoluene	U		0.000106	0.00100	1	06/17/2022 05:21	WG1880869
4-Chlorotoluene	U		0.000114	0.00100	1	06/17/2022 05:21	WG1880869
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	06/17/2022 05:21	WG1880869
1,2-Dibromoethane	U		0.000126	0.00100	1	06/17/2022 05:21	WG1880869
Dibromomethane	U		0.000122	0.00100	1	06/17/2022 05:21	WG1880869
1,2-Dichlorobenzene	U		0.000107	0.00100	1	06/17/2022 05:21	WG1880869
1,3-Dichlorobenzene	U		0.000110	0.00100	1	06/17/2022 05:21	WG1880869
1,4-Dichlorobenzene	U		0.000120	0.00100	1	06/17/2022 05:21	WG1880869
Dichlorodifluoromethane	U		0.000374	0.00500	1	06/17/2022 05:21	WG1880869
1,1-Dichloroethane	U		0.000100	0.00100	1	06/17/2022 05:21	WG1880869
1,2-Dichloroethane	U		0.0000819	0.00100	1	06/17/2022 05:21	WG1880869
1,1-Dichloroethene	U		0.000188	0.00100	1	06/17/2022 05:21	WG1880869
cis-1,2-Dichloroethene	0.000288	J	0.000126	0.00100	1	06/17/2022 05:21	WG1880869
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	06/17/2022 05:21	WG1880869
1,2-Dichloropropane	U		0.000149	0.00100	1	06/17/2022 05:21	WG1880869
1,1-Dichloropropene	U		0.000142	0.00100	1	06/17/2022 05:21	WG1880869
1,3-Dichloropropane	U		0.000110	0.00100	1	06/17/2022 05:21	WG1880869
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	06/17/2022 05:21	WG1880869
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	06/17/2022 05:21	WG1880869
2,2-Dichloropropane	U		0.000161	0.00100	1	06/17/2022 05:21	WG1880869
Ethylbenzene	U		0.000137	0.00100	1	06/17/2022 05:21	WG1880869
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	06/17/2022 05:21	WG1880869
n-Hexane	U		0.000749	0.0100	1	06/17/2022 05:21	WG1880869
Isopropylbenzene	U		0.000105	0.00100	1	06/17/2022 05:21	WG1880869
p-Isopropyltoluene	U		0.000120	0.00100	1	06/17/2022 05:21	WG1880869
2-Butanone (MEK)	U		0.00119	0.0100	1	06/17/2022 05:21	WG1880869
Methylene Chloride	U		0.000430	0.00500	1	06/17/2022 05:21	WG1880869
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	06/17/2022 05:21	WG1880869
Methyl tert-butyl ether	0.000247	J	0.000101	0.00100	1	06/17/2022 05:21	WG1880869
Naphthalene	U		0.00100	0.00500	1	06/17/2022 05:21	WG1880869
n-Propylbenzene	U		0.0000993	0.00100	1	06/17/2022 05:21	WG1880869
Styrene	U		0.000118	0.00100	1	06/17/2022 05:21	WG1880869
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	06/17/2022 05:21	WG1880869
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	06/17/2022 05:21	WG1880869
Tetrachloroethene	U		0.000300	0.00100	1	06/17/2022 05:21	WG1880869
Toluene	U		0.000278	0.00100	1	06/17/2022 05:21	WG1880869
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	06/17/2022 05:21	WG1880869
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	06/17/2022 05:21	WG1880869
1,1,1-Trichloroethane	U		0.000149	0.00100	1	06/17/2022 05:21	WG1880869

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.000158	0.00100	1	06/17/2022 05:21	WG1880869
Trichloroethene	U		0.000190	0.00100	1	06/17/2022 05:21	WG1880869
Trichlorofluoromethane	U		0.000160	0.00500	1	06/17/2022 05:21	WG1880869
1,2,3-Trichloropropane	U		0.000237	0.00250	1	06/17/2022 05:21	WG1880869
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	06/17/2022 05:21	WG1880869
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	06/17/2022 05:21	WG1880869
Vinyl chloride	0.000662	J	0.000234	0.00100	1	06/17/2022 05:21	WG1880869
Xylenes, Total	0.000276	J	0.000174	0.00300	1	06/17/2022 05:21	WG1880869
(S) Toluene-d8	*109*			*80.0-120*		*06/17/2022 05:21*	WG1880869
(S) 4-Bromofluorobenzene	*108*			*77.0-126*		*06/17/2022 05:21*	WG1880869
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*06/17/2022 05:21*	WG1880869

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	U		0.000190	0.000500	10	06/16/2022 13:59	WG1879115
Acenaphthene	0.00622		0.000190	0.000500	10	06/16/2022 13:59	WG1879115
Acenaphthylene	U		0.000171	0.000500	10	06/16/2022 13:59	WG1879115
Benzo(a)anthracene	0.000515		0.000203	0.000500	10	06/16/2022 13:59	WG1879115
Benzo(a)pyrene	0.000522		0.000184	0.000500	10	06/16/2022 13:59	WG1879115
Benzo(b)fluoranthene	0.000465	J	0.000168	0.000500	10	06/16/2022 13:59	WG1879115
Benzo(g,h,i)perylene	0.00105		0.000184	0.000500	10	06/16/2022 13:59	WG1879115
Benzo(k)fluoranthene	U		0.000202	0.000500	10	06/16/2022 13:59	WG1879115
Chrysene	0.000456	J	0.000179	0.000500	10	06/16/2022 13:59	WG1879115
Dibenz(a,h)anthracene	0.000370	J	0.000160	0.000500	10	06/16/2022 13:59	WG1879115
Fluoranthene	0.000751	J	0.000270	0.00100	10	06/16/2022 13:59	WG1879115
Fluorene	0.00336		0.000169	0.000500	10	06/16/2022 13:59	WG1879115
Indeno(1,2,3-cd)pyrene	0.000554		0.000158	0.000500	10	06/16/2022 13:59	WG1879115
Naphthalene	U		0.000917	0.00250	10	06/16/2022 13:59	WG1879115
Phenanthrene	0.000661		0.000180	0.000500	10	06/16/2022 13:59	WG1879115
Pyrene	0.00104		0.000169	0.000500	10	06/16/2022 13:59	WG1879115
1-Methylnaphthalene	0.00462		0.000687	0.00250	10	06/16/2022 13:59	WG1879115
2-Methylnaphthalene	U		0.000674	0.00250	10	06/16/2022 13:59	WG1879115
2-Chloronaphthalene	U		0.000682	0.00250	10	06/16/2022 13:59	WG1879115
(S) Nitrobenzene-d5	*55.8*			*31.0-160*		*06/16/2022 13:59*	WG1879115
(S) 2-Fluorobiphenyl	*79.5*			*48.0-148*		*06/16/2022 13:59*	WG1879115
(S) p-Terphenyl-d14	*113*			*37.0-146*		*06/16/2022 13:59*	WG1879115

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	0.0261	J	0.0113	0.0500	1	06/17/2022 05:43	WG1880869
Acrolein	U		0.00254	0.0500	1	06/17/2022 05:43	WG1880869
Acrylonitrile	U		0.000671	0.0100	1	06/17/2022 05:43	WG1880869
Benzene	U		0.0000941	0.00100	1	06/17/2022 05:43	WG1880869
Bromobenzene	U		0.000118	0.00100	1	06/17/2022 05:43	WG1880869
Bromodichloromethane	U		0.000136	0.00100	1	06/17/2022 05:43	WG1880869
Bromoform	U		0.000129	0.00100	1	06/17/2022 05:43	WG1880869
Bromomethane	U		0.000605	0.00500	1	06/17/2022 05:43	WG1880869
n-Butylbenzene	U		0.000157	0.00100	1	06/17/2022 05:43	WG1880869
sec-Butylbenzene	U		0.000125	0.00100	1	06/17/2022 05:43	WG1880869
tert-Butylbenzene	U		0.000127	0.00100	1	06/17/2022 05:43	WG1880869
Carbon tetrachloride	U		0.000128	0.00100	1	06/17/2022 05:43	WG1880869
Chlorobenzene	U		0.000116	0.00100	1	06/17/2022 05:43	WG1880869
Chlorodibromomethane	U		0.000140	0.00100	1	06/17/2022 05:43	WG1880869
Chloroethane	U		0.000192	0.00500	1	06/17/2022 05:43	WG1880869
Chloroform	U		0.000111	0.00500	1	06/17/2022 05:43	WG1880869
Chloromethane	U		0.000960	0.00250	1	06/17/2022 05:43	WG1880869
2-Chlorotoluene	U		0.000106	0.00100	1	06/17/2022 05:43	WG1880869
4-Chlorotoluene	U		0.000114	0.00100	1	06/17/2022 05:43	WG1880869
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	06/17/2022 05:43	WG1880869
1,2-Dibromoethane	U		0.000126	0.00100	1	06/17/2022 05:43	WG1880869
Dibromomethane	U		0.000122	0.00100	1	06/17/2022 05:43	WG1880869
1,2-Dichlorobenzene	U		0.000107	0.00100	1	06/17/2022 05:43	WG1880869
1,3-Dichlorobenzene	U		0.000110	0.00100	1	06/17/2022 05:43	WG1880869
1,4-Dichlorobenzene	U		0.000120	0.00100	1	06/17/2022 05:43	WG1880869
Dichlorodifluoromethane	U		0.000374	0.00500	1	06/17/2022 05:43	WG1880869
1,1-Dichloroethane	U		0.000100	0.00100	1	06/17/2022 05:43	WG1880869
1,2-Dichloroethane	U		0.0000819	0.00100	1	06/17/2022 05:43	WG1880869
1,1-Dichloroethene	U		0.000188	0.00100	1	06/17/2022 05:43	WG1880869
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	06/17/2022 05:43	WG1880869
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	06/17/2022 05:43	WG1880869
1,2-Dichloropropane	U		0.000149	0.00100	1	06/17/2022 05:43	WG1880869
1,1-Dichloropropene	U		0.000142	0.00100	1	06/17/2022 05:43	WG1880869
1,3-Dichloropropane	U		0.000110	0.00100	1	06/17/2022 05:43	WG1880869
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	06/17/2022 05:43	WG1880869
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	06/17/2022 05:43	WG1880869
2,2-Dichloropropane	U		0.000161	0.00100	1	06/17/2022 05:43	WG1880869
Ethylbenzene	U		0.000137	0.00100	1	06/17/2022 05:43	WG1880869
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	06/17/2022 05:43	WG1880869
n-Hexane	U		0.000749	0.0100	1	06/17/2022 05:43	WG1880869
Isopropylbenzene	U		0.000105	0.00100	1	06/17/2022 05:43	WG1880869
p-Isopropyltoluene	0.00356		0.000120	0.00100	1	06/17/2022 05:43	WG1880869
2-Butanone (MEK)	U		0.00119	0.0100	1	06/17/2022 05:43	WG1880869
Methylene Chloride	U		0.000430	0.00500	1	06/17/2022 05:43	WG1880869
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	06/17/2022 05:43	WG1880869
Methyl tert-butyl ether	U		0.000101	0.00100	1	06/17/2022 05:43	WG1880869
Naphthalene	U		0.00100	0.00500	1	06/17/2022 05:43	WG1880869
n-Propylbenzene	U		0.0000993	0.00100	1	06/17/2022 05:43	WG1880869
Styrene	U		0.000118	0.00100	1	06/17/2022 05:43	WG1880869
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	06/17/2022 05:43	WG1880869
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	06/17/2022 05:43	WG1880869
Tetrachloroethene	U		0.000300	0.00100	1	06/17/2022 05:43	WG1880869
Toluene	U		0.000278	0.00100	1	06/17/2022 05:43	WG1880869
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	06/17/2022 05:43	WG1880869
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	06/17/2022 05:43	WG1880869
1,1,1-Trichloroethane	U		0.000149	0.00100	1	06/17/2022 05:43	WG1880869

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
1,1,2-Trichloroethane	U		0.000158	0.00100	1	06/17/2022 05:43	WG1880869
Trichloroethene	U		0.000190	0.00100	1	06/17/2022 05:43	WG1880869
Trichlorofluoromethane	U		0.000160	0.00500	1	06/17/2022 05:43	WG1880869
1,2,3-Trichloropropane	U		0.000237	0.00250	1	06/17/2022 05:43	WG1880869
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	06/17/2022 05:43	WG1880869
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	06/17/2022 05:43	WG1880869
Vinyl chloride	U		0.000234	0.00100	1	06/17/2022 05:43	WG1880869
Xylenes, Total	U		0.000174	0.00300	1	06/17/2022 05:43	WG1880869
(S) Toluene-d8	*104*			*80.0-120*		*06/17/2022 05:43*	WG1880869
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*06/17/2022 05:43*	WG1880869
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*06/17/2022 05:43*	WG1880869

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Anthracene	0.0000434	J	0.0000190	0.0000500	1	06/16/2022 10:42	WG1879115
Acenaphthene	0.000269		0.0000190	0.0000500	1	06/16/2022 10:42	WG1879115
Acenaphthylene	U		0.0000171	0.0000500	1	06/16/2022 10:42	WG1879115
Benzo(a)anthracene	U		0.0000203	0.0000500	1	06/16/2022 10:42	WG1879115
Benzo(a)pyrene	U		0.0000184	0.0000500	1	06/16/2022 10:42	WG1879115
Benzo(b)fluoranthene	U		0.0000168	0.0000500	1	06/16/2022 10:42	WG1879115
Benzo(g,h,i)perylene	U		0.0000184	0.0000500	1	06/16/2022 10:42	WG1879115
Benzo(k)fluoranthene	U		0.0000202	0.0000500	1	06/16/2022 10:42	WG1879115
Chrysene	U		0.0000179	0.0000500	1	06/16/2022 10:42	WG1879115
Dibenz(a,h)anthracene	U		0.0000160	0.0000500	1	06/16/2022 10:42	WG1879115
Fluoranthene	0.0000945	J	0.0000270	0.000100	1	06/16/2022 10:42	WG1879115
Fluorene	0.000125		0.0000169	0.0000500	1	06/16/2022 10:42	WG1879115
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500	1	06/16/2022 10:42	WG1879115
Naphthalene	U		0.0000917	0.000250	1	06/16/2022 10:42	WG1879115
Phenanthrene	0.000149		0.0000180	0.0000500	1	06/16/2022 10:42	WG1879115
Pyrene	0.000195		0.0000169	0.0000500	1	06/16/2022 10:42	WG1879115
1-Methylnaphthalene	U		0.0000687	0.000250	1	06/16/2022 10:42	WG1879115
2-Methylnaphthalene	U		0.0000674	0.000250	1	06/16/2022 10:42	WG1879115
2-Chloronaphthalene	U		0.0000682	0.000250	1	06/16/2022 10:42	WG1879115
(S) Nitrobenzene-d5	*225*	J1		*31.0-160*		*06/16/2022 10:42*	WG1879115
(S) 2-Fluorobiphenyl	*93.2*			*48.0-148*		*06/16/2022 10:42*	WG1879115
(S) p-Terphenyl-d14	*117*			*37.0-146*		*06/16/2022 10:42*	WG1879115

Sample Narrative:

L1503859-02 WG1879115: Surrogate failure due to matrix interference

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	0.0135	J	0.0113	0.0500	1	06/17/2022 06:05	WG1880869
Acrolein	U		0.00254	0.0500	1	06/17/2022 06:05	WG1880869
Acrylonitrile	U		0.000671	0.0100	1	06/17/2022 06:05	WG1880869
Benzene	0.000437	J	0.0000941	0.00100	1	06/17/2022 06:05	WG1880869
Bromobenzene	U		0.000118	0.00100	1	06/17/2022 06:05	WG1880869
Bromodichloromethane	U		0.000136	0.00100	1	06/17/2022 06:05	WG1880869
Bromoform	U		0.000129	0.00100	1	06/17/2022 06:05	WG1880869
Bromomethane	U		0.000605	0.00500	1	06/17/2022 06:05	WG1880869
n-Butylbenzene	U		0.000157	0.00100	1	06/17/2022 06:05	WG1880869
sec-Butylbenzene	0.000185	J	0.000125	0.00100	1	06/17/2022 06:05	WG1880869
tert-Butylbenzene	0.000650	J	0.000127	0.00100	1	06/17/2022 06:05	WG1880869
Carbon tetrachloride	U		0.000128	0.00100	1	06/17/2022 06:05	WG1880869
Chlorobenzene	U		0.000116	0.00100	1	06/17/2022 06:05	WG1880869
Chlorodibromomethane	U		0.000140	0.00100	1	06/17/2022 06:05	WG1880869
Chloroethane	U		0.000192	0.00500	1	06/17/2022 06:05	WG1880869
Chloroform	U		0.000111	0.00500	1	06/17/2022 06:05	WG1880869
Chloromethane	U		0.000960	0.00250	1	06/17/2022 06:05	WG1880869
2-Chlorotoluene	U		0.000106	0.00100	1	06/17/2022 06:05	WG1880869
4-Chlorotoluene	U		0.000114	0.00100	1	06/17/2022 06:05	WG1880869
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	06/17/2022 06:05	WG1880869
1,2-Dibromoethane	U		0.000126	0.00100	1	06/17/2022 06:05	WG1880869
Dibromomethane	U		0.000122	0.00100	1	06/17/2022 06:05	WG1880869
1,2-Dichlorobenzene	U		0.000107	0.00100	1	06/17/2022 06:05	WG1880869
1,3-Dichlorobenzene	U		0.000110	0.00100	1	06/17/2022 06:05	WG1880869
1,4-Dichlorobenzene	U		0.000120	0.00100	1	06/17/2022 06:05	WG1880869
Dichlorodifluoromethane	U		0.000374	0.00500	1	06/17/2022 06:05	WG1880869
1,1-Dichloroethane	U		0.000100	0.00100	1	06/17/2022 06:05	WG1880869
1,2-Dichloroethane	U		0.0000819	0.00100	1	06/17/2022 06:05	WG1880869
1,1-Dichloroethene	U		0.000188	0.00100	1	06/17/2022 06:05	WG1880869
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	06/17/2022 06:05	WG1880869
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	06/17/2022 06:05	WG1880869
1,2-Dichloropropane	U		0.000149	0.00100	1	06/17/2022 06:05	WG1880869
1,1-Dichloropropene	U		0.000142	0.00100	1	06/17/2022 06:05	WG1880869
1,3-Dichloropropane	U		0.000110	0.00100	1	06/17/2022 06:05	WG1880869
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	06/17/2022 06:05	WG1880869
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	06/17/2022 06:05	WG1880869
2,2-Dichloropropane	U		0.000161	0.00100	1	06/17/2022 06:05	WG1880869
Ethylbenzene	U		0.000137	0.00100	1	06/17/2022 06:05	WG1880869
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	06/17/2022 06:05	WG1880869
n-Hexane	U		0.000749	0.0100	1	06/17/2022 06:05	WG1880869
Isopropylbenzene	U		0.000105	0.00100	1	06/17/2022 06:05	WG1880869
p-Isopropyltoluene	U		0.000120	0.00100	1	06/17/2022 06:05	WG1880869
2-Butanone (MEK)	U		0.00119	0.0100	1	06/17/2022 06:05	WG1880869
Methylene Chloride	U		0.000430	0.00500	1	06/17/2022 06:05	WG1880869
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	06/17/2022 06:05	WG1880869
Methyl tert-butyl ether	U		0.000101	0.00100	1	06/17/2022 06:05	WG1880869
Naphthalene	U		0.00100	0.00500	1	06/17/2022 06:05	WG1880869
n-Propylbenzene	U		0.0000993	0.00100	1	06/17/2022 06:05	WG1880869
Styrene	U		0.000118	0.00100	1	06/17/2022 06:05	WG1880869
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	06/17/2022 06:05	WG1880869
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	06/17/2022 06:05	WG1880869
Tetrachloroethene	U		0.000300	0.00100	1	06/17/2022 06:05	WG1880869
Toluene	0.000517	J	0.000278	0.00100	1	06/17/2022 06:05	WG1880869
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	06/17/2022 06:05	WG1880869
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	06/17/2022 06:05	WG1880869
1,1,1-Trichloroethane	U		0.000149	0.00100	1	06/17/2022 06:05	WG1880869

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.000158	0.00100	1	06/17/2022 06:05	WG1880869
Trichloroethene	U		0.000190	0.00100	1	06/17/2022 06:05	WG1880869
Trichlorofluoromethane	U		0.000160	0.00500	1	06/17/2022 06:05	WG1880869
1,2,3-Trichloropropane	U		0.000237	0.00250	1	06/17/2022 06:05	WG1880869
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	06/17/2022 06:05	WG1880869
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	06/17/2022 06:05	WG1880869
Vinyl chloride	U		0.000234	0.00100	1	06/17/2022 06:05	WG1880869
Xylenes, Total	0.000898	J	0.000174	0.00300	1	06/17/2022 06:05	WG1880869
(S) Toluene-d8	*106*			*80.0-120*		*06/17/2022 06:05*	WG1880869
(S) 4-Bromofluorobenzene	*105*			*77.0-126*		*06/17/2022 06:05*	WG1880869
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*06/17/2022 06:05*	WG1880869

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	0.000577		0.0000190	0.0000500	1	06/16/2022 13:23	WG1879115
Acenaphthene	0.00113		0.0000190	0.0000500	1	06/16/2022 13:23	WG1879115
Acenaphthylene	U		0.0000171	0.0000500	1	06/16/2022 13:23	WG1879115
Benzo(a)anthracene	0.000130		0.0000203	0.0000500	1	06/16/2022 13:23	WG1879115
Benzo(a)pyrene	0.0000781		0.0000184	0.0000500	1	06/16/2022 13:23	WG1879115
Benzo(b)fluoranthene	0.0000449	J	0.0000168	0.0000500	1	06/16/2022 13:23	WG1879115
Benzo(g,h,i)perylene	0.0000908		0.0000184	0.0000500	1	06/16/2022 13:23	WG1879115
Benzo(k)fluoranthene	U		0.0000202	0.0000500	1	06/16/2022 13:23	WG1879115
Chrysene	0.000126		0.0000179	0.0000500	1	06/16/2022 13:23	WG1879115
Dibenz(a,h)anthracene	0.0000277	J	0.0000160	0.0000500	1	06/16/2022 13:23	WG1879115
Fluoranthene	0.000133		0.0000270	0.000100	1	06/16/2022 13:23	WG1879115
Fluorene	0.000187		0.0000169	0.0000500	1	06/16/2022 13:23	WG1879115
Indeno(1,2,3-cd)pyrene	0.0000295	J	0.0000158	0.0000500	1	06/16/2022 13:23	WG1879115
Naphthalene	0.000107	J	0.0000917	0.000250	1	06/16/2022 13:23	WG1879115
Phenanthrene	0.0000861		0.0000180	0.0000500	1	06/16/2022 13:23	WG1879115
Pyrene	0.00102		0.0000169	0.0000500	1	06/16/2022 13:23	WG1879115
1-Methylnaphthalene	0.000160	J	0.0000687	0.000250	1	06/16/2022 13:23	WG1879115
2-Methylnaphthalene	0.0000989	J	0.0000674	0.000250	1	06/16/2022 13:23	WG1879115
2-Chloronaphthalene	U		0.0000682	0.000250	1	06/16/2022 13:23	WG1879115
(S) Nitrobenzene-d5	*87.4*			*31.0-160*		*06/16/2022 13:23*	WG1879115
(S) 2-Fluorobiphenyl	*89.5*			*48.0-148*		*06/16/2022 13:23*	WG1879115
(S) p-Terphenyl-d14	*110*			*37.0-146*		*06/16/2022 13:23*	WG1879115

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U		0.0113	0.0500	1	06/17/2022 06:27	WG1880869
Acrolein	U		0.00254	0.0500	1	06/17/2022 06:27	WG1880869
Acrylonitrile	U		0.000671	0.0100	1	06/17/2022 06:27	WG1880869
Benzene	0.0333		0.0000941	0.00100	1	06/17/2022 06:27	WG1880869
Bromobenzene	U		0.000118	0.00100	1	06/17/2022 06:27	WG1880869
Bromodichloromethane	U		0.000136	0.00100	1	06/17/2022 06:27	WG1880869
Bromoform	U		0.000129	0.00100	1	06/17/2022 06:27	WG1880869
Bromomethane	U		0.000605	0.00500	1	06/17/2022 06:27	WG1880869
n-Butylbenzene	0.00230		0.000157	0.00100	1	06/17/2022 06:27	WG1880869
sec-Butylbenzene	0.00143		0.000125	0.00100	1	06/17/2022 06:27	WG1880869
tert-Butylbenzene	0.000158	J	0.000127	0.00100	1	06/17/2022 06:27	WG1880869
Carbon tetrachloride	U		0.000128	0.00100	1	06/17/2022 06:27	WG1880869
Chlorobenzene	U		0.000116	0.00100	1	06/17/2022 06:27	WG1880869
Chlorodibromomethane	U		0.000140	0.00100	1	06/17/2022 06:27	WG1880869
Chloroethane	U		0.000192	0.00500	1	06/17/2022 06:27	WG1880869
Chloroform	U		0.000111	0.00500	1	06/17/2022 06:27	WG1880869
Chloromethane	U		0.000960	0.00250	1	06/17/2022 06:27	WG1880869
2-Chlorotoluene	U		0.000106	0.00100	1	06/17/2022 06:27	WG1880869
4-Chlorotoluene	U		0.000114	0.00100	1	06/17/2022 06:27	WG1880869
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	06/17/2022 06:27	WG1880869
1,2-Dibromoethane	U		0.000126	0.00100	1	06/17/2022 06:27	WG1880869
Dibromomethane	U		0.000122	0.00100	1	06/17/2022 06:27	WG1880869
1,2-Dichlorobenzene	U		0.000107	0.00100	1	06/17/2022 06:27	WG1880869
1,3-Dichlorobenzene	U		0.000110	0.00100	1	06/17/2022 06:27	WG1880869
1,4-Dichlorobenzene	U		0.000120	0.00100	1	06/17/2022 06:27	WG1880869
Dichlorodifluoromethane	U		0.000374	0.00500	1	06/17/2022 06:27	WG1880869
1,1-Dichloroethane	U		0.000100	0.00100	1	06/17/2022 06:27	WG1880869
1,2-Dichloroethane	U		0.0000819	0.00100	1	06/17/2022 06:27	WG1880869
1,1-Dichloroethene	U		0.000188	0.00100	1	06/17/2022 06:27	WG1880869
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	06/17/2022 06:27	WG1880869
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	06/17/2022 06:27	WG1880869
1,2-Dichloropropane	U		0.000149	0.00100	1	06/17/2022 06:27	WG1880869
1,1-Dichloropropene	U		0.000142	0.00100	1	06/17/2022 06:27	WG1880869
1,3-Dichloropropane	U		0.000110	0.00100	1	06/17/2022 06:27	WG1880869
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	06/17/2022 06:27	WG1880869
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	06/17/2022 06:27	WG1880869
2,2-Dichloropropane	U		0.000161	0.00100	1	06/17/2022 06:27	WG1880869
Ethylbenzene	0.00192		0.000137	0.00100	1	06/17/2022 06:27	WG1880869
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	06/17/2022 06:27	WG1880869
n-Hexane	0.0121		0.000749	0.0100	1	06/17/2022 06:27	WG1880869
Isopropylbenzene	0.0129		0.000105	0.00100	1	06/17/2022 06:27	WG1880869
p-Isopropyltoluene	0.000431	J	0.000120	0.00100	1	06/17/2022 06:27	WG1880869
2-Butanone (MEK)	U		0.00119	0.0100	1	06/17/2022 06:27	WG1880869
Methylene Chloride	U		0.000430	0.00500	1	06/17/2022 06:27	WG1880869
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	06/17/2022 06:27	WG1880869
Methyl tert-butyl ether	U		0.000101	0.00100	1	06/17/2022 06:27	WG1880869
Naphthalene	0.00274	J	0.00100	0.00500	1	06/17/2022 06:27	WG1880869
n-Propylbenzene	0.0193		0.0000993	0.00100	1	06/17/2022 06:27	WG1880869
Styrene	U		0.000118	0.00100	1	06/17/2022 06:27	WG1880869
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	06/17/2022 06:27	WG1880869
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	06/17/2022 06:27	WG1880869
Tetrachloroethene	U		0.000300	0.00100	1	06/17/2022 06:27	WG1880869
Toluene	0.00535		0.000278	0.00100	1	06/17/2022 06:27	WG1880869
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	06/17/2022 06:27	WG1880869
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	06/17/2022 06:27	WG1880869
1,1,1-Trichloroethane	U		0.000149	0.00100	1	06/17/2022 06:27	WG1880869

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.000158	0.00100	1	06/17/2022 06:27	WG1880869
Trichloroethene	U		0.000190	0.00100	1	06/17/2022 06:27	WG1880869
Trichlorofluoromethane	U		0.000160	0.00500	1	06/17/2022 06:27	WG1880869
1,2,3-Trichloropropane	U		0.000237	0.00250	1	06/17/2022 06:27	WG1880869
1,2,4-Trimethylbenzene	0.0110		0.000322	0.00100	1	06/17/2022 06:27	WG1880869
1,3,5-Trimethylbenzene	0.00441		0.000104	0.00100	1	06/17/2022 06:27	WG1880869
Vinyl chloride	U		0.000234	0.00100	1	06/17/2022 06:27	WG1880869
Xylenes, Total	0.0263		0.000174	0.00300	1	06/17/2022 06:27	WG1880869
(S) Toluene-d8	*105*			*80.0-120*		*06/17/2022 06:27*	WG1880869
(S) 4-Bromofluorobenzene	*106*			*77.0-126*		*06/17/2022 06:27*	WG1880869
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*06/17/2022 06:27*	WG1880869

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	0.000462		0.0000190	0.0000500	1	06/17/2022 10:36	WG1879115
Acenaphthene	0.000997		0.0000190	0.0000500	1	06/17/2022 10:36	WG1879115
Acenaphthylene	U		0.0000171	0.0000500	1	06/17/2022 10:36	WG1879115
Benzo(a)anthracene	0.000411		0.0000203	0.0000500	1	06/17/2022 10:36	WG1879115
Benzo(a)pyrene	0.000345		0.0000184	0.0000500	1	06/17/2022 10:36	WG1879115
Benzo(b)fluoranthene	0.000179		0.0000168	0.0000500	1	06/17/2022 10:36	WG1879115
Benzo(g,h,i)perylene	0.000220		0.0000184	0.0000500	1	06/17/2022 10:36	WG1879115
Benzo(k)fluoranthene	0.0000444	J	0.0000202	0.0000500	1	06/17/2022 10:36	WG1879115
Chrysene	0.000455		0.0000179	0.0000500	1	06/17/2022 10:36	WG1879115
Dibenz(a,h)anthracene	0.000126		0.0000160	0.0000500	1	06/17/2022 10:36	WG1879115
Fluoranthene	0.000354		0.0000270	0.000100	1	06/17/2022 10:36	WG1879115
Fluorene	0.00127		0.0000169	0.0000500	1	06/17/2022 10:36	WG1879115
Indeno(1,2,3-cd)pyrene	0.0000900		0.0000158	0.0000500	1	06/17/2022 10:36	WG1879115
Naphthalene	0.00299		0.0000917	0.000250	1	06/17/2022 10:36	WG1879115
Phenanthrene	0.00230		0.0000180	0.0000500	1	06/17/2022 10:36	WG1879115
Pyrene	0.000638		0.0000169	0.0000500	1	06/17/2022 10:36	WG1879115
1-Methylnaphthalene	0.0109		0.0000687	0.000250	1	06/17/2022 10:36	WG1879115
2-Methylnaphthalene	0.00329		0.0000674	0.000250	1	06/17/2022 10:36	WG1879115
2-Chloronaphthalene	0.000257		0.0000682	0.000250	1	06/17/2022 10:36	WG1879115
(S) Nitrobenzene-d5	*124*			*31.0-160*		*06/17/2022 10:36*	WG1879115
(S) 2-Fluorobiphenyl	*93.2*			*48.0-148*		*06/17/2022 10:36*	WG1879115
(S) p-Terphenyl-d14	*97.9*			*37.0-146*		*06/17/2022 10:36*	WG1879115

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U		0.0113	0.0500	1	06/17/2022 06:49	WG1880869
Acrolein	U		0.00254	0.0500	1	06/17/2022 06:49	WG1880869
Acrylonitrile	U		0.000671	0.0100	1	06/17/2022 06:49	WG1880869
Benzene	0.000202	J	0.0000941	0.00100	1	06/17/2022 06:49	WG1880869
Bromobenzene	U		0.000118	0.00100	1	06/17/2022 06:49	WG1880869
Bromodichloromethane	U		0.000136	0.00100	1	06/17/2022 06:49	WG1880869
Bromoform	U		0.000129	0.00100	1	06/17/2022 06:49	WG1880869
Bromomethane	U		0.000605	0.00500	1	06/17/2022 06:49	WG1880869
n-Butylbenzene	U		0.000157	0.00100	1	06/17/2022 06:49	WG1880869
sec-Butylbenzene	0.000358	J	0.000125	0.00100	1	06/17/2022 06:49	WG1880869
tert-Butylbenzene	0.000269	J	0.000127	0.00100	1	06/17/2022 06:49	WG1880869
Carbon tetrachloride	U		0.000128	0.00100	1	06/17/2022 06:49	WG1880869
Chlorobenzene	U		0.000116	0.00100	1	06/17/2022 06:49	WG1880869
Chlorodibromomethane	U		0.000140	0.00100	1	06/17/2022 06:49	WG1880869
Chloroethane	U		0.000192	0.00500	1	06/17/2022 06:49	WG1880869
Chloroform	U		0.000111	0.00500	1	06/17/2022 06:49	WG1880869
Chloromethane	U		0.000960	0.00250	1	06/17/2022 06:49	WG1880869
2-Chlorotoluene	U		0.000106	0.00100	1	06/17/2022 06:49	WG1880869
4-Chlorotoluene	U		0.000114	0.00100	1	06/17/2022 06:49	WG1880869
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	06/17/2022 06:49	WG1880869
1,2-Dibromoethane	U		0.000126	0.00100	1	06/17/2022 06:49	WG1880869
Dibromomethane	U		0.000122	0.00100	1	06/17/2022 06:49	WG1880869
1,2-Dichlorobenzene	U		0.000107	0.00100	1	06/17/2022 06:49	WG1880869
1,3-Dichlorobenzene	U		0.000110	0.00100	1	06/17/2022 06:49	WG1880869
1,4-Dichlorobenzene	U		0.000120	0.00100	1	06/17/2022 06:49	WG1880869
Dichlorodifluoromethane	U		0.000374	0.00500	1	06/17/2022 06:49	WG1880869
1,1-Dichloroethane	U		0.000100	0.00100	1	06/17/2022 06:49	WG1880869
1,2-Dichloroethane	U		0.0000819	0.00100	1	06/17/2022 06:49	WG1880869
1,1-Dichloroethene	U		0.000188	0.00100	1	06/17/2022 06:49	WG1880869
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	06/17/2022 06:49	WG1880869
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	06/17/2022 06:49	WG1880869
1,2-Dichloropropane	U		0.000149	0.00100	1	06/17/2022 06:49	WG1880869
1,1-Dichloropropene	U		0.000142	0.00100	1	06/17/2022 06:49	WG1880869
1,3-Dichloropropane	U		0.000110	0.00100	1	06/17/2022 06:49	WG1880869
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	06/17/2022 06:49	WG1880869
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	06/17/2022 06:49	WG1880869
2,2-Dichloropropane	U		0.000161	0.00100	1	06/17/2022 06:49	WG1880869
Ethylbenzene	U		0.000137	0.00100	1	06/17/2022 06:49	WG1880869
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	06/17/2022 06:49	WG1880869
n-Hexane	U		0.000749	0.0100	1	06/17/2022 06:49	WG1880869
Isopropylbenzene	0.000493	J	0.000105	0.00100	1	06/17/2022 06:49	WG1880869
p-Isopropyltoluene	0.000646	J	0.000120	0.00100	1	06/17/2022 06:49	WG1880869
2-Butanone (MEK)	U		0.00119	0.0100	1	06/17/2022 06:49	WG1880869
Methylene Chloride	U		0.000430	0.00500	1	06/17/2022 06:49	WG1880869
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	06/17/2022 06:49	WG1880869
Methyl tert-butyl ether	0.00284		0.000101	0.00100	1	06/17/2022 06:49	WG1880869
Naphthalene	U		0.00100	0.00500	1	06/17/2022 06:49	WG1880869
n-Propylbenzene	0.000133	J	0.0000993	0.00100	1	06/17/2022 06:49	WG1880869
Styrene	U		0.000118	0.00100	1	06/17/2022 06:49	WG1880869
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	06/17/2022 06:49	WG1880869
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	06/17/2022 06:49	WG1880869
Tetrachloroethene	U		0.000300	0.00100	1	06/17/2022 06:49	WG1880869
Toluene	U		0.000278	0.00100	1	06/17/2022 06:49	WG1880869
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	06/17/2022 06:49	WG1880869
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	06/17/2022 06:49	WG1880869
1,1,1-Trichloroethane	U		0.000149	0.00100	1	06/17/2022 06:49	WG1880869

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.000158	0.00100	1	06/17/2022 06:49	WG1880869
Trichloroethene	U		0.000190	0.00100	1	06/17/2022 06:49	WG1880869
Trichlorofluoromethane	U		0.000160	0.00500	1	06/17/2022 06:49	WG1880869
1,2,3-Trichloropropane	U		0.000237	0.00250	1	06/17/2022 06:49	WG1880869
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	06/17/2022 06:49	WG1880869
1,3,5-Trimethylbenzene	0.000182	J	0.000104	0.00100	1	06/17/2022 06:49	WG1880869
Vinyl chloride	U		0.000234	0.00100	1	06/17/2022 06:49	WG1880869
Xylenes, Total	0.000588	J	0.000174	0.00300	1	06/17/2022 06:49	WG1880869
(S) Toluene-d8	*107*			*80.0-120*		*06/17/2022 06:49*	WG1880869
(S) 4-Bromofluorobenzene	*106*			*77.0-126*		*06/17/2022 06:49*	WG1880869
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*06/17/2022 06:49*	WG1880869

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	U		0.0000190	0.0000500	1	06/16/2022 13:14	WG1879813
Acenaphthene	0.000365		0.0000190	0.0000500	1	06/16/2022 13:14	WG1879813
Acenaphthylene	U		0.0000171	0.0000500	1	06/16/2022 13:14	WG1879813
Benzo(a)anthracene	U		0.0000203	0.0000500	1	06/16/2022 13:14	WG1879813
Benzo(a)pyrene	U		0.0000184	0.0000500	1	06/16/2022 13:14	WG1879813
Benzo(b)fluoranthene	U		0.0000168	0.0000500	1	06/16/2022 13:14	WG1879813
Benzo(g,h,i)perylene	U		0.0000184	0.0000500	1	06/16/2022 13:14	WG1879813
Benzo(k)fluoranthene	U		0.0000202	0.0000500	1	06/16/2022 13:14	WG1879813
Chrysene	U		0.0000179	0.0000500	1	06/16/2022 13:14	WG1879813
Dibenz(a,h)anthracene	U		0.0000160	0.0000500	1	06/16/2022 13:14	WG1879813
Fluoranthene	0.0000298	J	0.0000270	0.000100	1	06/16/2022 13:14	WG1879813
Fluorene	0.000141		0.0000169	0.0000500	1	06/16/2022 13:14	WG1879813
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500	1	06/16/2022 13:14	WG1879813
Naphthalene	U		0.0000917	0.000250	1	06/16/2022 13:14	WG1879813
Phenanthrene	U		0.0000180	0.0000500	1	06/16/2022 13:14	WG1879813
Pyrene	0.0000434	J	0.0000169	0.0000500	1	06/16/2022 13:14	WG1879813
1-Methylnaphthalene	U		0.0000687	0.000250	1	06/16/2022 13:14	WG1879813
2-Methylnaphthalene	U		0.0000674	0.000250	1	06/16/2022 13:14	WG1879813
2-Chloronaphthalene	U		0.0000682	0.000250	1	06/16/2022 13:14	WG1879813
(S) Nitrobenzene-d5	*101*			*31.0-160*		*06/16/2022 13:14*	WG1879813
(S) 2-Fluorobiphenyl	*100*			*48.0-148*		*06/16/2022 13:14*	WG1879813
(S) p-Terphenyl-d14	*123*			*37.0-146*		*06/16/2022 13:14*	WG1879813

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U		0.0113	0.0500	1	06/17/2022 07:11	WG1880869
Acrolein	U		0.00254	0.0500	1	06/17/2022 07:11	WG1880869
Acrylonitrile	U		0.000671	0.0100	1	06/17/2022 07:11	WG1880869
Benzene	0.000305	J	0.0000941	0.00100	1	06/17/2022 07:11	WG1880869
Bromobenzene	U		0.000118	0.00100	1	06/17/2022 07:11	WG1880869
Bromodichloromethane	U		0.000136	0.00100	1	06/17/2022 07:11	WG1880869
Bromoform	U		0.000129	0.00100	1	06/17/2022 07:11	WG1880869
Bromomethane	U		0.000605	0.00500	1	06/17/2022 07:11	WG1880869
n-Butylbenzene	0.000486	J	0.000157	0.00100	1	06/17/2022 07:11	WG1880869
sec-Butylbenzene	0.00301		0.000125	0.00100	1	06/17/2022 07:11	WG1880869
tert-Butylbenzene	0.00138		0.000127	0.00100	1	06/17/2022 07:11	WG1880869
Carbon tetrachloride	U		0.000128	0.00100	1	06/17/2022 07:11	WG1880869
Chlorobenzene	U		0.000116	0.00100	1	06/17/2022 07:11	WG1880869
Chlorodibromomethane	U		0.000140	0.00100	1	06/17/2022 07:11	WG1880869
Chloroethane	U		0.000192	0.00500	1	06/17/2022 07:11	WG1880869
Chloroform	U		0.000111	0.00500	1	06/17/2022 07:11	WG1880869
Chloromethane	U		0.000960	0.00250	1	06/17/2022 07:11	WG1880869
2-Chlorotoluene	U		0.000106	0.00100	1	06/17/2022 07:11	WG1880869
4-Chlorotoluene	U		0.000114	0.00100	1	06/17/2022 07:11	WG1880869
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	06/17/2022 07:11	WG1880869
1,2-Dibromoethane	U		0.000126	0.00100	1	06/17/2022 07:11	WG1880869
Dibromomethane	U		0.000122	0.00100	1	06/17/2022 07:11	WG1880869
1,2-Dichlorobenzene	U		0.000107	0.00100	1	06/17/2022 07:11	WG1880869
1,3-Dichlorobenzene	U		0.000110	0.00100	1	06/17/2022 07:11	WG1880869
1,4-Dichlorobenzene	U		0.000120	0.00100	1	06/17/2022 07:11	WG1880869
Dichlorodifluoromethane	U		0.000374	0.00500	1	06/17/2022 07:11	WG1880869
1,1-Dichloroethane	U		0.000100	0.00100	1	06/17/2022 07:11	WG1880869
1,2-Dichloroethane	U		0.0000819	0.00100	1	06/17/2022 07:11	WG1880869
1,1-Dichloroethene	U		0.000188	0.00100	1	06/17/2022 07:11	WG1880869
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	06/17/2022 07:11	WG1880869
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	06/17/2022 07:11	WG1880869
1,2-Dichloropropane	U		0.000149	0.00100	1	06/17/2022 07:11	WG1880869
1,1-Dichloropropene	U		0.000142	0.00100	1	06/17/2022 07:11	WG1880869
1,3-Dichloropropane	U		0.000110	0.00100	1	06/17/2022 07:11	WG1880869
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	06/17/2022 07:11	WG1880869
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	06/17/2022 07:11	WG1880869
2,2-Dichloropropane	U		0.000161	0.00100	1	06/17/2022 07:11	WG1880869
Ethylbenzene	U		0.000137	0.00100	1	06/17/2022 07:11	WG1880869
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	06/17/2022 07:11	WG1880869
n-Hexane	U		0.000749	0.0100	1	06/17/2022 07:11	WG1880869
Isopropylbenzene	0.00147		0.000105	0.00100	1	06/17/2022 07:11	WG1880869
p-Isopropyltoluene	0.000203	J	0.000120	0.00100	1	06/17/2022 07:11	WG1880869
2-Butanone (MEK)	U		0.00119	0.0100	1	06/17/2022 07:11	WG1880869
Methylene Chloride	U		0.000430	0.00500	1	06/17/2022 07:11	WG1880869
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	06/17/2022 07:11	WG1880869
Methyl tert-butyl ether	0.00140		0.000101	0.00100	1	06/17/2022 07:11	WG1880869
Naphthalene	U		0.00100	0.00500	1	06/17/2022 07:11	WG1880869
n-Propylbenzene	0.000492	J	0.0000993	0.00100	1	06/17/2022 07:11	WG1880869
Styrene	U		0.000118	0.00100	1	06/17/2022 07:11	WG1880869
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	06/17/2022 07:11	WG1880869
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	06/17/2022 07:11	WG1880869
Tetrachloroethene	U		0.000300	0.00100	1	06/17/2022 07:11	WG1880869
Toluene	U		0.000278	0.00100	1	06/17/2022 07:11	WG1880869
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	06/17/2022 07:11	WG1880869
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	06/17/2022 07:11	WG1880869
1,1,1-Trichloroethane	U		0.000149	0.00100	1	06/17/2022 07:11	WG1880869

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.000158	0.00100	1	06/17/2022 07:11	WG1880869
Trichloroethene	U		0.000190	0.00100	1	06/17/2022 07:11	WG1880869
Trichlorofluoromethane	U		0.000160	0.00500	1	06/17/2022 07:11	WG1880869
1,2,3-Trichloropropane	U		0.000237	0.00250	1	06/17/2022 07:11	WG1880869
1,2,4-Trimethylbenzene	0.00520		0.000322	0.00100	1	06/17/2022 07:11	WG1880869
1,3,5-Trimethylbenzene	0.000316	J	0.000104	0.00100	1	06/17/2022 07:11	WG1880869
Vinyl chloride	U		0.000234	0.00100	1	06/17/2022 07:11	WG1880869
Xylenes, Total	0.00109	J	0.000174	0.00300	1	06/17/2022 07:11	WG1880869
(S) Toluene-d8	*108*			*80.0-120*		*06/17/2022 07:11*	WG1880869
(S) 4-Bromofluorobenzene	*107*			*77.0-126*		*06/17/2022 07:11*	WG1880869
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*06/17/2022 07:11*	WG1880869

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	0.000203		0.0000190	0.0000500	1	06/16/2022 13:31	WG1879813
Acenaphthene	0.00128		0.0000190	0.0000500	1	06/16/2022 13:31	WG1879813
Acenaphthylene	U		0.0000171	0.0000500	1	06/16/2022 13:31	WG1879813
Benzo(a)anthracene	0.000345		0.0000203	0.0000500	1	06/16/2022 13:31	WG1879813
Benzo(a)pyrene	0.000220		0.0000184	0.0000500	1	06/16/2022 13:31	WG1879813
Benzo(b)fluoranthene	0.000164		0.0000168	0.0000500	1	06/16/2022 13:31	WG1879813
Benzo(g,h,i)perylene	0.000145		0.0000184	0.0000500	1	06/16/2022 13:31	WG1879813
Benzo(k)fluoranthene	0.0000471	J	0.0000202	0.0000500	1	06/16/2022 13:31	WG1879813
Chrysene	0.000282		0.0000179	0.0000500	1	06/16/2022 13:31	WG1879813
Dibenz(a,h)anthracene	0.0000746		0.0000160	0.0000500	1	06/16/2022 13:31	WG1879813
Fluoranthene	0.000372		0.0000270	0.000100	1	06/16/2022 13:31	WG1879813
Fluorene	0.00150		0.0000169	0.0000500	1	06/16/2022 13:31	WG1879813
Indeno(1,2,3-cd)pyrene	0.0000694		0.0000158	0.0000500	1	06/16/2022 13:31	WG1879813
Naphthalene	0.000302		0.0000917	0.000250	1	06/16/2022 13:31	WG1879813
Phenanthrene	0.000454		0.0000180	0.0000500	1	06/16/2022 13:31	WG1879813
Pyrene	0.000667		0.0000169	0.0000500	1	06/16/2022 13:31	WG1879813
1-Methylnaphthalene	0.000429		0.0000687	0.000250	1	06/16/2022 13:31	WG1879813
2-Methylnaphthalene	0.000138	J	0.0000674	0.000250	1	06/16/2022 13:31	WG1879813
2-Chloronaphthalene	U		0.0000682	0.000250	1	06/16/2022 13:31	WG1879813
(S) Nitrobenzene-d5	*61.1*			*31.0-160*		*06/16/2022 13:31*	WG1879813
(S) 2-Fluorobiphenyl	*94.7*			*48.0-148*		*06/16/2022 13:31*	WG1879813
(S) p-Terphenyl-d14	*118*			*37.0-146*		*06/16/2022 13:31*	WG1879813

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U	J+	0.0113	0.0500	1	06/17/2022 15:35	WG1881176
Acrolein	U	J+	0.00254	0.0500	1	06/17/2022 15:35	WG1881176
Acrylonitrile	U		0.000671	0.0100	1	06/17/2022 15:35	WG1881176
Benzene	0.00164		0.0000941	0.00100	1	06/17/2022 15:35	WG1881176
Bromobenzene	U		0.000118	0.00100	1	06/17/2022 15:35	WG1881176
Bromodichloromethane	U		0.000136	0.00100	1	06/17/2022 15:35	WG1881176
Bromoform	U		0.000129	0.00100	1	06/17/2022 15:35	WG1881176
Bromomethane	U		0.000605	0.00500	1	06/17/2022 15:35	WG1881176
n-Butylbenzene	0.00116		0.000157	0.00100	1	06/17/2022 15:35	WG1881176
sec-Butylbenzene	0.00252		0.000125	0.00100	1	06/17/2022 15:35	WG1881176
tert-Butylbenzene	0.000604	J	0.000127	0.00100	1	06/17/2022 15:35	WG1881176
Carbon tetrachloride	U		0.000128	0.00100	1	06/17/2022 15:35	WG1881176
Chlorobenzene	U		0.000116	0.00100	1	06/17/2022 15:35	WG1881176
Chlorodibromomethane	U		0.000140	0.00100	1	06/17/2022 15:35	WG1881176
Chloroethane	U		0.000192	0.00500	1	06/17/2022 15:35	WG1881176
Chloroform	U		0.000111	0.00500	1	06/17/2022 15:35	WG1881176
Chloromethane	U		0.000960	0.00250	1	06/17/2022 15:35	WG1881176
2-Chlorotoluene	U		0.000106	0.00100	1	06/17/2022 15:35	WG1881176
4-Chlorotoluene	U		0.000114	0.00100	1	06/17/2022 15:35	WG1881176
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	06/17/2022 15:35	WG1881176
1,2-Dibromoethane	U		0.000126	0.00100	1	06/17/2022 15:35	WG1881176
Dibromomethane	U		0.000122	0.00100	1	06/17/2022 15:35	WG1881176
1,2-Dichlorobenzene	U		0.000107	0.00100	1	06/17/2022 15:35	WG1881176
1,3-Dichlorobenzene	U		0.000110	0.00100	1	06/17/2022 15:35	WG1881176
1,4-Dichlorobenzene	U		0.000120	0.00100	1	06/17/2022 15:35	WG1881176
Dichlorodifluoromethane	U		0.000374	0.00500	1	06/17/2022 15:35	WG1881176
1,1-Dichloroethane	U		0.000100	0.00100	1	06/17/2022 15:35	WG1881176
1,2-Dichloroethane	U		0.0000819	0.00100	1	06/17/2022 15:35	WG1881176
1,1-Dichloroethene	U		0.000188	0.00100	1	06/17/2022 15:35	WG1881176
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	06/17/2022 15:35	WG1881176
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	06/17/2022 15:35	WG1881176
1,2-Dichloropropane	U		0.000149	0.00100	1	06/17/2022 15:35	WG1881176
1,1-Dichloropropene	U		0.000142	0.00100	1	06/17/2022 15:35	WG1881176
1,3-Dichloropropane	U		0.000110	0.00100	1	06/17/2022 15:35	WG1881176
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	06/17/2022 15:35	WG1881176
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	06/17/2022 15:35	WG1881176
2,2-Dichloropropane	U		0.000161	0.00100	1	06/17/2022 15:35	WG1881176
Ethylbenzene	U		0.000137	0.00100	1	06/17/2022 15:35	WG1881176
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	06/17/2022 15:35	WG1881176
n-Hexane	U		0.000749	0.0100	1	06/17/2022 15:35	WG1881176
Isopropylbenzene	0.0149		0.000105	0.00100	1	06/17/2022 15:35	WG1881176
p-Isopropyltoluene	0.00114		0.000120	0.00100	1	06/17/2022 15:35	WG1881176
2-Butanone (MEK)	U		0.00119	0.0100	1	06/17/2022 15:35	WG1881176
Methylene Chloride	U		0.000430	0.00500	1	06/17/2022 15:35	WG1881176
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	06/17/2022 15:35	WG1881176
Methyl tert-butyl ether	U		0.000101	0.00100	1	06/17/2022 15:35	WG1881176
Naphthalene	U		0.00100	0.00500	1	06/17/2022 15:35	WG1881176
n-Propylbenzene	0.000408	J	0.0000993	0.00100	1	06/17/2022 15:35	WG1881176
Styrene	U		0.000118	0.00100	1	06/17/2022 15:35	WG1881176
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	06/17/2022 15:35	WG1881176
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	06/17/2022 15:35	WG1881176
Tetrachloroethene	U		0.000300	0.00100	1	06/17/2022 15:35	WG1881176
Toluene	U		0.000278	0.00100	1	06/17/2022 15:35	WG1881176
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	06/17/2022 15:35	WG1881176
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	06/17/2022 15:35	WG1881176
1,1,1-Trichloroethane	U		0.000149	0.00100	1	06/17/2022 15:35	WG1881176

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.000158	0.00100	1	06/17/2022 15:35	WG1881176
Trichloroethene	U		0.000190	0.00100	1	06/17/2022 15:35	WG1881176
Trichlorofluoromethane	U		0.000160	0.00500	1	06/17/2022 15:35	WG1881176
1,2,3-Trichloropropane	U		0.000237	0.00250	1	06/17/2022 15:35	WG1881176
1,2,4-Trimethylbenzene	0.00220		0.000322	0.00100	1	06/17/2022 15:35	WG1881176
1,3,5-Trimethylbenzene	0.000647	J	0.000104	0.00100	1	06/17/2022 15:35	WG1881176
Vinyl chloride	U		0.000234	0.00100	1	06/17/2022 15:35	WG1881176
Xylenes, Total	0.00297	J	0.000174	0.00300	1	06/17/2022 15:35	WG1881176
(S) Toluene-d8	*93.1*			*80.0-120*		*06/17/2022 15:35*	WG1881176
(S) 4-Bromofluorobenzene	*106*			*77.0-126*		*06/17/2022 15:35*	WG1881176
(S) 1,2-Dichloroethane-d4	*131*	J1		*70.0-130*		*06/17/2022 15:35*	WG1881176

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	0.000334		0.0000190	0.0000500	1	06/16/2022 13:49	WG1879813
Acenaphthene	0.00168		0.0000190	0.0000500	1	06/16/2022 13:49	WG1879813
Acenaphthylene	U		0.0000171	0.0000500	1	06/16/2022 13:49	WG1879813
Benzo(a)anthracene	0.0000699		0.0000203	0.0000500	1	06/16/2022 13:49	WG1879813
Benzo(a)pyrene	0.0000462	J	0.0000184	0.0000500	1	06/16/2022 13:49	WG1879813
Benzo(b)fluoranthene	0.0000347	J	0.0000168	0.0000500	1	06/16/2022 13:49	WG1879813
Benzo(g,h,i)perylene	0.0000407	J	0.0000184	0.0000500	1	06/16/2022 13:49	WG1879813
Benzo(k)fluoranthene	U		0.0000202	0.0000500	1	06/16/2022 13:49	WG1879813
Chrysene	0.0000544		0.0000179	0.0000500	1	06/16/2022 13:49	WG1879813
Dibenz(a,h)anthracene	0.0000207	J	0.0000160	0.0000500	1	06/16/2022 13:49	WG1879813
Fluoranthene	0.000128		0.0000270	0.000100	1	06/16/2022 13:49	WG1879813
Fluorene	0.00139		0.0000169	0.0000500	1	06/16/2022 13:49	WG1879813
Indeno(1,2,3-cd)pyrene	0.0000226	J	0.0000158	0.0000500	1	06/16/2022 13:49	WG1879813
Naphthalene	0.000946		0.0000917	0.000250	1	06/16/2022 13:49	WG1879813
Phenanthrene	0.00193		0.0000180	0.0000500	1	06/16/2022 13:49	WG1879813
Pyrene	0.000370		0.0000169	0.0000500	1	06/16/2022 13:49	WG1879813
1-Methylnaphthalene	0.00609		0.0000687	0.000250	1	06/16/2022 13:49	WG1879813
2-Methylnaphthalene	0.000612		0.0000674	0.000250	1	06/16/2022 13:49	WG1879813
2-Chloronaphthalene	U		0.0000682	0.000250	1	06/16/2022 13:49	WG1879813
(S) Nitrobenzene-d5	*107*			*31.0-160*		*06/16/2022 13:49*	WG1879813
(S) 2-Fluorobiphenyl	*85.8*			*48.0-148*		*06/16/2022 13:49*	WG1879813
(S) p-Terphenyl-d14	*113*			*37.0-146*		*06/16/2022 13:49*	WG1879813

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U		0.0113	0.0500	1	06/17/2022 07:32	WG1880869
Acrolein	U		0.00254	0.0500	1	06/17/2022 07:32	WG1880869
Acrylonitrile	U		0.000671	0.0100	1	06/17/2022 07:32	WG1880869
Benzene	0.0209		0.0000941	0.00100	1	06/17/2022 07:32	WG1880869
Bromobenzene	U		0.000118	0.00100	1	06/17/2022 07:32	WG1880869
Bromodichloromethane	U		0.000136	0.00100	1	06/17/2022 07:32	WG1880869
Bromoform	U		0.000129	0.00100	1	06/17/2022 07:32	WG1880869
Bromomethane	U		0.000605	0.00500	1	06/17/2022 07:32	WG1880869
n-Butylbenzene	0.000267	J	0.000157	0.00100	1	06/17/2022 07:32	WG1880869
sec-Butylbenzene	0.000466	J	0.000125	0.00100	1	06/17/2022 07:32	WG1880869
tert-Butylbenzene	U		0.000127	0.00100	1	06/17/2022 07:32	WG1880869
Carbon tetrachloride	U		0.000128	0.00100	1	06/17/2022 07:32	WG1880869
Chlorobenzene	U		0.000116	0.00100	1	06/17/2022 07:32	WG1880869
Chlorodibromomethane	U		0.000140	0.00100	1	06/17/2022 07:32	WG1880869
Chloroethane	U		0.000192	0.00500	1	06/17/2022 07:32	WG1880869
Chloroform	U		0.000111	0.00500	1	06/17/2022 07:32	WG1880869
Chloromethane	U		0.000960	0.00250	1	06/17/2022 07:32	WG1880869
2-Chlorotoluene	U		0.000106	0.00100	1	06/17/2022 07:32	WG1880869
4-Chlorotoluene	U		0.000114	0.00100	1	06/17/2022 07:32	WG1880869
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	06/17/2022 07:32	WG1880869
1,2-Dibromoethane	U		0.000126	0.00100	1	06/17/2022 07:32	WG1880869
Dibromomethane	U		0.000122	0.00100	1	06/17/2022 07:32	WG1880869
1,2-Dichlorobenzene	U		0.000107	0.00100	1	06/17/2022 07:32	WG1880869
1,3-Dichlorobenzene	U		0.000110	0.00100	1	06/17/2022 07:32	WG1880869
1,4-Dichlorobenzene	U		0.000120	0.00100	1	06/17/2022 07:32	WG1880869
Dichlorodifluoromethane	U		0.000374	0.00500	1	06/17/2022 07:32	WG1880869
1,1-Dichloroethane	0.000441	J	0.000100	0.00100	1	06/17/2022 07:32	WG1880869
1,2-Dichloroethane	U		0.0000819	0.00100	1	06/17/2022 07:32	WG1880869
1,1-Dichloroethene	U		0.000188	0.00100	1	06/17/2022 07:32	WG1880869
cis-1,2-Dichloroethene	0.000148	J	0.000126	0.00100	1	06/17/2022 07:32	WG1880869
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	06/17/2022 07:32	WG1880869
1,2-Dichloropropane	U		0.000149	0.00100	1	06/17/2022 07:32	WG1880869
1,1-Dichloropropene	U		0.000142	0.00100	1	06/17/2022 07:32	WG1880869
1,3-Dichloropropane	U		0.000110	0.00100	1	06/17/2022 07:32	WG1880869
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	06/17/2022 07:32	WG1880869
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	06/17/2022 07:32	WG1880869
2,2-Dichloropropane	U		0.000161	0.00100	1	06/17/2022 07:32	WG1880869
Ethylbenzene	0.00496		0.000137	0.00100	1	06/17/2022 07:32	WG1880869
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	06/17/2022 07:32	WG1880869
n-Hexane	0.0117		0.000749	0.0100	1	06/17/2022 07:32	WG1880869
Isopropylbenzene	0.00299		0.000105	0.00100	1	06/17/2022 07:32	WG1880869
p-Isopropyltoluene	0.000258	J	0.000120	0.00100	1	06/17/2022 07:32	WG1880869
2-Butanone (MEK)	U		0.00119	0.0100	1	06/17/2022 07:32	WG1880869
Methylene Chloride	U		0.000430	0.00500	1	06/17/2022 07:32	WG1880869
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	06/17/2022 07:32	WG1880869
Methyl tert-butyl ether	0.00384		0.000101	0.00100	1	06/17/2022 07:32	WG1880869
Naphthalene	0.0161		0.00100	0.00500	1	06/17/2022 07:32	WG1880869
n-Propylbenzene	0.00367		0.0000993	0.00100	1	06/17/2022 07:32	WG1880869
Styrene	U		0.000118	0.00100	1	06/17/2022 07:32	WG1880869
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	06/17/2022 07:32	WG1880869
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	06/17/2022 07:32	WG1880869
Tetrachloroethene	U		0.000300	0.00100	1	06/17/2022 07:32	WG1880869
Toluene	0.00304		0.000278	0.00100	1	06/17/2022 07:32	WG1880869
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	06/17/2022 07:32	WG1880869
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	06/17/2022 07:32	WG1880869
1,1,1-Trichloroethane	U		0.000149	0.00100	1	06/17/2022 07:32	WG1880869

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.000158	0.00100	1	06/17/2022 07:32	WG1880869
Trichloroethene	U		0.000190	0.00100	1	06/17/2022 07:32	WG1880869
Trichlorofluoromethane	U		0.000160	0.00500	1	06/17/2022 07:32	WG1880869
1,2,3-Trichloropropane	U		0.000237	0.00250	1	06/17/2022 07:32	WG1880869
1,2,4-Trimethylbenzene	0.00693		0.000322	0.00100	1	06/17/2022 07:32	WG1880869
1,3,5-Trimethylbenzene	0.00154		0.000104	0.00100	1	06/17/2022 07:32	WG1880869
Vinyl chloride	U		0.000234	0.00100	1	06/17/2022 07:32	WG1880869
Xylenes, Total	0.0175		0.000174	0.00300	1	06/17/2022 07:32	WG1880869
(S) Toluene-d8	*104*			*80.0-120*		*06/17/2022 07:32*	WG1880869
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*06/17/2022 07:32*	WG1880869
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*06/17/2022 07:32*	WG1880869

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	0.0000636		0.0000190	0.0000500	1	06/16/2022 14:06	WG1879813
Acenaphthene	0.00121		0.0000190	0.0000500	1	06/16/2022 14:06	WG1879813
Acenaphthylene	U		0.0000171	0.0000500	1	06/16/2022 14:06	WG1879813
Benzo(a)anthracene	0.0000270	J	0.0000203	0.0000500	1	06/16/2022 14:06	WG1879813
Benzo(a)pyrene	U		0.0000184	0.0000500	1	06/16/2022 14:06	WG1879813
Benzo(b)fluoranthene	0.0000179	J	0.0000168	0.0000500	1	06/16/2022 14:06	WG1879813
Benzo(g,h,i)perylene	U		0.0000184	0.0000500	1	06/16/2022 14:06	WG1879813
Benzo(k)fluoranthene	U		0.0000202	0.0000500	1	06/16/2022 14:06	WG1879813
Chrysene	U		0.0000179	0.0000500	1	06/16/2022 14:06	WG1879813
Dibenz(a,h)anthracene	U		0.0000160	0.0000500	1	06/16/2022 14:06	WG1879813
Fluoranthene	0.000157		0.0000270	0.000100	1	06/16/2022 14:06	WG1879813
Fluorene	0.00151		0.0000169	0.0000500	1	06/16/2022 14:06	WG1879813
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500	1	06/16/2022 14:06	WG1879813
Naphthalene	0.0121		0.0000917	0.000250	1	06/16/2022 14:06	WG1879813
Phenanthrene	0.00105		0.0000180	0.0000500	1	06/16/2022 14:06	WG1879813
Pyrene	0.000106		0.0000169	0.0000500	1	06/16/2022 14:06	WG1879813
1-Methylnaphthalene	0.00320		0.0000687	0.000250	1	06/16/2022 14:06	WG1879813
2-Methylnaphthalene	0.00329		0.0000674	0.000250	1	06/16/2022 14:06	WG1879813
2-Chloronaphthalene	U		0.0000682	0.000250	1	06/16/2022 14:06	WG1879813
(S) Nitrobenzene-d5	*109*			*31.0-160*		*06/16/2022 14:06*	WG1879813
(S) 2-Fluorobiphenyl	*96.8*			*48.0-148*		*06/16/2022 14:06*	WG1879813
(S) p-Terphenyl-d14	*113*			*37.0-146*		*06/16/2022 14:06*	WG1879813

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U		0.226	1.00	20	06/17/2022 08:59	WG1880869
Acrolein	U		0.0508	1.00	20	06/17/2022 08:59	WG1880869
Acrylonitrile	U		0.0134	0.200	20	06/17/2022 08:59	WG1880869
Benzene	1.23		0.00188	0.0200	20	06/17/2022 08:59	WG1880869
Bromobenzene	U		0.00236	0.0200	20	06/17/2022 08:59	WG1880869
Bromodichloromethane	U		0.00272	0.0200	20	06/17/2022 08:59	WG1880869
Bromoform	U		0.00258	0.0200	20	06/17/2022 08:59	WG1880869
Bromomethane	U		0.0121	0.100	20	06/17/2022 08:59	WG1880869
n-Butylbenzene	0.00822	J	0.00314	0.0200	20	06/17/2022 08:59	WG1880869
sec-Butylbenzene	0.0140	J	0.00250	0.0200	20	06/17/2022 08:59	WG1880869
tert-Butylbenzene	U		0.00254	0.0200	20	06/17/2022 08:59	WG1880869
Carbon tetrachloride	U		0.00256	0.0200	20	06/17/2022 08:59	WG1880869
Chlorobenzene	U		0.00232	0.0200	20	06/17/2022 08:59	WG1880869
Chlorodibromomethane	U		0.00280	0.0200	20	06/17/2022 08:59	WG1880869
Chloroethane	U		0.00384	0.100	20	06/17/2022 08:59	WG1880869
Chloroform	U		0.00222	0.100	20	06/17/2022 08:59	WG1880869
Chloromethane	U		0.0192	0.0500	20	06/17/2022 08:59	WG1880869
2-Chlorotoluene	U		0.00212	0.0200	20	06/17/2022 08:59	WG1880869
4-Chlorotoluene	U		0.00228	0.0200	20	06/17/2022 08:59	WG1880869
1,2-Dibromo-3-Chloropropane	U		0.00552	0.100	20	06/17/2022 08:59	WG1880869
1,2-Dibromoethane	U		0.00252	0.0200	20	06/17/2022 08:59	WG1880869
Dibromomethane	U		0.00244	0.0200	20	06/17/2022 08:59	WG1880869
1,2-Dichlorobenzene	U		0.00214	0.0200	20	06/17/2022 08:59	WG1880869
1,3-Dichlorobenzene	U		0.00220	0.0200	20	06/17/2022 08:59	WG1880869
1,4-Dichlorobenzene	U		0.00240	0.0200	20	06/17/2022 08:59	WG1880869
Dichlorodifluoromethane	U		0.00748	0.100	20	06/17/2022 08:59	WG1880869
1,1-Dichloroethane	U		0.00200	0.0200	20	06/17/2022 08:59	WG1880869
1,2-Dichloroethane	U		0.00164	0.0200	20	06/17/2022 08:59	WG1880869
1,1-Dichloroethene	U		0.00376	0.0200	20	06/17/2022 08:59	WG1880869
cis-1,2-Dichloroethene	U		0.00252	0.0200	20	06/17/2022 08:59	WG1880869
trans-1,2-Dichloroethene	U		0.00298	0.0200	20	06/17/2022 08:59	WG1880869
1,2-Dichloropropane	U		0.00298	0.0200	20	06/17/2022 08:59	WG1880869
1,1-Dichloropropene	U		0.00284	0.0200	20	06/17/2022 08:59	WG1880869
1,3-Dichloropropane	U		0.00220	0.0200	20	06/17/2022 08:59	WG1880869
cis-1,3-Dichloropropene	U		0.00222	0.0200	20	06/17/2022 08:59	WG1880869
trans-1,3-Dichloropropene	U		0.00236	0.0200	20	06/17/2022 08:59	WG1880869
2,2-Dichloropropane	U		0.00322	0.0200	20	06/17/2022 08:59	WG1880869
Ethylbenzene	0.0201		0.00274	0.0200	20	06/17/2022 08:59	WG1880869
Hexachloro-1,3-butadiene	U		0.00674	0.0200	20	06/17/2022 08:59	WG1880869
n-Hexane	U		0.0150	0.200	20	06/17/2022 08:59	WG1880869
Isopropylbenzene	0.0915		0.00210	0.0200	20	06/17/2022 08:59	WG1880869
p-Isopropyltoluene	0.00819	J	0.00240	0.0200	20	06/17/2022 08:59	WG1880869
2-Butanone (MEK)	U		0.0238	0.200	20	06/17/2022 08:59	WG1880869
Methylene Chloride	U		0.00860	0.100	20	06/17/2022 08:59	WG1880869
4-Methyl-2-pentanone (MIBK)	U		0.00956	0.200	20	06/17/2022 08:59	WG1880869
Methyl tert-butyl ether	U		0.00202	0.0200	20	06/17/2022 08:59	WG1880869
Naphthalene	U		0.0200	0.100	20	06/17/2022 08:59	WG1880869
n-Propylbenzene	0.0969		0.00199	0.0200	20	06/17/2022 08:59	WG1880869
Styrene	U		0.00236	0.0200	20	06/17/2022 08:59	WG1880869
1,1,1,2-Tetrachloroethane	U		0.00294	0.0200	20	06/17/2022 08:59	WG1880869
1,1,2,2-Tetrachloroethane	U		0.00266	0.0200	20	06/17/2022 08:59	WG1880869
Tetrachloroethene	U		0.00600	0.0200	20	06/17/2022 08:59	WG1880869
Toluene	0.0518		0.00556	0.0200	20	06/17/2022 08:59	WG1880869
1,2,3-Trichlorobenzene	U		0.00460	0.0200	20	06/17/2022 08:59	WG1880869
1,2,4-Trichlorobenzene	U		0.00962	0.0200	20	06/17/2022 08:59	WG1880869
1,1,1-Trichloroethane	U		0.00298	0.0200	20	06/17/2022 08:59	WG1880869

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.00316	0.0200	20	06/17/2022 08:59	WG1880869
Trichloroethene	U		0.00380	0.0200	20	06/17/2022 08:59	WG1880869
Trichlorofluoromethane	U		0.00320	0.100	20	06/17/2022 08:59	WG1880869
1,2,3-Trichloropropane	U		0.00474	0.0500	20	06/17/2022 08:59	WG1880869
1,2,4-Trimethylbenzene	U		0.00644	0.0200	20	06/17/2022 08:59	WG1880869
1,3,5-Trimethylbenzene	0.00755	J	0.00208	0.0200	20	06/17/2022 08:59	WG1880869
Vinyl chloride	U		0.00468	0.0200	20	06/17/2022 08:59	WG1880869
Xylenes, Total	0.0882		0.00348	0.0600	20	06/17/2022 08:59	WG1880869
(S) Toluene-d8	*102*			*80.0-120*		*06/17/2022 08:59*	WG1880869
(S) 4-Bromofluorobenzene	*98.4*			*77.0-126*		*06/17/2022 08:59*	WG1880869
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*06/17/2022 08:59*	WG1880869

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	0.0000782		0.0000190	0.0000500	1	06/16/2022 14:23	WG1879813
Acenaphthene	0.000587		0.0000190	0.0000500	1	06/16/2022 14:23	WG1879813
Acenaphthylene	U		0.0000171	0.0000500	1	06/16/2022 14:23	WG1879813
Benzo(a)anthracene	U		0.0000203	0.0000500	1	06/16/2022 14:23	WG1879813
Benzo(a)pyrene	U		0.0000184	0.0000500	1	06/16/2022 14:23	WG1879813
Benzo(b)fluoranthene	U		0.0000168	0.0000500	1	06/16/2022 14:23	WG1879813
Benzo(g,h,i)perylene	U		0.0000184	0.0000500	1	06/16/2022 14:23	WG1879813
Benzo(k)fluoranthene	U		0.0000202	0.0000500	1	06/16/2022 14:23	WG1879813
Chrysene	U		0.0000179	0.0000500	1	06/16/2022 14:23	WG1879813
Dibenz(a,h)anthracene	U		0.0000160	0.0000500	1	06/16/2022 14:23	WG1879813
Fluoranthene	0.0000360	J	0.0000270	0.000100	1	06/16/2022 14:23	WG1879813
Fluorene	0.000645		0.0000169	0.0000500	1	06/16/2022 14:23	WG1879813
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500	1	06/16/2022 14:23	WG1879813
Naphthalene	0.00357		0.0000917	0.000250	1	06/16/2022 14:23	WG1879813
Phenanthrene	0.000711		0.0000180	0.0000500	1	06/16/2022 14:23	WG1879813
Pyrene	0.0000585		0.0000169	0.0000500	1	06/16/2022 14:23	WG1879813
1-Methylnaphthalene	0.0472		0.0000687	0.000250	1	06/16/2022 14:23	WG1879813
2-Methylnaphthalene	0.00126		0.0000674	0.000250	1	06/16/2022 14:23	WG1879813
2-Chloronaphthalene	U		0.0000682	0.000250	1	06/16/2022 14:23	WG1879813
(S) Nitrobenzene-d5	*143*			*31.0-160*		*06/16/2022 14:23*	WG1879813
(S) 2-Fluorobiphenyl	*84.2*			*48.0-148*		*06/16/2022 14:23*	WG1879813
(S) p-Terphenyl-d14	*113*			*37.0-146*		*06/16/2022 14:23*	WG1879813

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U		0.0113	0.0500	1	06/17/2022 07:54	WG1880869
Acrolein	U		0.00254	0.0500	1	06/17/2022 07:54	WG1880869
Acrylonitrile	U		0.000671	0.0100	1	06/17/2022 07:54	WG1880869
Benzene	0.000158	J	0.0000941	0.00100	1	06/17/2022 07:54	WG1880869
Bromobenzene	U		0.000118	0.00100	1	06/17/2022 07:54	WG1880869
Bromodichloromethane	U		0.000136	0.00100	1	06/17/2022 07:54	WG1880869
Bromoform	U		0.000129	0.00100	1	06/17/2022 07:54	WG1880869
Bromomethane	U		0.000605	0.00500	1	06/17/2022 07:54	WG1880869
n-Butylbenzene	U		0.000157	0.00100	1	06/17/2022 07:54	WG1880869
sec-Butylbenzene	0.000318	J	0.000125	0.00100	1	06/17/2022 07:54	WG1880869
tert-Butylbenzene	0.000232	J	0.000127	0.00100	1	06/17/2022 07:54	WG1880869
Carbon tetrachloride	U		0.000128	0.00100	1	06/17/2022 07:54	WG1880869
Chlorobenzene	U		0.000116	0.00100	1	06/17/2022 07:54	WG1880869
Chlorodibromomethane	U		0.000140	0.00100	1	06/17/2022 07:54	WG1880869
Chloroethane	U		0.000192	0.00500	1	06/17/2022 07:54	WG1880869
Chloroform	U		0.000111	0.00500	1	06/17/2022 07:54	WG1880869
Chloromethane	U		0.000960	0.00250	1	06/17/2022 07:54	WG1880869
2-Chlorotoluene	U		0.000106	0.00100	1	06/17/2022 07:54	WG1880869
4-Chlorotoluene	U		0.000114	0.00100	1	06/17/2022 07:54	WG1880869
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	06/17/2022 07:54	WG1880869
1,2-Dibromoethane	U		0.000126	0.00100	1	06/17/2022 07:54	WG1880869
Dibromomethane	U		0.000122	0.00100	1	06/17/2022 07:54	WG1880869
1,2-Dichlorobenzene	U		0.000107	0.00100	1	06/17/2022 07:54	WG1880869
1,3-Dichlorobenzene	U		0.000110	0.00100	1	06/17/2022 07:54	WG1880869
1,4-Dichlorobenzene	U		0.000120	0.00100	1	06/17/2022 07:54	WG1880869
Dichlorodifluoromethane	U		0.000374	0.00500	1	06/17/2022 07:54	WG1880869
1,1-Dichloroethane	U		0.000100	0.00100	1	06/17/2022 07:54	WG1880869
1,2-Dichloroethane	U		0.0000819	0.00100	1	06/17/2022 07:54	WG1880869
1,1-Dichloroethene	U		0.000188	0.00100	1	06/17/2022 07:54	WG1880869
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	06/17/2022 07:54	WG1880869
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	06/17/2022 07:54	WG1880869
1,2-Dichloropropane	U		0.000149	0.00100	1	06/17/2022 07:54	WG1880869
1,1-Dichloropropene	U		0.000142	0.00100	1	06/17/2022 07:54	WG1880869
1,3-Dichloropropane	U		0.000110	0.00100	1	06/17/2022 07:54	WG1880869
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	06/17/2022 07:54	WG1880869
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	06/17/2022 07:54	WG1880869
2,2-Dichloropropane	U		0.000161	0.00100	1	06/17/2022 07:54	WG1880869
Ethylbenzene	U		0.000137	0.00100	1	06/17/2022 07:54	WG1880869
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	06/17/2022 07:54	WG1880869
n-Hexane	U		0.000749	0.0100	1	06/17/2022 07:54	WG1880869
Isopropylbenzene	0.000422	J	0.000105	0.00100	1	06/17/2022 07:54	WG1880869
p-Isopropyltoluene	0.000612	J	0.000120	0.00100	1	06/17/2022 07:54	WG1880869
2-Butanone (MEK)	U		0.00119	0.0100	1	06/17/2022 07:54	WG1880869
Methylene Chloride	U		0.000430	0.00500	1	06/17/2022 07:54	WG1880869
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	06/17/2022 07:54	WG1880869
Methyl tert-butyl ether	0.00275		0.000101	0.00100	1	06/17/2022 07:54	WG1880869
Naphthalene	U		0.00100	0.00500	1	06/17/2022 07:54	WG1880869
n-Propylbenzene	U		0.0000993	0.00100	1	06/17/2022 07:54	WG1880869
Styrene	U		0.000118	0.00100	1	06/17/2022 07:54	WG1880869
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	06/17/2022 07:54	WG1880869
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	06/17/2022 07:54	WG1880869
Tetrachloroethene	U		0.000300	0.00100	1	06/17/2022 07:54	WG1880869
Toluene	U		0.000278	0.00100	1	06/17/2022 07:54	WG1880869
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	06/17/2022 07:54	WG1880869
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	06/17/2022 07:54	WG1880869
1,1,1-Trichloroethane	U		0.000149	0.00100	1	06/17/2022 07:54	WG1880869

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.000158	0.00100	1	06/17/2022 07:54	WG1880869
Trichloroethene	U		0.000190	0.00100	1	06/17/2022 07:54	WG1880869
Trichlorofluoromethane	U		0.000160	0.00500	1	06/17/2022 07:54	WG1880869
1,2,3-Trichloropropane	U		0.000237	0.00250	1	06/17/2022 07:54	WG1880869
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	06/17/2022 07:54	WG1880869
1,3,5-Trimethylbenzene	0.000134	J	0.000104	0.00100	1	06/17/2022 07:54	WG1880869
Vinyl chloride	U		0.000234	0.00100	1	06/17/2022 07:54	WG1880869
Xylenes, Total	0.000464	J	0.000174	0.00300	1	06/17/2022 07:54	WG1880869
(S) Toluene-d8	*107*			*80.0-120*		*06/17/2022 07:54*	WG1880869
(S) 4-Bromofluorobenzene	*107*			*77.0-126*		*06/17/2022 07:54*	WG1880869
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*06/17/2022 07:54*	WG1880869

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	U		0.0000190	0.0000500	1	06/16/2022 14:41	WG1879813
Acenaphthene	0.000364		0.0000190	0.0000500	1	06/16/2022 14:41	WG1879813
Acenaphthylene	U		0.0000171	0.0000500	1	06/16/2022 14:41	WG1879813
Benzo(a)anthracene	U		0.0000203	0.0000500	1	06/16/2022 14:41	WG1879813
Benzo(a)pyrene	U		0.0000184	0.0000500	1	06/16/2022 14:41	WG1879813
Benzo(b)fluoranthene	U		0.0000168	0.0000500	1	06/16/2022 14:41	WG1879813
Benzo(g,h,i)perylene	U		0.0000184	0.0000500	1	06/16/2022 14:41	WG1879813
Benzo(k)fluoranthene	U		0.0000202	0.0000500	1	06/16/2022 14:41	WG1879813
Chrysene	U		0.0000179	0.0000500	1	06/16/2022 14:41	WG1879813
Dibenz(a,h)anthracene	U		0.0000160	0.0000500	1	06/16/2022 14:41	WG1879813
Fluoranthene	0.0000331	J	0.0000270	0.000100	1	06/16/2022 14:41	WG1879813
Fluorene	0.000152		0.0000169	0.0000500	1	06/16/2022 14:41	WG1879813
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500	1	06/16/2022 14:41	WG1879813
Naphthalene	U		0.0000917	0.000250	1	06/16/2022 14:41	WG1879813
Phenanthrene	U		0.0000180	0.0000500	1	06/16/2022 14:41	WG1879813
Pyrene	0.0000487	J	0.0000169	0.0000500	1	06/16/2022 14:41	WG1879813
1-Methylnaphthalene	0.0000710	J	0.0000687	0.000250	1	06/16/2022 14:41	WG1879813
2-Methylnaphthalene	U		0.0000674	0.000250	1	06/16/2022 14:41	WG1879813
2-Chloronaphthalene	U		0.0000682	0.000250	1	06/16/2022 14:41	WG1879813
(S) Nitrobenzene-d5	*89.5*			*31.0-160*		*06/16/2022 14:41*	WG1879813
(S) 2-Fluorobiphenyl	*92.6*			*48.0-148*		*06/16/2022 14:41*	WG1879813
(S) p-Terphenyl-d14	*117*			*37.0-146*		*06/16/2022 14:41*	WG1879813

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U		0.0113	0.0500	1	06/17/2022 08:16	WG1880869
Acrolein	U		0.00254	0.0500	1	06/17/2022 08:16	WG1880869
Acrylonitrile	U		0.000671	0.0100	1	06/17/2022 08:16	WG1880869
Benzene	0.000110	J	0.0000941	0.00100	1	06/17/2022 08:16	WG1880869
Bromobenzene	U		0.000118	0.00100	1	06/17/2022 08:16	WG1880869
Bromodichloromethane	0.00163		0.000136	0.00100	1	06/17/2022 08:16	WG1880869
Bromoform	U		0.000129	0.00100	1	06/17/2022 08:16	WG1880869
Bromomethane	U		0.000605	0.00500	1	06/17/2022 08:16	WG1880869
n-Butylbenzene	U		0.000157	0.00100	1	06/17/2022 08:16	WG1880869
sec-Butylbenzene	U		0.000125	0.00100	1	06/17/2022 08:16	WG1880869
tert-Butylbenzene	U		0.000127	0.00100	1	06/17/2022 08:16	WG1880869
Carbon tetrachloride	U		0.000128	0.00100	1	06/17/2022 08:16	WG1880869
Chlorobenzene	U		0.000116	0.00100	1	06/17/2022 08:16	WG1880869
Chlorodibromomethane	U		0.000140	0.00100	1	06/17/2022 08:16	WG1880869
Chloroethane	U		0.000192	0.00500	1	06/17/2022 08:16	WG1880869
Chloroform	0.00897		0.000111	0.00500	1	06/17/2022 08:16	WG1880869
Chloromethane	U		0.000960	0.00250	1	06/17/2022 08:16	WG1880869
2-Chlorotoluene	U		0.000106	0.00100	1	06/17/2022 08:16	WG1880869
4-Chlorotoluene	U		0.000114	0.00100	1	06/17/2022 08:16	WG1880869
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	06/17/2022 08:16	WG1880869
1,2-Dibromoethane	U		0.000126	0.00100	1	06/17/2022 08:16	WG1880869
Dibromomethane	U		0.000122	0.00100	1	06/17/2022 08:16	WG1880869
1,2-Dichlorobenzene	U		0.000107	0.00100	1	06/17/2022 08:16	WG1880869
1,3-Dichlorobenzene	U		0.000110	0.00100	1	06/17/2022 08:16	WG1880869
1,4-Dichlorobenzene	U		0.000120	0.00100	1	06/17/2022 08:16	WG1880869
Dichlorodifluoromethane	U		0.000374	0.00500	1	06/17/2022 08:16	WG1880869
1,1-Dichloroethane	U		0.000100	0.00100	1	06/17/2022 08:16	WG1880869
1,2-Dichloroethane	U		0.0000819	0.00100	1	06/17/2022 08:16	WG1880869
1,1-Dichloroethene	U		0.000188	0.00100	1	06/17/2022 08:16	WG1880869
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	06/17/2022 08:16	WG1880869
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	06/17/2022 08:16	WG1880869
1,2-Dichloropropane	U		0.000149	0.00100	1	06/17/2022 08:16	WG1880869
1,1-Dichloropropene	U		0.000142	0.00100	1	06/17/2022 08:16	WG1880869
1,3-Dichloropropane	U		0.000110	0.00100	1	06/17/2022 08:16	WG1880869
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	06/17/2022 08:16	WG1880869
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	06/17/2022 08:16	WG1880869
2,2-Dichloropropane	U		0.000161	0.00100	1	06/17/2022 08:16	WG1880869
Ethylbenzene	U		0.000137	0.00100	1	06/17/2022 08:16	WG1880869
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	06/17/2022 08:16	WG1880869
n-Hexane	U		0.000749	0.0100	1	06/17/2022 08:16	WG1880869
Isopropylbenzene	U		0.000105	0.00100	1	06/17/2022 08:16	WG1880869
p-Isopropyltoluene	U		0.000120	0.00100	1	06/17/2022 08:16	WG1880869
2-Butanone (MEK)	U		0.00119	0.0100	1	06/17/2022 08:16	WG1880869
Methylene Chloride	U		0.000430	0.00500	1	06/17/2022 08:16	WG1880869
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	06/17/2022 08:16	WG1880869
Methyl tert-butyl ether	U		0.000101	0.00100	1	06/17/2022 08:16	WG1880869
Naphthalene	U		0.00100	0.00500	1	06/17/2022 08:16	WG1880869
n-Propylbenzene	U		0.0000993	0.00100	1	06/17/2022 08:16	WG1880869
Styrene	U		0.000118	0.00100	1	06/17/2022 08:16	WG1880869
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	06/17/2022 08:16	WG1880869
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	06/17/2022 08:16	WG1880869
Tetrachloroethene	U		0.000300	0.00100	1	06/17/2022 08:16	WG1880869
Toluene	U		0.000278	0.00100	1	06/17/2022 08:16	WG1880869
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	06/17/2022 08:16	WG1880869
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	06/17/2022 08:16	WG1880869
1,1,1-Trichloroethane	U		0.000149	0.00100	1	06/17/2022 08:16	WG1880869

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.000158	0.00100	1	06/17/2022 08:16	WG1880869
Trichloroethene	U		0.000190	0.00100	1	06/17/2022 08:16	WG1880869
Trichlorofluoromethane	U		0.000160	0.00500	1	06/17/2022 08:16	WG1880869
1,2,3-Trichloropropane	U		0.000237	0.00250	1	06/17/2022 08:16	WG1880869
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	06/17/2022 08:16	WG1880869
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	06/17/2022 08:16	WG1880869
Vinyl chloride	U		0.000234	0.00100	1	06/17/2022 08:16	WG1880869
Xylenes, Total	U		0.000174	0.00300	1	06/17/2022 08:16	WG1880869
(S) Toluene-d8	*104*			*80.0-120*		*06/17/2022 08:16*	WG1880869
(S) 4-Bromofluorobenzene	*104*			*77.0-126*		*06/17/2022 08:16*	WG1880869
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*06/17/2022 08:16*	WG1880869

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	U		0.0000190	0.0000500	1	06/16/2022 14:58	WG1879813
Acenaphthene	U		0.0000190	0.0000500	1	06/16/2022 14:58	WG1879813
Acenaphthylene	U		0.0000171	0.0000500	1	06/16/2022 14:58	WG1879813
Benzo(a)anthracene	U		0.0000203	0.0000500	1	06/16/2022 14:58	WG1879813
Benzo(a)pyrene	U		0.0000184	0.0000500	1	06/16/2022 14:58	WG1879813
Benzo(b)fluoranthene	U		0.0000168	0.0000500	1	06/16/2022 14:58	WG1879813
Benzo(g,h,i)perylene	U		0.0000184	0.0000500	1	06/16/2022 14:58	WG1879813
Benzo(k)fluoranthene	U		0.0000202	0.0000500	1	06/16/2022 14:58	WG1879813
Chrysene	U		0.0000179	0.0000500	1	06/16/2022 14:58	WG1879813
Dibenz(a,h)anthracene	U		0.0000160	0.0000500	1	06/16/2022 14:58	WG1879813
Fluoranthene	U		0.0000270	0.000100	1	06/16/2022 14:58	WG1879813
Fluorene	U		0.0000169	0.0000500	1	06/16/2022 14:58	WG1879813
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500	1	06/16/2022 14:58	WG1879813
Naphthalene	U		0.0000917	0.000250	1	06/16/2022 14:58	WG1879813
Phenanthrene	U		0.0000180	0.0000500	1	06/16/2022 14:58	WG1879813
Pyrene	U		0.0000169	0.0000500	1	06/16/2022 14:58	WG1879813
1-Methylnaphthalene	U		0.0000687	0.000250	1	06/16/2022 14:58	WG1879813
2-Methylnaphthalene	U		0.0000674	0.000250	1	06/16/2022 14:58	WG1879813
2-Chloronaphthalene	U		0.0000682	0.000250	1	06/16/2022 14:58	WG1879813
(S) Nitrobenzene-d5	*103*			*31.0-160*		*06/16/2022 14:58*	WG1879813
(S) 2-Fluorobiphenyl	*96.8*			*48.0-148*		*06/16/2022 14:58*	WG1879813
(S) p-Terphenyl-d14	*117*			*37.0-146*		*06/16/2022 14:58*	WG1879813

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U		0.0113	0.0500	1	06/17/2022 02:49	WG1880869
Acrolein	U		0.00254	0.0500	1	06/17/2022 02:49	WG1880869
Acrylonitrile	U		0.000671	0.0100	1	06/17/2022 02:49	WG1880869
Benzene	U		0.0000941	0.00100	1	06/17/2022 02:49	WG1880869
Bromobenzene	U		0.000118	0.00100	1	06/17/2022 02:49	WG1880869
Bromodichloromethane	U		0.000136	0.00100	1	06/17/2022 02:49	WG1880869
Bromoform	U		0.000129	0.00100	1	06/17/2022 02:49	WG1880869
Bromomethane	U		0.000605	0.00500	1	06/17/2022 02:49	WG1880869
n-Butylbenzene	U		0.000157	0.00100	1	06/17/2022 02:49	WG1880869
sec-Butylbenzene	U		0.000125	0.00100	1	06/17/2022 02:49	WG1880869
tert-Butylbenzene	U		0.000127	0.00100	1	06/17/2022 02:49	WG1880869
Carbon tetrachloride	U		0.000128	0.00100	1	06/17/2022 02:49	WG1880869
Chlorobenzene	U		0.000116	0.00100	1	06/17/2022 02:49	WG1880869
Chlorodibromomethane	U		0.000140	0.00100	1	06/17/2022 02:49	WG1880869
Chloroethane	U		0.000192	0.00500	1	06/17/2022 02:49	WG1880869
Chloroform	U		0.000111	0.00500	1	06/17/2022 02:49	WG1880869
Chloromethane	U		0.000960	0.00250	1	06/17/2022 02:49	WG1880869
2-Chlorotoluene	U		0.000106	0.00100	1	06/17/2022 02:49	WG1880869
4-Chlorotoluene	U		0.000114	0.00100	1	06/17/2022 02:49	WG1880869
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	06/17/2022 02:49	WG1880869
1,2-Dibromoethane	U		0.000126	0.00100	1	06/17/2022 02:49	WG1880869
Dibromomethane	U		0.000122	0.00100	1	06/17/2022 02:49	WG1880869
1,2-Dichlorobenzene	U		0.000107	0.00100	1	06/17/2022 02:49	WG1880869
1,3-Dichlorobenzene	U		0.000110	0.00100	1	06/17/2022 02:49	WG1880869
1,4-Dichlorobenzene	U		0.000120	0.00100	1	06/17/2022 02:49	WG1880869
Dichlorodifluoromethane	U		0.000374	0.00500	1	06/17/2022 02:49	WG1880869
1,1-Dichloroethane	U		0.000100	0.00100	1	06/17/2022 02:49	WG1880869
1,2-Dichloroethane	U		0.0000819	0.00100	1	06/17/2022 02:49	WG1880869
1,1-Dichloroethene	U		0.000188	0.00100	1	06/17/2022 02:49	WG1880869
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	06/17/2022 02:49	WG1880869
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	06/17/2022 02:49	WG1880869
1,2-Dichloropropane	U		0.000149	0.00100	1	06/17/2022 02:49	WG1880869
1,1-Dichloropropene	U		0.000142	0.00100	1	06/17/2022 02:49	WG1880869
1,3-Dichloropropane	U		0.000110	0.00100	1	06/17/2022 02:49	WG1880869
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	06/17/2022 02:49	WG1880869
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	06/17/2022 02:49	WG1880869
2,2-Dichloropropane	U		0.000161	0.00100	1	06/17/2022 02:49	WG1880869
Ethylbenzene	U		0.000137	0.00100	1	06/17/2022 02:49	WG1880869
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	06/17/2022 02:49	WG1880869
n-Hexane	U		0.000749	0.0100	1	06/17/2022 02:49	WG1880869
Isopropylbenzene	U		0.000105	0.00100	1	06/17/2022 02:49	WG1880869
p-Isopropyltoluene	U		0.000120	0.00100	1	06/17/2022 02:49	WG1880869
2-Butanone (MEK)	U		0.00119	0.0100	1	06/17/2022 02:49	WG1880869
Methylene Chloride	U		0.000430	0.00500	1	06/17/2022 02:49	WG1880869
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	06/17/2022 02:49	WG1880869
Methyl tert-butyl ether	U		0.000101	0.00100	1	06/17/2022 02:49	WG1880869
Naphthalene	U		0.00100	0.00500	1	06/17/2022 02:49	WG1880869
n-Propylbenzene	U		0.0000993	0.00100	1	06/17/2022 02:49	WG1880869
Styrene	U		0.000118	0.00100	1	06/17/2022 02:49	WG1880869
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	06/17/2022 02:49	WG1880869
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	06/17/2022 02:49	WG1880869
Tetrachloroethene	U		0.000300	0.00100	1	06/17/2022 02:49	WG1880869
Toluene	U		0.000278	0.00100	1	06/17/2022 02:49	WG1880869
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	06/17/2022 02:49	WG1880869
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	06/17/2022 02:49	WG1880869
1,1,1-Trichloroethane	U		0.000149	0.00100	1	06/17/2022 02:49	WG1880869

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
1,1,2-Trichloroethane	U		0.000158	0.00100	1	06/17/2022 02:49	WG1880869
Trichloroethene	U		0.000190	0.00100	1	06/17/2022 02:49	WG1880869
Trichlorofluoromethane	U		0.000160	0.00500	1	06/17/2022 02:49	WG1880869
1,2,3-Trichloropropane	U		0.000237	0.00250	1	06/17/2022 02:49	WG1880869
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	06/17/2022 02:49	WG1880869
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	06/17/2022 02:49	WG1880869
Vinyl chloride	U		0.000234	0.00100	1	06/17/2022 02:49	WG1880869
Xylenes, Total	U		0.000174	0.00300	1	06/17/2022 02:49	WG1880869
(S) Toluene-d8	*105*			*80.0-120*		*06/17/2022 02:49*	WG1880869
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*06/17/2022 02:49*	WG1880869
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*06/17/2022 02:49*	WG1880869

Method Blank (MB)

(MB) R3804312-2 06/17/22 02:05

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0113	0.0500
Acrolein	U		0.00254	0.0500
Acrylonitrile	U		0.000671	0.0100
Benzene	U		0.0000941	0.00100
Bromobenzene	U		0.000118	0.00100
Bromodichloromethane	U		0.000136	0.00100
Bromoform	U		0.000129	0.00100
Bromomethane	U		0.000605	0.00500
n-Butylbenzene	U		0.000157	0.00100
sec-Butylbenzene	U		0.000125	0.00100
tert-Butylbenzene	U		0.000127	0.00100
Carbon tetrachloride	U		0.000128	0.00100
Chlorobenzene	U		0.000116	0.00100
Chlorodibromomethane	U		0.000140	0.00100
Chloroethane	U		0.000192	0.00500
Chloroform	U		0.000111	0.00500
Chloromethane	U		0.000960	0.00250
2-Chlorotoluene	U		0.000106	0.00100
4-Chlorotoluene	U		0.000114	0.00100
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500
1,2-Dibromoethane	U		0.000126	0.00100
Dibromomethane	U		0.000122	0.00100
1,2-Dichlorobenzene	U		0.000107	0.00100
1,3-Dichlorobenzene	U		0.000110	0.00100
1,4-Dichlorobenzene	U		0.000120	0.00100
Dichlorodifluoromethane	U		0.000374	0.00500
1,1-Dichloroethane	U		0.000100	0.00100
1,2-Dichloroethane	U		0.0000819	0.00100
1,1-Dichloroethene	U		0.000188	0.00100
cis-1,2-Dichloroethene	U		0.000126	0.00100
trans-1,2-Dichloroethene	U		0.000149	0.00100
1,2-Dichloropropane	U		0.000149	0.00100
1,1-Dichloropropene	U		0.000142	0.00100
1,3-Dichloropropane	U		0.000110	0.00100
cis-1,3-Dichloropropene	U		0.000111	0.00100
trans-1,3-Dichloropropene	U		0.000118	0.00100
2,2-Dichloropropane	U		0.000161	0.00100
Ethylbenzene	U		0.000137	0.00100
Hexachloro-1,3-butadiene	U		0.000337	0.00100
n-Hexane	U		0.000749	0.0100

Method Blank (MB)

(MB) R3804312-2 06/17/22 02:05

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Isopropylbenzene	U		0.000105	0.00100
p-Isopropyltoluene	U		0.000120	0.00100
2-Butanone (MEK)	U		0.00119	0.0100
Methylene Chloride	U		0.000430	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100
Methyl tert-butyl ether	U		0.000101	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.0000993	0.00100
Styrene	U		0.000118	0.00100
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100
Tetrachloroethene	U		0.000300	0.00100
Toluene	U		0.000278	0.00100
1,2,3-Trichlorobenzene	U		0.000230	0.00100
1,2,4-Trichlorobenzene	U		0.000481	0.00100
1,1,1-Trichloroethane	U		0.000149	0.00100
1,1,2-Trichloroethane	U		0.000158	0.00100
Trichloroethene	U		0.000190	0.00100
Trichlorofluoromethane	U		0.000160	0.00500
1,2,3-Trichloropropane	U		0.000237	0.00250
1,2,4-Trimethylbenzene	U		0.000322	0.00100
1,3,5-Trimethylbenzene	U		0.000104	0.00100
Vinyl chloride	U		0.000234	0.00100
Xylenes, Total	U		0.000174	0.00300
(S) Toluene-d8	*105*			*80.0-120*
(S) 4-Bromofluorobenzene	*99.4*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3804312-1 06/17/22 01:22

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.0250	0.0265	106	19.0-160	
Acrolein	0.0250	0.0228	91.2	10.0-160	
Acrylonitrile	0.0250	0.0274	110	55.0-149	
Benzene	0.00500	0.00557	111	70.0-123	
Bromobenzene	0.00500	0.00515	103	73.0-121	
Bromodichloromethane	0.00500	0.00558	112	75.0-120	

Laboratory Control Sample (LCS)

(LCS) R3804312-1 06/17/22 01:22

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Bromoform	0.00500	0.00507	101	68.0-132	
Bromomethane	0.00500	0.00796	159	10.0-160	
n-Butylbenzene	0.00500	0.00528	106	73.0-125	
sec-Butylbenzene	0.00500	0.00538	108	75.0-125	
tert-Butylbenzene	0.00500	0.00535	107	76.0-124	
Carbon tetrachloride	0.00500	0.00585	117	68.0-126	
Chlorobenzene	0.00500	0.00526	105	80.0-121	
Chlorodibromomethane	0.00500	0.00500	100	77.0-125	
Chloroethane	0.00500	0.00610	122	47.0-150	
Chloroform	0.00500	0.00546	109	73.0-120	
Chloromethane	0.00500	0.00568	114	41.0-142	
2-Chlorotoluene	0.00500	0.00564	113	76.0-123	
4-Chlorotoluene	0.00500	0.00527	105	75.0-122	
1,2-Dibromo-3-Chloropropane	0.00500	0.00474	94.8	58.0-134	
1,2-Dibromoethane	0.00500	0.00514	103	80.0-122	
Dibromomethane	0.00500	0.00556	111	80.0-120	
1,2-Dichlorobenzene	0.00500	0.00532	106	79.0-121	
1,3-Dichlorobenzene	0.00500	0.00500	100	79.0-120	
1,4-Dichlorobenzene	0.00500	0.00526	105	79.0-120	
Dichlorodifluoromethane	0.00500	0.00506	101	51.0-149	
1,1-Dichloroethane	0.00500	0.00566	113	70.0-126	
1,2-Dichloroethane	0.00500	0.00540	108	70.0-128	
1,1-Dichloroethene	0.00500	0.00580	116	71.0-124	
cis-1,2-Dichloroethene	0.00500	0.00554	111	73.0-120	
trans-1,2-Dichloroethene	0.00500	0.00571	114	73.0-120	
1,2-Dichloropropane	0.00500	0.00553	111	77.0-125	
1,1-Dichloropropene	0.00500	0.00604	121	74.0-126	
1,3-Dichloropropane	0.00500	0.00521	104	80.0-120	
cis-1,3-Dichloropropene	0.00500	0.00513	103	80.0-123	
trans-1,3-Dichloropropene	0.00500	0.00497	99.4	78.0-124	
2,2-Dichloropropane	0.00500	0.00513	103	58.0-130	
Ethylbenzene	0.00500	0.00540	108	79.0-123	
Hexachloro-1,3-butadiene	0.00500	0.00558	112	54.0-138	
n-Hexane	0.00500	0.00527	105	57.0-133	
Isopropylbenzene	0.00500	0.00530	106	76.0-127	
p-Isopropyltoluene	0.00500	0.00561	112	76.0-125	
2-Butanone (MEK)	0.0250	0.0272	109	44.0-160	
Methylene Chloride	0.00500	0.00581	116	67.0-120	
4-Methyl-2-pentanone (MIBK)	0.0250	0.0269	108	68.0-142	
Methyl tert-butyl ether	0.00500	0.00536	107	68.0-125	

Laboratory Control Sample (LCS)

(LCS) R3804312-1 06/17/22 01:22

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Naphthalene	0.00500	0.00497	99.4	54.0-135	
n-Propylbenzene	0.00500	0.00555	111	77.0-124	
Styrene	0.00500	0.00496	99.2	73.0-130	
1,1,1,2-Tetrachloroethane	0.00500	0.00527	105	75.0-125	
1,1,2,2-Tetrachloroethane	0.00500	0.00501	100	65.0-130	
Tetrachloroethene	0.00500	0.00576	115	72.0-132	
Toluene	0.00500	0.00524	105	79.0-120	
1,2,3-Trichlorobenzene	0.00500	0.00527	105	50.0-138	
1,2,4-Trichlorobenzene	0.00500	0.00506	101	57.0-137	
1,1,1-Trichloroethane	0.00500	0.00587	117	73.0-124	
1,1,2-Trichloroethane	0.00500	0.00532	106	80.0-120	
Trichloroethene	0.00500	0.00603	121	78.0-124	
Trichlorofluoromethane	0.00500	0.00580	116	59.0-147	
1,2,3-Trichloropropane	0.00500	0.00512	102	73.0-130	
1,2,4-Trimethylbenzene	0.00500	0.00534	107	76.0-121	
1,3,5-Trimethylbenzene	0.00500	0.00558	112	76.0-122	
Vinyl chloride	0.00500	0.00580	116	67.0-131	
Xylenes, Total	0.0150	0.0162	108	79.0-123	
(S) Toluene-d8			*102*	*80.0-120*	
(S) 4-Bromofluorobenzene			*101*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*108*	*70.0-130*	

Method Blank (MB)

(MB) R3804616-3 06/17/22 12:11

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0113	0.0500
Acrolein	U		0.00254	0.0500
Acrylonitrile	U		0.000671	0.0100
Benzene	U		0.0000941	0.00100
Bromobenzene	U		0.000118	0.00100
Bromodichloromethane	U		0.000136	0.00100
Bromoform	U		0.000129	0.00100
Bromomethane	U		0.000605	0.00500
n-Butylbenzene	U		0.000157	0.00100
sec-Butylbenzene	U		0.000125	0.00100
tert-Butylbenzene	U		0.000127	0.00100
Carbon tetrachloride	U		0.000128	0.00100
Chlorobenzene	U		0.000116	0.00100
Chlorodibromomethane	U		0.000140	0.00100
Chloroethane	U		0.000192	0.00500
Chloroform	U		0.000111	0.00500
Chloromethane	U		0.000960	0.00250
2-Chlorotoluene	U		0.000106	0.00100
4-Chlorotoluene	U		0.000114	0.00100
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500
1,2-Dibromoethane	U		0.000126	0.00100
Dibromomethane	U		0.000122	0.00100
1,2-Dichlorobenzene	U		0.000107	0.00100
1,3-Dichlorobenzene	U		0.000110	0.00100
1,4-Dichlorobenzene	U		0.000120	0.00100
Dichlorodifluoromethane	U		0.000374	0.00500
1,1-Dichloroethane	U		0.000100	0.00100
1,2-Dichloroethane	U		0.0000819	0.00100
1,1-Dichloroethene	U		0.000188	0.00100
cis-1,2-Dichloroethene	U		0.000126	0.00100
trans-1,2-Dichloroethene	U		0.000149	0.00100
1,2-Dichloropropane	U		0.000149	0.00100
1,1-Dichloropropene	U		0.000142	0.00100
1,3-Dichloropropane	U		0.000110	0.00100
cis-1,3-Dichloropropene	U		0.000111	0.00100
trans-1,3-Dichloropropene	U		0.000118	0.00100
2,2-Dichloropropane	U		0.000161	0.00100
Ethylbenzene	U		0.000137	0.00100
Hexachloro-1,3-butadiene	U		0.000337	0.00100
n-Hexane	U		0.000749	0.0100

Method Blank (MB)

(MB) R3804616-3 06/17/22 12:11

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Isopropylbenzene	U		0.000105	0.00100
p-Isopropyltoluene	U		0.000120	0.00100
2-Butanone (MEK)	U		0.00119	0.0100
Methylene Chloride	U		0.000430	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100
Methyl tert-butyl ether	U		0.000101	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.0000993	0.00100
Styrene	U		0.000118	0.00100
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100
Tetrachloroethene	U		0.000300	0.00100
Toluene	U		0.000278	0.00100
1,2,3-Trichlorobenzene	U		0.000230	0.00100
1,2,4-Trichlorobenzene	U		0.000481	0.00100
1,1,1-Trichloroethane	U		0.000149	0.00100
1,1,2-Trichloroethane	U		0.000158	0.00100
Trichloroethene	U		0.000190	0.00100
Trichlorofluoromethane	U		0.000160	0.00500
1,2,3-Trichloropropane	U		0.000237	0.00250
1,2,4-Trimethylbenzene	U		0.000322	0.00100
1,3,5-Trimethylbenzene	U		0.000104	0.00100
Vinyl chloride	U		0.000234	0.00100
Xylenes, Total	U		0.000174	0.00300
(S) Toluene-d8	*93.8*			*80.0-120*
(S) 4-Bromofluorobenzene	*98.8*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*125*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3804616-1 06/17/22 11:14 • (LCSD) R3804616-2 06/17/22 11:33

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.0250	0.0469	0.0441	188	176	19.0-160	J4	J4	6.15	27
Acrolein	0.0250	0.113	0.115	452	460	10.0-160	J4	J4	1.75	26
Acrylonitrile	0.0250	0.0338	0.0319	135	128	55.0-149			5.78	20
Benzene	0.00500	0.00495	0.00477	99.0	95.4	70.0-123			3.70	20
Bromobenzene	0.00500	0.00456	0.00451	91.2	90.2	73.0-121			1.10	20
Bromodichloromethane	0.00500	0.00561	0.00540	112	108	75.0-120			3.81	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3804616-1 06/17/22 11:14 • (LCSD) R3804616-2 06/17/22 11:33

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromoform	0.00500	0.00512	0.00493	102	98.6	68.0-132			3.78	20
Bromomethane	0.00500	0.00537	0.00503	107	101	10.0-160			6.54	25
n-Butylbenzene	0.00500	0.00443	0.00434	88.6	86.8	73.0-125			2.05	20
sec-Butylbenzene	0.00500	0.00449	0.00437	89.8	87.4	75.0-125			2.71	20
tert-Butylbenzene	0.00500	0.00443	0.00431	88.6	86.2	76.0-124			2.75	20
Carbon tetrachloride	0.00500	0.00592	0.00556	118	111	68.0-126			6.27	20
Chlorobenzene	0.00500	0.00469	0.00443	93.8	88.6	80.0-121			5.70	20
Chlorodibromomethane	0.00500	0.00504	0.00471	101	94.2	77.0-125			6.77	20
Chloroethane	0.00500	0.00480	0.00444	96.0	88.8	47.0-150			7.79	20
Chloroform	0.00500	0.00547	0.00517	109	103	73.0-120			5.64	20
Chloromethane	0.00500	0.00511	0.00452	102	90.4	41.0-142			12.3	20
2-Chlorotoluene	0.00500	0.00456	0.00444	91.2	88.8	76.0-123			2.67	20
4-Chlorotoluene	0.00500	0.00445	0.00430	89.0	86.0	75.0-122			3.43	20
1,2-Dibromo-3-Chloropropane	0.00500	0.00444	0.00406	88.8	81.2	58.0-134			8.94	20
1,2-Dibromoethane	0.00500	0.00484	0.00460	96.8	92.0	80.0-122			5.08	20
Dibromomethane	0.00500	0.00566	0.00516	113	103	80.0-120			9.24	20
1,2-Dichlorobenzene	0.00500	0.00474	0.00458	94.8	91.6	79.0-121			3.43	20
1,3-Dichlorobenzene	0.00500	0.00461	0.00455	92.2	91.0	79.0-120			1.31	20
1,4-Dichlorobenzene	0.00500	0.00474	0.00455	94.8	91.0	79.0-120			4.09	20
Dichlorodifluoromethane	0.00500	0.00475	0.00463	95.0	92.6	51.0-149			2.56	20
1,1-Dichloroethane	0.00500	0.00518	0.00496	104	99.2	70.0-126			4.34	20
1,2-Dichloroethane	0.00500	0.00634	0.00601	127	120	70.0-128			5.34	20
1,1-Dichloroethene	0.00500	0.00451	0.00420	90.2	84.0	71.0-124			7.12	20
cis-1,2-Dichloroethene	0.00500	0.00492	0.00458	98.4	91.6	73.0-120			7.16	20
trans-1,2-Dichloroethene	0.00500	0.00459	0.00451	91.8	90.2	73.0-120			1.76	20
1,2-Dichloropropane	0.00500	0.00522	0.00519	104	104	77.0-125			0.576	20
1,1-Dichloropropene	0.00500	0.00511	0.00503	102	101	74.0-126			1.58	20
1,3-Dichloropropane	0.00500	0.00486	0.00474	97.2	94.8	80.0-120			2.50	20
cis-1,3-Dichloropropene	0.00500	0.00523	0.00531	105	106	80.0-123			1.52	20
trans-1,3-Dichloropropene	0.00500	0.00491	0.00479	98.2	95.8	78.0-124			2.47	20
2,2-Dichloropropane	0.00500	0.00527	0.00528	105	106	58.0-130			0.190	20
Ethylbenzene	0.00500	0.00467	0.00446	93.4	89.2	79.0-123			4.60	20
Hexachloro-1,3-butadiene	0.00500	0.00618	0.00601	124	120	54.0-138			2.79	20
n-Hexane	0.00500	0.00491	0.00532	98.2	106	57.0-133			8.02	20
Isopropylbenzene	0.00500	0.00473	0.00457	94.6	91.4	76.0-127			3.44	20
p-Isopropyltoluene	0.00500	0.00464	0.00441	92.8	88.2	76.0-125			5.08	20
2-Butanone (MEK)	0.0250	0.0390	0.0380	156	152	44.0-160			2.60	20
Methylene Chloride	0.00500	0.00479	0.00464	95.8	92.8	67.0-120			3.18	20
4-Methyl-2-pentanone (MIBK)	0.0250	0.0326	0.0314	130	126	68.0-142			3.75	20
Methyl tert-butyl ether	0.00500	0.00560	0.00528	112	106	68.0-125			5.88	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3804616-1 06/17/22 11:14 • (LCSD) R3804616-2 06/17/22 11:33

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Naphthalene	0.00500	0.00394	0.00378	78.8	75.6	54.0-135			4.15	20
n-Propylbenzene	0.00500	0.00445	0.00432	89.0	86.4	77.0-124			2.96	20
Styrene	0.00500	0.00457	0.00436	91.4	87.2	73.0-130			4.70	20
1,1,1,2-Tetrachloroethane	0.00500	0.00498	0.00460	99.6	92.0	75.0-125			7.93	20
1,1,2,2-Tetrachloroethane	0.00500	0.00424	0.00438	84.8	87.6	65.0-130			3.25	20
Tetrachloroethene	0.00500	0.00481	0.00461	96.2	92.2	72.0-132			4.25	20
Toluene	0.00500	0.00452	0.00426	90.4	85.2	79.0-120			5.92	20
1,2,3-Trichlorobenzene	0.00500	0.00426	0.00414	85.2	82.8	50.0-138			2.86	20
1,2,4-Trichlorobenzene	0.00500	0.00427	0.00419	85.4	83.8	57.0-137			1.89	20
1,1,1-Trichloroethane	0.00500	0.00561	0.00536	112	107	73.0-124			4.56	20
1,1,2-Trichloroethane	0.00500	0.00466	0.00440	93.2	88.0	80.0-120			5.74	20
Trichloroethene	0.00500	0.00523	0.00504	105	101	78.0-124			3.70	20
Trichlorofluoromethane	0.00500	0.00544	0.00549	109	110	59.0-147			0.915	20
1,2,3-Trichloropropane	0.00500	0.00507	0.00498	101	99.6	73.0-130			1.79	20
1,2,4-Trimethylbenzene	0.00500	0.00474	0.00451	94.8	90.2	76.0-121			4.97	20
1,3,5-Trimethylbenzene	0.00500	0.00468	0.00437	93.6	87.4	76.0-122			6.85	20
Vinyl chloride	0.00500	0.00418	0.00417	83.6	83.4	67.0-131			0.240	20
Xylenes, Total	0.0150	0.0141	0.0134	94.0	89.3	79.0-123			5.09	20
(S) Toluene-d8				*93.1*	*92.0*	*80.0-120*				
(S) 4-Bromofluorobenzene				*97.9*	*97.6*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*128*	*125*	*70.0-130*				

Method Blank (MB)

(MB) R3804078-2 06/16/22 06:49

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Anthracene	U		0.0000190	0.0000500
Acenaphthene	U		0.0000190	0.0000500
Acenaphthylene	U		0.0000171	0.0000500
Benzo(a)anthracene	U		0.0000203	0.0000500
Benzo(a)pyrene	U		0.0000184	0.0000500
Benzo(b)fluoranthene	U		0.0000168	0.0000500
Benzo(g,h,i)perylene	U		0.0000184	0.0000500
Benzo(k)fluoranthene	U		0.0000202	0.0000500
Chrysene	U		0.0000179	0.0000500
Dibenz(a,h)anthracene	U		0.0000160	0.0000500
Fluoranthene	U		0.0000270	0.000100
Fluorene	U		0.0000169	0.0000500
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500
Naphthalene	U		0.0000917	0.000250
Phenanthrene	U		0.0000180	0.0000500
Pyrene	U		0.0000169	0.0000500
1-Methylnaphthalene	U		0.0000687	0.000250
2-Methylnaphthalene	U		0.0000674	0.000250
2-Chloronaphthalene	U		0.0000682	0.000250
(S) Nitrobenzene-d5	*87.5*			*31.0-160*
(S) 2-Fluorobiphenyl	*88.5*			*48.0-148*
(S) p-Terphenyl-d14	*117*			*37.0-146*

Laboratory Control Sample (LCS)

(LCS) R3804078-1 06/16/22 06:32

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.00200	0.00187	93.5	67.0-150	
Acenaphthene	0.00200	0.00186	93.0	65.0-138	
Acenaphthylene	0.00200	0.00198	99.0	66.0-140	
Benzo(a)anthracene	0.00200	0.00189	94.5	61.0-140	
Benzo(a)pyrene	0.00200	0.00187	93.5	60.0-143	
Benzo(b)fluoranthene	0.00200	0.00194	97.0	58.0-141	
Benzo(g,h,i)perylene	0.00200	0.00173	86.5	52.0-153	
Benzo(k)fluoranthene	0.00200	0.00189	94.5	58.0-148	
Chrysene	0.00200	0.00192	96.0	64.0-144	
Dibenz(a,h)anthracene	0.00200	0.00167	83.5	52.0-155	
Fluoranthene	0.00200	0.00190	95.0	69.0-153	

Laboratory Control Sample (LCS)

(LCS) R3804078-1 06/16/22 06:32

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluorene	0.00200	0.00194	97.0	64.0-136	
Indeno(1,2,3-cd)pyrene	0.00200	0.00182	91.0	54.0-153	
Naphthalene	0.00200	0.00182	91.0	61.0-137	
Phenanthrene	0.00200	0.00184	92.0	62.0-137	
Pyrene	0.00200	0.00194	97.0	60.0-142	
1-Methylnaphthalene	0.00200	0.00187	93.5	66.0-142	
2-Methylnaphthalene	0.00200	0.00179	89.5	62.0-136	
2-Chloronaphthalene	0.00200	0.00185	92.5	64.0-140	
(S) Nitrobenzene-d5			*93.0*	*31.0-160*	
(S) 2-Fluorobiphenyl			*92.0*	*48.0-148*	
(S) p-Terphenyl-d14			*119*	*37.0-146*	

L1503698-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1503698-01 06/16/22 08:55 • (MS) R3804078-3 06/16/22 09:13 • (MSD) R3804078-4 06/16/22 09:30

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Anthracene	0.00190	U	0.00138	0.00137	72.6	72.1	1	56.0-156			0.727	20
Acenaphthene	0.00190	U	0.00141	0.00142	74.2	74.7	1	44.0-153			0.707	20
Acenaphthylene	0.00190	U	0.00149	0.00152	78.4	80.0	1	53.0-150			1.99	20
Benzo(a)anthracene	0.00190	U	0.00129	0.00128	67.9	67.4	1	47.0-151			0.778	20
Benzo(a)pyrene	0.00190	U	0.00112	0.00116	58.9	61.1	1	45.0-146			3.51	20
Benzo(b)fluoranthene	0.00190	U	0.00121	0.00125	63.7	65.8	1	43.0-142			3.25	20
Benzo(g,h,i)perylene	0.00190	U	0.00102	0.00105	53.7	55.3	1	40.0-147			2.90	20
Benzo(k)fluoranthene	0.00190	U	0.00114	0.00116	60.0	61.1	1	43.0-148			1.74	21
Chrysene	0.00190	U	0.00131	0.00133	68.9	70.0	1	50.0-148			1.52	20
Dibenz(a,h)anthracene	0.00190	U	0.000964	0.000974	50.7	51.3	1	37.0-151			1.03	20
Fluoranthene	0.00190	U	0.00139	0.00140	73.2	73.7	1	56.0-157			0.717	20
Fluorene	0.00190	U	0.00144	0.00146	75.8	76.8	1	48.0-148			1.38	20
Indeno(1,2,3-cd)pyrene	0.00190	U	0.000979	0.00101	51.5	53.2	1	41.0-148			3.12	20
Naphthalene	0.00190	U	0.00142	0.00143	74.7	75.3	1	10.0-160			0.702	20
Phenanthrene	0.00190	U	0.00140	0.00144	73.7	75.8	1	47.0-147			2.82	20
Pyrene	0.00190	U	0.00144	0.00144	75.8	75.8	1	51.0-148			0.000	20
1-Methylnaphthalene	0.00190	U	0.00137	0.00140	72.1	73.7	1	21.0-160			2.17	20
2-Methylnaphthalene	0.00190	U	0.00136	0.00139	71.6	73.2	1	31.0-160			2.18	20
2-Chloronaphthalene	0.00190	U	0.00143	0.00145	75.3	76.3	1	52.0-148			1.39	20
(S) Nitrobenzene-d5					*84.7*	*85.8*		*31.0-160*				
(S) 2-Fluorobiphenyl					*75.8*	*75.8*		*48.0-148*				
(S) p-Terphenyl-d14					*81.1*	*80.0*		*37.0-146*				

L1503698-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1503698-02 06/16/22 09:48 • (MS) R3804078-5 06/16/22 10:06 • (MSD) R3804078-6 06/16/22 10:24

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Anthracene	0.00190	U	0.00128	0.00101	67.4	53.2	1	56.0-156		J3 J6	23.6	20
Acenaphthene	0.00190	U	0.00136	0.00112	71.6	58.9	1	44.0-153			19.4	20
Acenaphthylene	0.00190	U	0.00146	0.00119	76.8	62.6	1	53.0-150		J3	20.4	20
Benzo(a)anthracene	0.00190	U	0.00105	0.000781	55.3	41.1	1	47.0-151		J3 J6	29.4	20
Benzo(a)pyrene	0.00190	U	0.000832	0.000644	43.8	33.9	1	45.0-146	J6	J3 J6	25.5	20
Benzo(b)fluoranthene	0.00190	U	0.000902	0.000676	47.5	35.6	1	43.0-142		J3 J6	28.6	20
Benzo(g,h,i)perylene	0.00190	U	0.000634	0.000506	33.4	26.6	1	40.0-147	J6	J3 J6	22.5	20
Benzo(k)fluoranthene	0.00190	U	0.000825	0.000671	43.4	35.3	1	43.0-148		J6	20.6	21
Chrysene	0.00190	U	0.00106	0.000841	55.8	44.3	1	50.0-148		J3 J6	23.0	20
Dibenz(a,h)anthracene	0.00190	U	0.000548	0.000435	28.8	22.9	1	37.0-151	J6	J3 J6	23.0	20
Fluoranthene	0.00190	U	0.00124	0.000952	65.3	50.1	1	56.0-157		J3 J6	26.3	20
Fluorene	0.00190	U	0.00139	0.00112	73.2	58.9	1	48.0-148		J3	21.5	20
Indeno(1,2,3-cd)pyrene	0.00190	U	0.000655	0.000517	34.5	27.2	1	41.0-148	J6	J3 J6	23.5	20
Naphthalene	0.00190	U	0.00136	0.00116	71.6	61.1	1	10.0-160			15.9	20
Phenanthrene	0.00190	0.0000357	0.00133	0.00104	68.1	52.9	1	47.0-147		J3	24.5	20
Pyrene	0.00190	0.0000242	0.00131	0.00101	67.7	51.9	1	51.0-148		J3	25.9	20
1-Methylnaphthalene	0.00190	U	0.00130	0.00108	68.4	56.8	1	21.0-160			18.5	20
2-Methylnaphthalene	0.00190	U	0.00128	0.00108	67.4	56.8	1	31.0-160			16.9	20
2-Chloronaphthalene	0.00190	U	0.00138	0.00112	72.6	58.9	1	52.0-148		J3	20.8	20
(S) Nitrobenzene-d5					*80.0*	*74.2*		*31.0-160*				
(S) 2-Fluorobiphenyl					*72.1*	*58.4*		*48.0-148*				
(S) p-Terphenyl-d14					*68.4*	*51.3*		*37.0-146*				

Method Blank (MB)

(MB) R3804093-2 06/16/22 07:08

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Anthracene	U		0.0000190	0.0000500
Acenaphthene	U		0.0000190	0.0000500
Acenaphthylene	U		0.0000171	0.0000500
Benzo(a)anthracene	U		0.0000203	0.0000500
Benzo(a)pyrene	U		0.0000184	0.0000500
Benzo(b)fluoranthene	U		0.0000168	0.0000500
Benzo(g,h,i)perylene	U		0.0000184	0.0000500
Benzo(k)fluoranthene	U		0.0000202	0.0000500
Chrysene	U		0.0000179	0.0000500
Dibenz(a,h)anthracene	U		0.0000160	0.0000500
Fluoranthene	U		0.0000270	0.000100
Fluorene	U		0.0000169	0.0000500
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500
Naphthalene	U		0.0000917	0.000250
Phenanthrene	U		0.0000180	0.0000500
Pyrene	U		0.0000169	0.0000500
1-Methylnaphthalene	U		0.0000687	0.000250
2-Methylnaphthalene	U		0.0000674	0.000250
2-Chloronaphthalene	U		0.0000682	0.000250
(S) Nitrobenzene-d5	*103*			*31.0-160*
(S) 2-Fluorobiphenyl	*96.0*			*48.0-148*
(S) p-Terphenyl-d14	*123*			*37.0-146*

Laboratory Control Sample (LCS)

(LCS) R3804093-1 06/16/22 06:51

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.00200	0.00204	102	67.0-150	
Acenaphthene	0.00200	0.00207	104	65.0-138	
Acenaphthylene	0.00200	0.00211	105	66.0-140	
Benzo(a)anthracene	0.00200	0.00205	103	61.0-140	
Benzo(a)pyrene	0.00200	0.00200	100	60.0-143	
Benzo(b)fluoranthene	0.00200	0.00211	105	58.0-141	
Benzo(g,h,i)perylene	0.00200	0.00195	97.5	52.0-153	
Benzo(k)fluoranthene	0.00200	0.00209	104	58.0-148	
Chrysene	0.00200	0.00208	104	64.0-144	
Dibenz(a,h)anthracene	0.00200	0.00188	94.0	52.0-155	
Fluoranthene	0.00200	0.00208	104	69.0-153	

Laboratory Control Sample (LCS)

(LCS) R3804093-1 06/16/22 06:51

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluorene	0.00200	0.00219	109	64.0-136	
Indeno(1,2,3-cd)pyrene	0.00200	0.00204	102	54.0-153	
Naphthalene	0.00200	0.00198	99.0	61.0-137	
Phenanthrene	0.00200	0.00207	104	62.0-137	
Pyrene	0.00200	0.00203	102	60.0-142	
1-Methylnaphthalene	0.00200	0.00205	103	66.0-142	
2-Methylnaphthalene	0.00200	0.00196	98.0	62.0-136	
2-Chloronaphthalene	0.00200	0.00207	104	64.0-140	
(S) Nitrobenzene-d5			*107*	*31.0-160*	
(S) 2-Fluorobiphenyl			*102*	*48.0-148*	
(S) p-Terphenyl-d14			*126*	*37.0-146*	

L1504566-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1504566-01 06/16/22 15:16 • (MS) R3804093-3 06/16/22 15:33 • (MSD) R3804093-4 06/16/22 15:51

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Anthracene	0.00200	U	0.00196	0.00195	98.0	97.5	1	56.0-156			0.512	20
Acenaphthene	0.00200	U	0.00201	0.00199	100	99.5	1	44.0-153			1.00	20
Acenaphthylene	0.00200	U	0.00206	0.00206	103	103	1	53.0-150			0.000	20
Benzo(a)anthracene	0.00200	U	0.00181	0.00187	90.5	93.5	1	47.0-151			3.26	20
Benzo(a)pyrene	0.00200	U	0.00152	0.00165	76.0	82.5	1	45.0-146			8.20	20
Benzo(b)fluoranthene	0.00200	U	0.00154	0.00169	77.0	84.5	1	43.0-142			9.29	20
Benzo(g,h,i)perylene	0.00200	U	0.00135	0.00141	67.5	70.5	1	40.0-147			4.35	20
Benzo(k)fluoranthene	0.00200	U	0.00143	0.00160	71.5	80.0	1	43.0-148			11.2	21
Chrysene	0.00200	U	0.00181	0.00188	90.5	94.0	1	50.0-148			3.79	20
Dibenz(a,h)anthracene	0.00200	U	0.00119	0.00126	59.5	63.0	1	37.0-151			5.71	20
Fluoranthene	0.00200	U	0.00191	0.00194	95.5	97.0	1	56.0-157			1.56	20
Fluorene	0.00200	U	0.00208	0.00205	104	103	1	48.0-148			1.45	20
Indeno(1,2,3-cd)pyrene	0.00200	U	0.000997	0.00115	49.8	57.5	1	41.0-148			14.3	20
Naphthalene	0.00200	U	0.00191	0.00191	95.5	95.5	1	10.0-160			0.000	20
Phenanthrene	0.00200	U	0.00193	0.00197	96.5	98.5	1	47.0-147			2.05	20
Pyrene	0.00200	U	0.00184	0.00189	92.0	94.5	1	51.0-148			2.68	20
1-Methylnaphthalene	0.00200	U	0.00201	0.00200	100	100	1	21.0-160			0.499	20
2-Methylnaphthalene	0.00200	U	0.00191	0.00190	95.5	95.0	1	31.0-160			0.525	20
2-Chloronaphthalene	0.00200	U	0.00199	0.00197	99.5	98.5	1	52.0-148			1.01	20
(S) Nitrobenzene-d5					*105*	*103*		*31.0-160*				
(S) 2-Fluorobiphenyl					*100*	*99.5*		*48.0-148*				
(S) p-Terphenyl-d14					*98.5*	*106*		*37.0-146*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
J+	The associated batch QC was outside the upper control limits; associated data has a potential positive bias.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Partners Environmental Consulting, Inc.
31100 Solon Road, Suite G
Solon, OH 44319

Billing Information:
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31100 Solon Road, Suite G
Solon, OH 44319

Pres Chk

Report to: VALERIE WEIR

Email To: TWEIR VWEIR @partnersenv.com

Project Description: 2700 TRANSPORT ROAD

City/State Collected: CLEVELAND OH

Phone: 800-763-1363
Fax:

Client Project # 2093.07

Lab Project #

Collected by (print): TOM WEIR

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs 8260	PAHs 8270	Remarks	Sample # (lab only)
MW-104	GRAB	GW	–	6/8/22	1500	4	X	X		– 01
MW-103			–		1510	4	X	X		– 02
MW-101			–		1525	4	X	X		– 03
MW-102			–		1540	4	X	X		– 04
MW-108			–	6/9/22	1230	4	X	X		– 05
MW-109			–		1240	4	X	X		– 06
MW-110			–		1255	4	X	X		– 07
MW-107			–		1305	4	X	X		– 08
MW-106			–		1320	4	X	X		– 09
MW-108 DUPLICATE			–		1230	4	X	X		– 10

Analysis / Container / Preservative

Chain of Custody Page 1 of 2

Pace Analytical® National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

LAB # 61503859

J147

Acctnum: PARENVOH
Template:
Prelogin:
TSR: Heather Wagner
PB:
Shipped Via:

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: Ohio VAP Protocol

pH _____ Temp _____
Flow _____ Other _____

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N

Samples returned via: UPS FedEx Courier

Tracking #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	6/9/22	1440	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	6 JUN 22	1500	FEDEX
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: Yes / No
HCL / MeOH
TBR

Temp: 1.1 °C Bottles Received: 44

Date: 6/10/22 Time: 0700

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Partners Environmental Consulting, Inc.
31100 Solon Road, Suite G
Solon, OH 44319

Billing Information:
Partners Environmental Consulting, Inc.
31100 Solon Road, Suite G
Solon, OH 44319

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 2 of 2

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Report to: VALERIE WEIR

Email To: TWEIR VWEIR @partnersenv.com

Project Description: 2700 TRANSPORT ROAD

City/State Collected: CLEVELAND OH

Phone: 800-763-1363
Fax:

Client Project # 2093.07

Lab Project #

L# L150389

Table #

Collected by (print): TOM WEIR

Site/Facility ID #

P.O. #

Acctnum: PARENVOH

Template:

Prelogin:

TSR: Heather Wagner

PB:

Collected by (signature): Thomas W

Immediately Packed on Ice N___ Y_5_

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs			Remarks	Sample # (lab only)
EQP-03	GRAB	OT	-	6/9/22	1350	4	X	X		-11
TRIP BLANK-04	LAB	LAB	-	6/8/22	1430	1	X			-12

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other DI WATER

Remarks: OHIO VAP Protocol

pH _____ Temp _____

Flow _____ Other _____

Samples returned via: UPS FedEx Courier

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable:
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Thomas W	6/9/22	1440	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
PARENVOH	9JUN22	1500	FEDEX
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: Yes / No
HCL / MeOH
TBR

Temp: 1.1 °C Bottles Received: 44

Date: 6/10/22 Time: 0900

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

ANALYTICAL REPORT

June 16, 2022

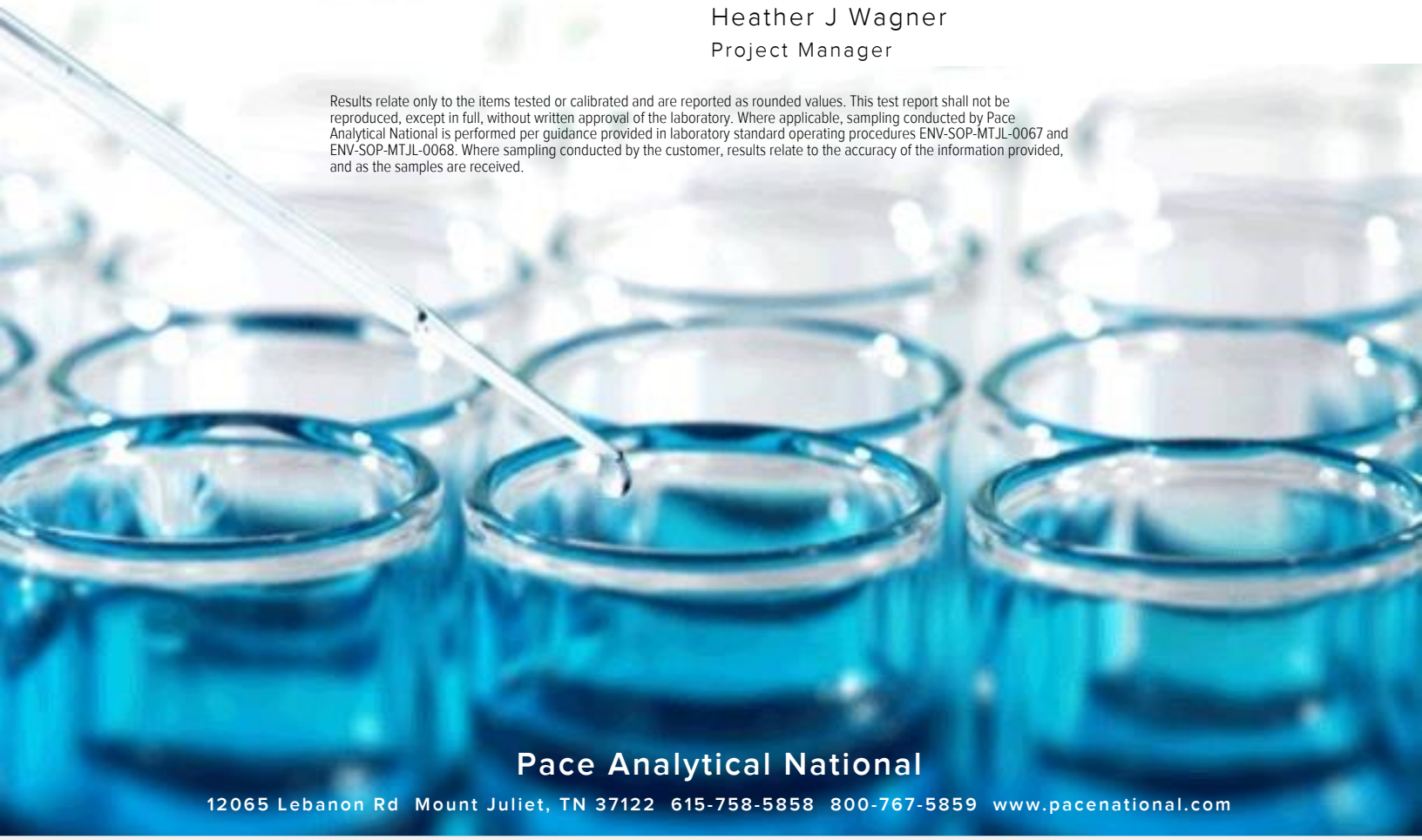
Partners Env. Consulting - Solon, OH

Sample Delivery Group:	L1504044
Samples Received:	06/11/2022
Project Number:	2093.07
Description:	2700 Transport Road

Report To: Tom Weir
31100 Solon Road, Ste. G
Solon, OH 44139

Entire Report Reviewed By:

Heather J Wagner
Project Manager



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SAMPLE SUMMARY

SGP-02 L1504044-01 Air

Collected by: Tom Weir | Collected date/time: 06/10/22 11:18 | Received date/time: 06/11/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1879639	1	06/15/22 15:17	06/15/22 15:17	DAH	Mt. Juliet, TN

SSV-01 L1504044-02 Air

Collected by: Tom Weir | Collected date/time: 06/10/22 13:20 | Received date/time: 06/11/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1879639	1	06/15/22 15:46	06/15/22 15:46	DAH	Mt. Juliet, TN

SSV-02 L1504044-03 Air

Collected by: Tom Weir | Collected date/time: 06/10/22 13:21 | Received date/time: 06/11/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1879639	20	06/15/22 16:40	06/15/22 16:40	DAH	Mt. Juliet, TN

SSV-03 L1504044-04 Air

Collected by: Tom Weir | Collected date/time: 06/10/22 13:30 | Received date/time: 06/11/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1879025	20	06/14/22 13:22	06/14/22 13:22	DAH	Mt. Juliet, TN

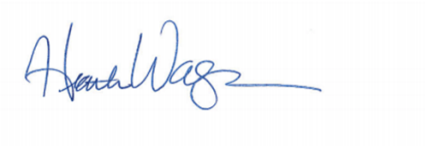
BG-01 L1504044-05 Air

Collected by: Tom Weir | Collected date/time: 06/10/22 13:36 | Received date/time: 06/11/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1879639	1	06/15/22 16:15	06/15/22 16:15	DAH	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Heather J Wagner
Project Manager

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	271	644	E	1	WG1879639
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1879639
Benzene	71-43-2	78.10	0.200	0.639	12.2	39.0		1	WG1879639
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1879639
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1879639
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1879639
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1879639
Carbon disulfide	75-15-0	76.10	0.200	0.622	47.9	149		1	WG1879639
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1879639
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1879639
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1879639
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1879639
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1879639
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1879639
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1879639
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1879639
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1879639
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1879639
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1879639
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1879639
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1879639
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1879639
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1879639
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1879639
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1879639
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1879639
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1879639
Ethanol	64-17-5	46.10	1.25	2.36	7.24	13.7		1	WG1879639
Ethyl acetate	141-78-6	88	0.200	0.720	ND	ND		1	WG1879639
Ethylbenzene	100-41-4	106	0.200	0.867	3.29	14.3		1	WG1879639
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1879639
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1879639
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1879639
n-Hexane	110-54-3	86.20	0.630	2.22	96.3	340		1	WG1879639
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1879639
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1879639
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1879639
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	3.53	10.4		1	WG1879639
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1879639
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1879639
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1879639
Naphthalene	91-20-3	128	0.630	3.30	1.04	5.44		1	WG1879639
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1879639
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1879639
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1879639
Toluene	108-88-3	92.10	0.500	1.88	15.8	59.5		1	WG1879639
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1879639
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1879639
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1879639
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1879639
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1879639
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1879639
m&p-Xylene	1330-20-7	106	0.400	1.73	8.77	38.0		1	WG1879639
o-Xylene	95-47-6	106	0.200	0.867	6.49	28.1		1	WG1879639
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	2.43	11.9		1	WG1879639
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	1.36	6.67		1	WG1879639

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*211*		J1		WG1879639

Sample Narrative:

L1504044-01 WG1879639: Surrogate failure due to matrix interference

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	132	314	E	1	WG1879639
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1879639
Benzene	71-43-2	78.10	0.200	0.639	11.6	37.1		1	WG1879639
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1879639
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1879639
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1879639
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1879639
Carbon disulfide	75-15-0	76.10	0.200	0.622	3.72	11.6		1	WG1879639
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1879639
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1879639
Chloroethane	75-00-3	64.50	0.200	0.528	0.550	1.45		1	WG1879639
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1879639
Chloromethane	74-87-3	50.50	0.200	0.413	0.441	0.911		1	WG1879639
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1879639
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1879639
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	8.76	52.7		1	WG1879639
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1879639
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1879639
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1879639
1,1-Dichloroethane	75-34-3	98	0.200	0.802	26.3	105		1	WG1879639
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1879639
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	1.18	4.68		1	WG1879639
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	0.441	1.75		1	WG1879639
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1879639
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1879639
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1879639
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1879639
Ethanol	64-17-5	46.10	1.25	2.36	40.2	75.8		1	WG1879639
Ethyl acetate	141-78-6	88	0.200	0.720	ND	ND		1	WG1879639
Ethylbenzene	100-41-4	106	0.200	0.867	20.7	89.7		1	WG1879639
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.224	1.26		1	WG1879639
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.484	2.39		1	WG1879639
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1879639
n-Hexane	110-54-3	86.20	0.630	2.22	59.5	210		1	WG1879639
Isopropylbenzene	98-82-8	120.20	0.200	0.983	2.85	14.0		1	WG1879639
Methylene Chloride	75-09-2	84.90	0.200	0.694	63.8	222		1	WG1879639
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1879639
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	18.5	54.6		1	WG1879639
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1879639
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1879639
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1879639
Naphthalene	91-20-3	128	0.630	3.30	2.19	11.5		1	WG1879639
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1879639
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1879639
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1879639
Toluene	108-88-3	92.10	0.500	1.88	35.2	133		1	WG1879639
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1879639
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1879639
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1879639
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1879639
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1879639
Vinyl chloride	75-01-4	62.50	0.200	0.511	0.864	2.21		1	WG1879639
m&p-Xylene	1330-20-7	106	0.400	1.73	38.9	169		1	WG1879639
o-Xylene	95-47-6	106	0.200	0.867	17.0	73.7		1	WG1879639
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	13.3	65.3		1	WG1879639
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	4.17	20.5		1	WG1879639

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*144*		J1		WG1879639

Sample Narrative:

L1504044-02 WG1879639: Surrogate failure due to matrix interference

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	25.0	59.4	ND	ND		20	WG1879639
Allyl chloride	107-05-1	76.53	4.00	12.5	ND	ND		20	WG1879639
Benzene	71-43-2	78.10	4.00	12.8	178	569		20	WG1879639
Benzyl Chloride	100-44-7	127	4.00	20.8	ND	ND		20	WG1879639
Bromodichloromethane	75-27-4	164	4.00	26.8	ND	ND		20	WG1879639
Bromoform	75-25-2	253	12.0	124	ND	ND		20	WG1879639
Bromomethane	74-83-9	94.90	4.00	15.5	ND	ND		20	WG1879639
Carbon disulfide	75-15-0	76.10	4.00	12.4	ND	ND		20	WG1879639
Carbon tetrachloride	56-23-5	154	4.00	25.2	ND	ND		20	WG1879639
Chlorobenzene	108-90-7	113	4.00	18.5	ND	ND		20	WG1879639
Chloroethane	75-00-3	64.50	4.00	10.6	ND	ND		20	WG1879639
Chloroform	67-66-3	119	4.00	19.5	ND	ND		20	WG1879639
Chloromethane	74-87-3	50.50	4.00	8.26	ND	ND		20	WG1879639
Dibromochloromethane	124-48-1	208	4.00	34.0	ND	ND		20	WG1879639
1,2-Dibromoethane	106-93-4	188	4.00	30.8	ND	ND		20	WG1879639
1,2-Dichlorobenzene	95-50-1	147	4.00	24.0	ND	ND		20	WG1879639
1,3-Dichlorobenzene	541-73-1	147	4.00	24.0	ND	ND		20	WG1879639
1,4-Dichlorobenzene	106-46-7	147	4.00	24.0	ND	ND		20	WG1879639
1,2-Dichloroethane	107-06-2	99	4.00	16.2	ND	ND		20	WG1879639
1,1-Dichloroethane	75-34-3	98	4.00	16.0	ND	ND		20	WG1879639
1,1-Dichloroethene	75-35-4	96.90	4.00	15.9	ND	ND		20	WG1879639
cis-1,2-Dichloroethene	156-59-2	96.90	4.00	15.9	ND	ND		20	WG1879639
trans-1,2-Dichloroethene	156-60-5	96.90	4.00	15.9	ND	ND		20	WG1879639
1,2-Dichloropropane	78-87-5	113	4.00	18.5	ND	ND		20	WG1879639
cis-1,3-Dichloropropene	10061-01-5	111	4.00	18.2	ND	ND		20	WG1879639
trans-1,3-Dichloropropene	10061-02-6	111	4.00	18.2	ND	ND		20	WG1879639
1,4-Dioxane	123-91-1	88.10	4.00	14.4	ND	ND		20	WG1879639
Ethanol	64-17-5	46.10	25.0	47.1	ND	ND		20	WG1879639
Ethyl acetate	141-78-6	88	4.00	14.4	ND	ND		20	WG1879639
Ethylbenzene	100-41-4	106	4.00	17.3	ND	ND		20	WG1879639
Trichlorofluoromethane	75-69-4	137.40	4.00	22.5	ND	ND		20	WG1879639
Dichlorodifluoromethane	75-71-8	120.92	4.00	19.8	ND	ND		20	WG1879639
Hexachloro-1,3-butadiene	87-68-3	261	12.6	135	ND	ND		20	WG1879639
n-Hexane	110-54-3	86.20	12.6	44.4	634	2240		20	WG1879639
Isopropylbenzene	98-82-8	120.20	4.00	19.7	ND	ND		20	WG1879639
Methylene Chloride	75-09-2	84.90	4.00	13.9	ND	ND		20	WG1879639
Methyl Butyl Ketone	591-78-6	100	25.0	102	ND	ND		20	WG1879639
2-Butanone (MEK)	78-93-3	72.10	25.0	73.7	ND	ND		20	WG1879639
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	25.0	102	ND	ND		20	WG1879639
Methyl methacrylate	80-62-6	100.12	4.00	16.4	ND	ND		20	WG1879639
MTBE	1634-04-4	88.10	4.00	14.4	ND	ND		20	WG1879639
Naphthalene	91-20-3	128	12.6	66.0	ND	ND		20	WG1879639
Styrene	100-42-5	104	4.00	17.0	ND	ND		20	WG1879639
1,1,2,2-Tetrachloroethane	79-34-5	168	4.00	27.5	ND	ND		20	WG1879639
Tetrachloroethylene	127-18-4	166	4.00	27.2	ND	ND		20	WG1879639
Toluene	108-88-3	92.10	10.0	37.7	68.0	256		20	WG1879639
1,2,4-Trichlorobenzene	120-82-1	181	12.6	93.3	ND	ND		20	WG1879639
1,1,1-Trichloroethane	71-55-6	133	4.00	21.8	ND	ND		20	WG1879639
1,1,2-Trichloroethane	79-00-5	133	4.00	21.8	ND	ND		20	WG1879639
Trichloroethylene	79-01-6	131	4.00	21.4	ND	ND		20	WG1879639
Vinyl acetate	108-05-4	86.10	4.00	14.1	ND	ND		20	WG1879639
Vinyl chloride	75-01-4	62.50	4.00	10.2	120	307		20	WG1879639
m&p-Xylene	1330-20-7	106	8.00	34.7	ND	ND		20	WG1879639
o-Xylene	95-47-6	106	4.00	17.3	ND	ND		20	WG1879639
1,2,4-Trimethylbenzene	95-63-6	120	4.00	19.6	16.9	82.9		20	WG1879639
1,3,5-Trimethylbenzene	108-67-8	120	4.00	19.6	7.13	35.0		20	WG1879639

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*168*		J1		WG1879639

Sample Narrative:

L1504044-03 WG1879639: Surrogate failure due to matrix interference

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	25.0	59.4	ND	ND		20	WG1879025
Allyl chloride	107-05-1	76.53	4.00	12.5	ND	ND		20	WG1879025
Benzene	71-43-2	78.10	4.00	12.8	13.5	43.1		20	WG1879025
Benzyl Chloride	100-44-7	127	4.00	20.8	ND	ND		20	WG1879025
Bromodichloromethane	75-27-4	164	4.00	26.8	ND	ND		20	WG1879025
Bromoform	75-25-2	253	12.0	124	ND	ND		20	WG1879025
Bromomethane	74-83-9	94.90	4.00	15.5	ND	ND		20	WG1879025
Carbon disulfide	75-15-0	76.10	4.00	12.4	44.9	140		20	WG1879025
Carbon tetrachloride	56-23-5	154	4.00	25.2	ND	ND		20	WG1879025
Chlorobenzene	108-90-7	113	4.00	18.5	ND	ND		20	WG1879025
Chloroethane	75-00-3	64.50	4.00	10.6	ND	ND		20	WG1879025
Chloroform	67-66-3	119	4.00	19.5	ND	ND		20	WG1879025
Chloromethane	74-87-3	50.50	4.00	8.26	ND	ND		20	WG1879025
Dibromochloromethane	124-48-1	208	4.00	34.0	ND	ND		20	WG1879025
1,2-Dibromoethane	106-93-4	188	4.00	30.8	ND	ND		20	WG1879025
1,2-Dichlorobenzene	95-50-1	147	4.00	24.0	ND	ND		20	WG1879025
1,3-Dichlorobenzene	541-73-1	147	4.00	24.0	ND	ND		20	WG1879025
1,4-Dichlorobenzene	106-46-7	147	4.00	24.0	ND	ND		20	WG1879025
1,2-Dichloroethane	107-06-2	99	4.00	16.2	ND	ND		20	WG1879025
1,1-Dichloroethane	75-34-3	98	4.00	16.0	ND	ND		20	WG1879025
1,1-Dichloroethene	75-35-4	96.90	4.00	15.9	ND	ND		20	WG1879025
cis-1,2-Dichloroethene	156-59-2	96.90	4.00	15.9	ND	ND		20	WG1879025
trans-1,2-Dichloroethene	156-60-5	96.90	4.00	15.9	ND	ND		20	WG1879025
1,2-Dichloropropane	78-87-5	113	4.00	18.5	ND	ND		20	WG1879025
cis-1,3-Dichloropropene	10061-01-5	111	4.00	18.2	ND	ND		20	WG1879025
trans-1,3-Dichloropropene	10061-02-6	111	4.00	18.2	ND	ND		20	WG1879025
1,4-Dioxane	123-91-1	88.10	4.00	14.4	ND	ND		20	WG1879025
Ethanol	64-17-5	46.10	25.0	47.1	ND	ND		20	WG1879025
Ethyl acetate	141-78-6	88	4.00	14.4	ND	ND		20	WG1879025
Ethylbenzene	100-41-4	106	4.00	17.3	ND	ND		20	WG1879025
Trichlorofluoromethane	75-69-4	137.40	4.00	22.5	ND	ND		20	WG1879025
Dichlorodifluoromethane	75-71-8	120.92	4.00	19.8	ND	ND		20	WG1879025
Hexachloro-1,3-butadiene	87-68-3	261	12.6	135	ND	ND		20	WG1879025
n-Hexane	110-54-3	86.20	12.6	44.4	106	374		20	WG1879025
Isopropylbenzene	98-82-8	120.20	4.00	19.7	ND	ND		20	WG1879025
Methylene Chloride	75-09-2	84.90	4.00	13.9	ND	ND		20	WG1879025
Methyl Butyl Ketone	591-78-6	100	25.0	102	ND	ND		20	WG1879025
2-Butanone (MEK)	78-93-3	72.10	25.0	73.7	ND	ND		20	WG1879025
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	25.0	102	ND	ND		20	WG1879025
Methyl methacrylate	80-62-6	100.12	4.00	16.4	ND	ND		20	WG1879025
MTBE	1634-04-4	88.10	4.00	14.4	ND	ND		20	WG1879025
Naphthalene	91-20-3	128	12.6	66.0	ND	ND		20	WG1879025
Styrene	100-42-5	104	4.00	17.0	ND	ND		20	WG1879025
1,1,2,2-Tetrachloroethane	79-34-5	168	4.00	27.5	ND	ND		20	WG1879025
Tetrachloroethylene	127-18-4	166	4.00	27.2	ND	ND		20	WG1879025
Toluene	108-88-3	92.10	10.0	37.7	18.5	69.7		20	WG1879025
1,2,4-Trichlorobenzene	120-82-1	181	12.6	93.3	ND	ND		20	WG1879025
1,1,1-Trichloroethane	71-55-6	133	4.00	21.8	ND	ND		20	WG1879025
1,1,2-Trichloroethane	79-00-5	133	4.00	21.8	ND	ND		20	WG1879025
Trichloroethylene	79-01-6	131	4.00	21.4	ND	ND		20	WG1879025
Vinyl acetate	108-05-4	86.10	4.00	14.1	ND	ND		20	WG1879025
Vinyl chloride	75-01-4	62.50	4.00	10.2	ND	ND		20	WG1879025
m&p-Xylene	1330-20-7	106	8.00	34.7	9.07	39.3		20	WG1879025
o-Xylene	95-47-6	106	4.00	17.3	6.92	30.0		20	WG1879025
1,2,4-Trimethylbenzene	95-63-6	120	4.00	19.6	ND	ND		20	WG1879025
1,3,5-Trimethylbenzene	108-67-8	120	4.00	19.6	ND	ND		20	WG1879025

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*104*				WG1879025

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	1.90	4.51		1	WG1879639
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1879639
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1879639
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1879639
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1879639
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1879639
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1879639
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1879639
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1879639
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1879639
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1879639
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1879639
Chloromethane	74-87-3	50.50	0.200	0.413	0.562	1.16		1	WG1879639
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1879639
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1879639
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1879639
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1879639
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1879639
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1879639
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1879639
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1879639
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1879639
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1879639
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1879639
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1879639
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1879639
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1879639
Ethanol	64-17-5	46.10	1.25	2.36	2.18	4.11		1	WG1879639
Ethyl acetate	141-78-6	88	0.200	0.720	ND	ND		1	WG1879639
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1879639
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.236	1.33		1	WG1879639
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.464	2.29		1	WG1879639
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1879639
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1879639
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1879639
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1879639
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1879639
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1879639
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1879639
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1879639
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1879639
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1879639
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1879639
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1879639
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1879639
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1879639
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1879639
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1879639
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1879639
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1879639
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1879639
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1879639
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1879639
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1879639
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1879639
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1879639

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*97.3*				WG1879639

Method Blank (MB)

(MB) R3803309-3 06/14/22 10:02

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.200
Ethanol	U		0.265	1.25
Ethyl acetate	U		0.100	0.200
Ethylbenzene	U		0.0835	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
n-Hexane	U		0.206	0.630
Isopropylbenzene	U		0.0777	0.200
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200

Method Blank (MB)

(MB) R3803309-3 06/14/22 10:02

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Toluene	U		0.0870	0.500
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	U		0.0680	0.200
Vinyl acetate	U		0.116	0.200
Vinyl chloride	U		0.0949	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
(S) 1,4-Bromofluorobenzene	*96.4*			*60.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3803309-1 06/14/22 08:44 • (LCSD) R3803309-2 06/14/22 09:24

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	3.75	3.48	3.57	92.8	95.2	70.0-130			2.55	25
Allyl Chloride	3.75	3.51	3.56	93.6	94.9	70.0-130			1.41	25
Benzene	3.75	3.68	3.75	98.1	100	70.0-130			1.88	25
Benzyl Chloride	3.75	3.79	3.79	101	101	70.0-152			0.000	25
Bromodichloromethane	3.75	3.55	3.65	94.7	97.3	70.0-130			2.78	25
Bromoform	3.75	3.71	3.83	98.9	102	70.0-130			3.18	25
Bromomethane	3.75	3.60	3.69	96.0	98.4	70.0-130			2.47	25
Carbon disulfide	3.75	3.73	3.82	99.5	102	70.0-130			2.38	25
Carbon tetrachloride	3.75	3.53	3.62	94.1	96.5	70.0-130			2.52	25
Chlorobenzene	3.75	3.67	3.75	97.9	100	70.0-130			2.16	25
Chloroethane	3.75	3.58	3.68	95.5	98.1	70.0-130			2.75	25
Chloroform	3.75	3.57	3.73	95.2	99.5	70.0-130			4.38	25
Chloromethane	3.75	3.58	3.73	95.5	99.5	70.0-130			4.10	25
Dibromochloromethane	3.75	3.67	3.72	97.9	99.2	70.0-130			1.35	25
1,2-Dibromoethane	3.75	3.71	3.77	98.9	101	70.0-130			1.60	25
1,2-Dichlorobenzene	3.75	3.75	3.81	100	102	70.0-130			1.59	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3803309-1 06/14/22 08:44 • (LCSD) R3803309-2 06/14/22 09:24

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,3-Dichlorobenzene	3.75	3.75	3.80	100	101	70.0-130			1.32	25
1,4-Dichlorobenzene	3.75	3.75	3.76	100	100	70.0-130			0.266	25
1,2-Dichloroethane	3.75	3.45	3.52	92.0	93.9	70.0-130			2.01	25
1,1-Dichloroethane	3.75	3.66	3.77	97.6	101	70.0-130			2.96	25
1,1-Dichloroethene	3.75	3.62	3.73	96.5	99.5	70.0-130			2.99	25
cis-1,2-Dichloroethene	3.75	3.65	3.72	97.3	99.2	70.0-130			1.90	25
trans-1,2-Dichloroethene	3.75	3.64	3.75	97.1	100	70.0-130			2.98	25
1,2-Dichloropropane	3.75	3.68	3.79	98.1	101	70.0-130			2.95	25
cis-1,3-Dichloropropene	3.75	3.71	3.77	98.9	101	70.0-130			1.60	25
trans-1,3-Dichloropropene	3.75	3.58	3.73	95.5	99.5	70.0-130			4.10	25
1,4-Dioxane	3.75	3.65	3.74	97.3	99.7	70.0-140			2.44	25
Ethanol	3.75	3.63	3.66	96.8	97.6	55.0-148			0.823	25
Ethyl acetate	3.75	3.59	3.74	95.7	99.7	70.0-130			4.09	25
Ethylbenzene	3.75	3.74	3.80	99.7	101	70.0-130			1.59	25
Trichlorofluoromethane	3.75	3.44	3.58	91.7	95.5	70.0-130			3.99	25
Dichlorodifluoromethane	3.75	3.49	3.65	93.1	97.3	64.0-139			4.48	25
Hexachloro-1,3-butadiene	3.75	3.60	3.66	96.0	97.6	70.0-151			1.65	25
n-Hexane	3.75	3.77	3.90	101	104	70.0-130			3.39	25
Isopropylbenzene	3.75	3.80	3.87	101	103	70.0-130			1.83	25
Methylene Chloride	3.75	3.38	3.46	90.1	92.3	70.0-130			2.34	25
Methyl Butyl Ketone	3.75	3.69	3.76	98.4	100	70.0-149			1.88	25
Methyl Ethyl Ketone	3.75	3.70	3.82	98.7	102	70.0-130			3.19	25
4-Methyl-2-pentanone (MIBK)	3.75	3.57	3.66	95.2	97.6	70.0-139			2.49	25
Methyl Methacrylate	3.75	3.64	3.81	97.1	102	70.0-130			4.56	25
MTBE	3.75	3.67	3.78	97.9	101	70.0-130			2.95	25
Naphthalene	3.75	3.75	3.71	100	98.9	70.0-159			1.07	25
Styrene	3.75	3.86	3.89	103	104	70.0-130			0.774	25
1,1,2,2-Tetrachloroethane	3.75	3.74	3.80	99.7	101	70.0-130			1.59	25
Tetrachloroethylene	3.75	3.72	3.76	99.2	100	70.0-130			1.07	25
Toluene	3.75	3.69	3.78	98.4	101	70.0-130			2.41	25
1,2,4-Trichlorobenzene	3.75	3.62	3.55	96.5	94.7	70.0-160			1.95	25
1,1,1-Trichloroethane	3.75	3.52	3.63	93.9	96.8	70.0-130			3.08	25
1,1,2-Trichloroethane	3.75	3.67	3.72	97.9	99.2	70.0-130			1.35	25
Trichloroethylene	3.75	3.67	3.72	97.9	99.2	70.0-130			1.35	25
Vinyl acetate	3.75	3.48	3.56	92.8	94.9	70.0-130			2.27	25
Vinyl chloride	3.75	3.66	3.77	97.6	101	70.0-130			2.96	25
m&p-Xylene	7.50	7.50	7.58	100	101	70.0-130			1.06	25
o-Xylene	3.75	3.77	3.82	101	102	70.0-130			1.32	25
1,2,4-Trimethylbenzene	3.75	3.79	3.85	101	103	70.0-130			1.57	25
1,3,5-Trimethylbenzene	3.75	3.66	3.81	97.6	102	70.0-130			4.02	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3803309-1 06/14/22 08:44 • (LCSD) R3803309-2 06/14/22 09:24

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
(S) 1,4-Bromofluorobenzene				*99.9*	*99.7*	*60.0-140*				

Method Blank (MB)

(MB) R3803470-3 06/15/22 09:52

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.200
Ethanol	U		0.265	1.25
Ethyl acetate	U		0.100	0.200
Ethylbenzene	U		0.0835	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
n-Hexane	U		0.206	0.630
Isopropylbenzene	U		0.0777	0.200
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200

Method Blank (MB)

(MB) R3803470-3 06/15/22 09:52

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Toluene	U		0.0870	0.500
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	U		0.0680	0.200
Vinyl acetate	U		0.116	0.200
Vinyl chloride	U		0.0949	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
(S) 1,4-Bromofluorobenzene	*96.1*			*60.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3803470-1 06/15/22 08:54 • (LCSD) R3803470-2 06/15/22 09:24

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	3.75	3.61	3.60	96.3	96.0	70.0-130			0.277	25
Allyl Chloride	3.75	3.70	3.61	98.7	96.3	70.0-130			2.46	25
Benzene	3.75	3.62	3.64	96.5	97.1	70.0-130			0.551	25
Benzyl Chloride	3.75	3.74	3.66	99.7	97.6	70.0-152			2.16	25
Bromodichloromethane	3.75	3.50	3.43	93.3	91.5	70.0-130			2.02	25
Bromoform	3.75	3.52	3.45	93.9	92.0	70.0-130			2.01	25
Bromomethane	3.75	3.70	3.75	98.7	100	70.0-130			1.34	25
Carbon disulfide	3.75	3.64	3.57	97.1	95.2	70.0-130			1.94	25
Carbon tetrachloride	3.75	3.52	3.47	93.9	92.5	70.0-130			1.43	25
Chlorobenzene	3.75	3.65	3.62	97.3	96.5	70.0-130			0.825	25
Chloroethane	3.75	3.55	3.59	94.7	95.7	70.0-130			1.12	25
Chloroform	3.75	3.58	3.59	95.5	95.7	70.0-130			0.279	25
Chloromethane	3.75	3.67	3.67	97.9	97.9	70.0-130			0.000	25
Dibromochloromethane	3.75	3.55	3.52	94.7	93.9	70.0-130			0.849	25
1,2-Dibromoethane	3.75	3.67	3.66	97.9	97.6	70.0-130			0.273	25
1,2-Dichlorobenzene	3.75	3.74	3.75	99.7	100	70.0-130			0.267	25

QUALITY CONTROL SUMMARY

L1504044-01,02,03,05

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3803470-1 06/15/22 08:54 • (LCSD) R3803470-2 06/15/22 09:24

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,3-Dichlorobenzene	3.75	3.84	3.80	102	101	70.0-130			1.05	25
1,4-Dichlorobenzene	3.75	3.87	3.85	103	103	70.0-130			0.518	25
1,2-Dichloroethane	3.75	3.48	3.48	92.8	92.8	70.0-130			0.000	25
1,1-Dichloroethane	3.75	3.57	3.55	95.2	94.7	70.0-130			0.562	25
1,1-Dichloroethene	3.75	3.68	3.71	98.1	98.9	70.0-130			0.812	25
cis-1,2-Dichloroethene	3.75	3.54	3.58	94.4	95.5	70.0-130			1.12	25
trans-1,2-Dichloroethene	3.75	3.73	3.74	99.5	99.7	70.0-130			0.268	25
1,2-Dichloropropane	3.75	3.51	3.47	93.6	92.5	70.0-130			1.15	25
cis-1,3-Dichloropropene	3.75	3.69	3.64	98.4	97.1	70.0-130			1.36	25
trans-1,3-Dichloropropene	3.75	3.72	3.64	99.2	97.1	70.0-130			2.17	25
1,4-Dioxane	3.75	3.69	3.73	98.4	99.5	70.0-140			1.08	25
Ethanol	3.75	3.79	3.71	101	98.9	55.0-148			2.13	25
Ethyl acetate	3.75	3.62	3.61	96.5	96.3	70.0-130			0.277	25
Ethylbenzene	3.75	3.81	3.79	102	101	70.0-130			0.526	25
Trichlorofluoromethane	3.75	3.75	3.70	100	98.7	70.0-130			1.34	25
Dichlorodifluoromethane	3.75	3.71	3.69	98.9	98.4	64.0-139			0.541	25
Hexachloro-1,3-butadiene	3.75	3.77	3.74	101	99.7	70.0-151			0.799	25
n-Hexane	3.75	3.70	3.70	98.7	98.7	70.0-130			0.000	25
Isopropylbenzene	3.75	3.83	3.79	102	101	70.0-130			1.05	25
Methylene Chloride	3.75	3.47	3.39	92.5	90.4	70.0-130			2.33	25
Methyl Butyl Ketone	3.75	3.76	3.67	100	97.9	70.0-149			2.42	25
Methyl Ethyl Ketone	3.75	3.71	3.80	98.9	101	70.0-130			2.40	25
4-Methyl-2-pentanone (MIBK)	3.75	3.75	3.71	100	98.9	70.0-139			1.07	25
Methyl Methacrylate	3.75	3.75	3.66	100	97.6	70.0-130			2.43	25
MTBE	3.75	3.82	3.78	102	101	70.0-130			1.05	25
Naphthalene	3.75	4.37	4.32	117	115	70.0-159			1.15	25
Styrene	3.75	3.90	3.87	104	103	70.0-130			0.772	25
1,1,2,2-Tetrachloroethane	3.75	3.75	3.69	100	98.4	70.0-130			1.61	25
Tetrachloroethylene	3.75	3.72	3.69	99.2	98.4	70.0-130			0.810	25
Toluene	3.75	3.81	3.78	102	101	70.0-130			0.791	25
1,2,4-Trichlorobenzene	3.75	4.00	4.01	107	107	70.0-160			0.250	25
1,1,1-Trichloroethane	3.75	3.62	3.61	96.5	96.3	70.0-130			0.277	25
1,1,2-Trichloroethane	3.75	3.66	3.61	97.6	96.3	70.0-130			1.38	25
Trichloroethylene	3.75	3.63	3.57	96.8	95.2	70.0-130			1.67	25
Vinyl acetate	3.75	3.41	3.39	90.9	90.4	70.0-130			0.588	25
Vinyl chloride	3.75	3.71	3.70	98.9	98.7	70.0-130			0.270	25
m&p-Xylene	7.50	7.72	7.71	103	103	70.0-130			0.130	25
o-Xylene	3.75	3.91	3.86	104	103	70.0-130			1.29	25
1,2,4-Trimethylbenzene	3.75	4.08	4.05	109	108	70.0-130			0.738	25
1,3,5-Trimethylbenzene	3.75	3.96	3.95	106	105	70.0-130			0.253	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3803470-1 06/15/22 08:54 • (LCSD) R3803470-2 06/15/22 09:24

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
(S) 1,4-Bromofluorobenzene				*99.9*	*99.4*	*60.0-140*				

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Company Name/Address:
Partners Env. Consulting - Solon, OH

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Solon, OH 44139

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Report To:
Tom Weir / VALERIE WEIR

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Project Description: 2700 TRANSPORT ROAD

City/State Collected: CLEVELAND OH

Please Circle: PT MT CT (ET)

Phone: 440-248-6005

Client Project # 2093.07

Lab Project # PARENVOH-TWEIR

Collected by (print): TOM WEIR

Site/Facility ID #

P.O. #

Collected by (signature): THOMAS W

Rush? (Lab MUST be Notified)
___ Same Day ___ Three Day
___ Next Day ___ Five Day
___ Two Day

Date Results Needed

Analysis: TO-15VAP Summa

Chain of Custody Page 1 of 1

Pace
PEOPLE ADVANCING SCIENCE
MT JULIET, TN
12065 Lebanon Road Mt Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1504044

A228

Acctnum: PARENVOH
Template: T210685
Prelogin: P930191
PM: 873 - Heather J Wagner
PB: LC 06/07/22

Shipped Via: FedEx Ground

Sample ID	Can #	Flow Cont. #	Collection Date	Collection Time	Canister Pressure/Vacuum Initial	Canister Pressure/Vacuum Final	TO-15VAP Summa				Rem./Contaminant	Sample # (lab only)
SGP-02	011987	7587	6-10-22	1118	-30	-4	X					-01
SSV-01	006076	7583	"	1320	-30	-5	X					-02
SSV-02	012364	12136	"	1321	-29	-3	X					-03
SSV-03	021075	7711	"	1330	-29	-5	X					-04
BG-01	010668	21215	"	1336	-29	-5	X					-05
							X					
							X					
							X					

Sample Receipt Checklist
COC Seal Present/Intact: Y N — If Applicable
COC Signed/Accurate: Y N — VOA Zero Headspace: Y N
Bottles arrive intact: Y N — Pres.Correct/Check: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N — +3 empty
RAD Screen <0.5 mR/hr: Y N

Remarks:
OHIO VAP PROTOCOL

Samples returned via: __ UPS __ FedEx __ Courier _____

Tracking # 5349 7827 9790 9805

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
THOMAS W	6-10-22	1430			
PNCOH	10JUN22	1700	FEDEX		
			Received for lab by: (Signature)	Date: 6/11/22	Time: 900

Condition: (lab use only)

COC Seal Intact: ___ Y ___ N ___ NA

NCF:

Attachment 3

Preliminary Property Specific Risk Assessment

PRELIMINARY PROPERTY-SPECIFIC RISK ASSESSMENT
2700 TRANSPORT ROAD, CLEVELAND, OHIO

The purpose of this PSRA is to determine if chemical compounds detected in soil, groundwater and sub-slab vapor are likely to pose an unacceptable human health risk. The PSRA provides estimates of the carcinogenic and non-carcinogenic risks posed to receptor populations on and off the Property, based upon applicable standards and the acceptable risk goals established by the Ohio VAP. The PSRA is comprised of four (4) parts, outlined in OAC 3745-300-09: the selection of COCs, the exposure assessment, the toxicity assessment, and the characterization of risk.

COCs Used in Risk Characterization

In order to provide a conservative evaluation of the potential risk to human health at the Property, detected COCs in soil, groundwater, sub-slab, and soil gas vapor were evaluated.

The TPH standards are based upon soil saturation and made up of numerous petroleum factions such that using cumulative risk adjustment is not appropriate (OAC 3745-300-08). For lead, the GDCS considers other factors and assumptions in addition to the carcinogenic or non-carcinogenic risks so that using cumulative risk adjustment is not appropriate (OAC 3745-300-08). No lead concentrations exceeding the applicable standard are present on the Property.

Exposure Assessment

The objective of the exposure assessment is to determine the reasonably anticipated magnitude, frequency, duration, and routes of exposure to COCs on the Property and on areas adjacent to the Property. Both the Property specific data and intended land uses are considered.

Current and Planned Land Use

The planned land use of the Property is for restricted residential development as a jail. The surrounding use is industrial to the north, south, east, and west.

Identification of Receptor Population

On-Property receptor populations based on the planned use of the Property include:

- On-Property residents.
- On-Property construction/excavation workers.

Additionally, a trespasser or visitor may be considered a potential receptor. Compliance for on-Property residents with the applicable standards is considered adequately protective of the potential trespasser or visitor whose exposure would be more limited than the on-Property residents.

Potential off-Property receptor populations based on the surrounding land use include:

- Off-Property Commercial/Industrial Workers and Construction/Excavation Activities

Evaluation of Complete Exposure Pathways

A determination of the complete exposure pathways was conducted based on the identified receptor populations and distribution of COCs in environmental media (**Table 1**). The following complete pathways were evaluated.

On-Property Residential Receptors

- Direct contact with soil via ingestion, dermal contact with soil and inhalation of volatile and particulate emissions.
- Inhalation due to vapor intrusion of volatile emissions to indoor air.

The evaluation of direct contact exposure for residential receptors is quantified using data collected from soils within a 2-foot point of compliance. The evaluation of inhalation exposure is quantified using the maximum concentrations detected in sub-slab vapor and/or groundwater.

On-Property Construction/Excavation Workers

- Direct contact with soil within the upper 10 feet via ingestion, dermal contact, and inhalation of volatile and particulate emissions.
- Dermal contact and inhalation of volatile emissions from groundwater during trench excavation activities.

The evaluation for direct contact exposure to soil for the construction/excavation worker is quantified using data within a point of compliance of 10 feet bgs.

The depths to groundwater ranged from 3 to 12 feet bgs. Therefore, potential construction and excavation worker exposure to groundwater is reasonably anticipated during trenching activities through dermal contact and inhalation of vapors. Trench worker risks were evaluated through the Virginia DEQ Virginia Unified Risk Assessment Model (VURAM) model.

Off-Property Receptors

The potential off-Property exposure pathways are vapor intrusion from groundwater to indoor air for commercial use and construction/excavation exposures to vapor intrusion into a trench.

Exposure Units (EUs)

An exposure unit is a location within which an exposed receptor may reasonably be assumed to move at random and where contact with an environmental medium (e.g., soil) is equally likely at all sub-locations. Based on the distribution of COCs and the current and reasonable anticipated development of the Property, one (1) Property wide exposure unit (EU) was established for the evaluation.

Exposure Point Concentrations (EPCs)

The EPCs for evaluating the risk posed to the potential receptors are described below:

<u>On-Property Residential Use</u>

The EPC used for direct contact exposures from soil were the maximum detected values within the applicable point of compliance of 2-feet for detected COCs. The EPCs used for evaluating the risk posed by inhalation of volatile emissions were the maximum detected concentrations in groundwater.

On-Property Construction/Excavation Worker

The EPC for direct contact exposures to soil for the construction/excavation worker were the maximum detected values within the point of compliance of 10 feet. This is the depth equal to the maximum depth reasonably anticipated for excavation activities at the Property. The EPCs for evaluating the risk posed by trench related groundwater exposures were the maximum detected concentrations in groundwater.

Off-Property Receptors

The EPCs used for evaluating the risk posed by inhalation of volatile emissions for off-Property receptors were the concentrations detected in groundwater at the down gradient boundary. As part of preliminary risk evaluation the off-Property risks were not determined.

Property Specific Standard Development

Residential Receptor Exposures via Vapor Intrusion from Groundwater

For evaluation of vapor intrusion exposures from groundwater, the USEPA VISL Calculator was utilized with parameters for residential land use and a carcinogenic risk of 1E-5, hazard quotient of 1, an attenuation factor (AF) of 0.001, and a groundwater temperature of 11 degrees Celsius in accordance with the Ohio EPA document *Sample Collection and Evaluation of Vapor Intrusion to Indoor Air for Remedial Response, RCRA and VAP.* A copy of the VISL Calculator is included in **Appendix A**.

Construction and Excavation Worker Exposures via Groundwater in a Utility Trench

Construction/excavation activities as defined in OAC 3745-300-08(C)(2) may include activities that result in potential exposure to groundwater on the Property. The Ohio EPA TGC VA30009.14.002 indicates that the complete exposure pathway to a construction/excavation worker from groundwater includes dermal contact with groundwater and inhalation of COCs emanating from groundwater. Ingestion of groundwater is considered incidental during construction/excavation activities. As no generic numerical standards exist for these pathways, they must be determined through modeling and risk assessment.

For evaluation of exposures to the construction/excavation in a trench, the Virginia DEQ Virginia Unified Risk Assessment Model (VURAM) model was utilized with default parameters and a defined cancer risk level of one (1) in 100,000 ($1x10^{-5}$) and non-cancer hazard level of one (1). The model evaluates dermal contact, inhalation, and ingestion. This presents a conservative assessment as Ohio EPA does not require the evaluation of groundwater ingestion in the trench scenario. A copy of the VURAM Construction Worker Quantitative Risk Assessment Report is included in **Appendix B**.

Toxicity Assessment

The toxicity criteria were determined in accordance OAC 3745-300-09. The toxicity values are consistent with the toxicity criteria in the most up to date values presented in the USEPA Integrated Risk Information System (IRIS), the Ohio EPA S*upport Document for the Development of Generic Numerical Standards and Risk Assessment Procedures* (Ohio EPA, 2014) and those published in the Ohio EPA Chemical Information Database and Applicable Regulatory Standards (CIDARS).

Risk Characterization

Risk characterization integrates the exposure point concentrations of the COCs, exposure routes, and toxicity values in order to estimate the carcinogenic and non-carcinogenic health risks for the identified receptor populations.

Carcinogenic Risk

Carcinogenic risk is expressed in scientific notation as a unitless probability. Risk due to exposure to multiple chemicals is assumed to be additive without consideration to target organs or systems. As presented in OAC 3745-300-09, the cumulative carcinogenic risk, attributable to the COCs on, underlying or emanating from a property, must not exceed an excess upper bound lifetime cancer risk to an individual of one (1) in 100,000 (1E-05).

Non-Carcinogenic Hazard Quotient

Non-carcinogenic hazards are expressed as hazard quotients. For a conservative determination, the hazard quotients for individual chemicals are assumed to be additive without consideration to target organs or systems. The sum of the hazard quotients is called a hazard index (HI). A HI above one (1) indicates that the potential for adverse effects cannot be ruled out. The cumulative non-carcinogenic hazard, attributable to the chemicals of concern on, underlying or emanating from a property, must not exceed one (1).

Carcinogenic and Non-Carcinogenic Risk Ratio Calculations

The carcinogenic and non-carcinogenic incremental risk ratios were calculated for exposure scenarios associated with each receptor. The risk ratio calculations for direct contact and sub-slab vapor were conducted by dividing the EPC of each COC by its associated standard for either single chemical carcinogens or single chemical non-carcinogens, in accordance with the procedures described in OAC 3745-300-08 and OAC 3745-300-09. The resultant cancer ratios were summed as an expression of estimated cancer risk and the resultant non-cancer ratios were summed as an expression of estimated hazard index. The cancer risk ratio is converted into an excess upper bound lifetime cancer risk (ELCR) by multiplying the risk ratio value by (1E-05). Therefore, a cancer risk ratio of one (1) represents a risk of (1E-05).

Results of Risk Calculations

Restricted Residential Land Use: The cumulative excess lifetime cancer risk (ELCR) and non-carcinogenic hazard index (HI) for a residential receptor is presented below. Exposure includes direct contact with soil with a point of compliance of 2-feet and vapor intrusion. Incremental risk for direct contact with soil is presented on **Table 2** and incremental risk for vapor intrusion from groundwater is included in **Appendix A**. As the incremental risk for vapor intrusion from groundwater was higher than that for sub-slab/soil gas vapor, that value was used in the determination of the cumulative excess lifetime cancer risk.

Restricted Residential Land Use		
Exposure Pathway	*HI*	*ELCR*
Direct Contact with Soil	0.2	1E-05
Vapor Intrusion from Groundwater	5.7	4.2E-04
Cumulative Risk	**6**	**4E-04**

Cumulative risk for direct contact with soil meets applicable standards for residential land use. Cumulative risk for a residential receptor does not meet applicable standards due to vapor intrusion from benzene in groundwater.

Construction and Excavation Activities

The cumulative excess lifetime cancer risk and non-carcinogenic hazard index for a construction/ excavation worker is presented below. Exposures include direct contact with soil with a point of compliance of 10 feet and trench related exposures to vapors from groundwater. Incremental risk for direct contact with soil is presented on **Table 3** and incremental risk for trench related exposures is included in **Appendix B**.

Construction and Excavation Activities		
Exposure Pathways	*HI*	*ELCR*
Direct Contact with Soil	0.32	4E-07
Trench Exposures to Groundwater	1.2	7.9E-05
Cumulative Risk	**1.5**	**8E-05**

Cumulative risk for direct contact with soil for construction/excavation activities meets applicable standards. Cumulative risk for the construction/excavation receptor does not meet applicable standards due to trench related exposures to groundwater vapor inhalation attributable to concentrations of benzene in groundwater.

TABLE 1
Summary of Exposure Pathways
2700 Transport Road, Cleveland, Ohio

	Affected Medium	COCs	Further Evaluation Required	Potential Receptor	Further Evaluation Conducted
EU1	**SOILS**				
	Direct Contact	Detectable concentrations of VOCs, PAHs, and TPH	Yes	Restricted Residential and Construction/Excavation	PSRA
	GROUNDWATER				
	Potable	Concentrations of COCs above UPUS	No	Not Applicable	USD/Groundwater Use Restriction
	Vapor intrusion to Indoor Air	COCs exceeding VISL	Yes	Restricted Residential	PSRA
	Trench Dermal Contact	Concentrations of COCs above UPUS	Yes	Construction/Excavation	PSRA
	Trench Inhalation	Concentrations of COCs above UPUS	Yes	Construction/Excavation	PSRA
	SUB-SLAB VAPOR &SOIL GAS				
	Vapor intrusion to Indoor Air	Detectable concentrations of VOCs	Yes	Restricted Residential	PSRA

TABLE 2
Soil Direct Contact Risk for Restricted Residential Land Use
2700 Transport Road, Cleveland, Ohio

Chemical of Concern	Exposure Point Concentration (2' POC), mg/kg	VAP GDCS Non-Carcinogens[1], mg/kg	VAP GDCS Carcinogens[2], mg/kg	Non-Cancer Hazard Quotient[3]	Cancer Risk Ratio [3]
ACETONE	0.195	110,000	NC	0.0000018	-
BENZENE	1.22	190	28	0.0064211	0.043571
N-BUTYLBENZENE	1.47	110	NA	0.0133636	-
SEC-BUTYLBENZENE	0.871	140	NC	0.0062214	-
TERT-BUTYLBENZENE	0.0786	180	NC	0.0004367	-
CHLOROBENZENE	0.00387	660	NA	0.0000059	-
1,2-DICHLOROBENZENE	0.000904	380	NA	0.0000024	-
1,4-DICHLOROBENZENE	0.00266	7,300	65	0.0000004	0.000041
CIS-1,2-DICHLOROETHENE	0.0826	310	NA	0.0002665	-
TRANS-1,2-DICHLOROETHENE	0.00958	3,100	NA	0.0000031	-
ETHYLBENZENE	3.94	480	140	0.0082083	0.028143
N-HEXANE	3.52	140	NA	0.0251429	-
ISOPROPYLBENZENE	0.846	270	NC	0.0031333	-
P-ISOPROPYLTOLUENE	0.904	160	NA	0.0056500	-
2-BUTANONE (MEK)	0.12	28,000	NC	0.0000043	-
METHYLENE CHLORIDE	0.0183	740	1,200	0.0000247	0.000015
4-METHYL-2-PENTANONE (MIBK)	0.00942	3,400	NA	0.0000028	-
NAPHTHALENE	4.25	320	96	0.0132813	0.044271
N-PROPYLBENZENE	2.39	260	NA	0.0091923	-
TOLUENE	1.02	820	NA	0.0012439	
TRICHLOROETHENE	0.0267	10	24	0.0026700	0.001113
1,2,4-TRIMETHYLBENZENE	17.1	220	NA	0.0777273	
1,3,5-TRIMETHYLBENZENE	0.231	180	NA	0.0012833	
XYLENES, TOTAL	3.35	260	NC	0.0128846	-
ANTHRACENE	0.62	36,000	NC	0.0000173	-
ACENAPHTHENE	0.53	7,200	NC	0.0000736	-
ACENAPHTHYLENE	0.30	7,200	NC	0.0000413	-
BENZO(A)ANTHRACENE	1.70	NA	23	-	0.073913
BENZO(A)PYRENE	1.6	NA	2.3	-	0.704348
BENZO(B)FLUORANTHENE	1.7	NA	23	-	0.072609
BENZO(G,H,I)PERYLENE	1.4	3,600	NC	0.0003944	-
BENZO(K)FLUORANTHENE	0.58	NA	230	-	0.002522
CHRYSENE	1.71	NA	2,300	-	0.000743
DIBENZ(A,H)ANTHRACENE	0.4	NA	2.3	-	0.166522
FLUORANTHENE	3.6	4,800	NC	0.0007396	-
FLUORENE	0.7	4,800	NC	0.0001369	-
INDENO(1,2,3-CD)PYRENE	0.8	NA	23	-	0.035826
PHENANTHRENE	3.74	36,000	NC	0.000104	-
PYRENE	3.93	3,600	NC	0.001092	-
1-METHYLNAPHTHALENE	3.91	8,400	350	0.000465	0.011171
2-METHYLNAPHTHALENE	3.67	480	NC	0.007646	-
		Direct Contact Cumulative Risk Ratio		*0.2*	*1*

Notes:

NC = Non Carcinogenic

1. Ohio VAP GDCS Residential Land Use Category for Single Chemical Non-Carcinogens
2. Ohio VAP GDCS Residential Land Use Category for Single Chemical Carcinogens
3 Cumulative multiple chemical adjustment calculation

TABLE 3

Soil Direct Contact Risk for Construction/Excavation Activities

2700 Transport Road, Cleveland, Ohio

Chemical of Concern	Exposure Point Concentration (10' POC), mg/kg	VAP GDCS Non-Carcinogens[1], mg/kg	VAP GDCS Carcinogens[2], mg/kg	Non-Cancer Hazard Quotient[3]	Cancer Risk Ratio [3]
ACETONE	0.456	110,000	NC	0.0000041	-
BENZENE	1.22	1,200	1,200	0.0010167	0.0010167
N-BUTYLBENZENE	1.76	110	NC	0.0160000	-
sec-BUTYLBENZENE	2.25	140	NC	0.0160714	-
tert-BUTYLBENZENE	0.218	180	NC	0.0012111	-
CHLOROBENZENE	0.00387	760	NA	0.0000051	-
CHLOROFORM	0.0447	320	320	0.0001397	0.0001397
1,2-DICHLOROBENZENE	0.000904	380	NC	0.0000024	-
1,4-DICHLOROBENZENE	0.00266	2,600	2,600	0.0000010	0.0000010
1,1-DICHLOROETHANE	0.0111	1,700	3,600	0.0000065	0.0000031
CIS-1,2-DICHLOROETHENE	0.0826	2400	NC	0.0000344	-
TRANS-1,2-DICHLOROETHENE	0.00958	1,900	NA	0.0000050	-
2,2-DICHLOROPROPANE	0.0226	NA	NA	-	-
ETHYLBENZENE	*3.94*	480	6,100	0.0082083	0.0006459
N-HEXANE	3.52	140	NA	0.0251429	-
ISOPROPYLBENZENE	2.89	270	NC	0.0107037	-
P-ISOPROPYLTOLUENE	0.904	160	NC	0.0056500	-
METHYLENE CHLORIDE	0.208	3,300	360,000	0.0000630	-
2-BUTANONE	0.12	28,000	NC	0.0000043	-
4-METHYL-2-PENTANONE (MIBK)	1.02	3,400	NC	0.0003000	-
METHYL TERT-BUTYL ETHER	0.00355	8,900	50,000	0.0000004	-
NAPHTHALENE	4.25	560	3,800	0.0075893	-
N-PROPYLBENZENE	4.22	260	NC	0.0162308	-
TETRACHLOROETHENE	0.0125	170	25,000	0.0000735	0.0000005
TOLUENE	1.02	820	NC	0.0012439	
1,1,1-TRICHLOROETHANE	0.00396	640	NC	0.0000062	
TRICHLOROETHENE	0.0267	17	1,500	0.0015706	0.0000178
1,2,4-TRIMETHYLBENZENE	17.1	220	NC	0.0777273	
1,3,5-TRIMETHYLBENZENE	0.338	180	NC	0.0018778	
XYLENES, Total	3.35	260	NC	0.0128846	-
ANTHRACENE	1.280	1,000,000	NC	0.0000013	-
ACENAPHTHENE	0.5350	290,000	NC	0.0000018	-
ACENAPHTHYLENE	0.2970	290,000	NC	0.0000010	-
BENZO(A)ANTHRACENE	8.600	NA	9,600	-	0.000896
BENZO(A)PYRENE	23.500	230	1,000	0.1021739	0.023500
BENZO(B)FLUORANTHENE	11.000	NA	10,000	-	0.001100
BENZO(G,H,I)PERYLENE	28.100	430,000	NC	0.000065	-
BENZO(K)FLUORANTHENE	2.560	NA	100,000	-	0.000026
CHRYSENE	6.840	NA	1,000,000	-	0.000007
DIBENZ(A,H)ANTHRACENE	12.9000	NA	1,000	-	0.012900
FLUORANTHENE	8.20	170,000	NC	0.000048	-
FLUORENE	0.6950	580,000	NC	0.0000012	-
INDENO(1,2,3-CD)PYRENE	11.400	NA	10,000	-	0.001140
PHENANTHRENE	4.210	1,000,000	NA	0.000004	-
PYRENE	8.050	430,000	NC	0.000019	-
1-METHYLNAPHTHALENE	3.9100	390	35,000	0.010026	0.000112
2-METHYLNAPHTHALENE	3.6700	5,800	NA	0.000633	-
2-CHLORONAPHTHALENE	0.0262	5,800	NA	0.000005	-
		Direct Contact Cumulative Risk Ratio		*0.3*	*0.04*

Notes:

NC = Non Carcinogenic

1. Ohio VAP GDCS Construction and Excavation Activities for Single Chemical Non-Carcinogens
2. Ohio VAP GDCS Construction and Excavation Activities for Single Chemical Carcinogens
3 Cumulative multiple chemical adjustment calculation

APPENDIX A

Resident Air Inputs

Variable	Resident Air Default Value	Site-Specific Value
AF_{gw} (Attenuation Factor Groundwater) unitless	0.001	0.001
AF_{ss} (Attenuation Factor Sub-Slab) unitless	0.03	0.03
ED_{res} (exposure duration) years	26	26
ED_{0-2} (mutagenic exposure duration first phase) years	2	2
ED_{2-6} (mutagenic exposure duration second phase) years	4	4
ED_{6-16} (mutagenic exposure duration third phase) years	10	10
ED_{16-26} (mutagenic exposure duration fourth phase) years	10	10
EF_{res} (exposure frequency) days/year	350	350
EF_{0-2} (mutagenic exposure frequency first phase) days/year	350	350
EF_{2-6} (mutagenic exposure frequency second phase) days/year	350	350
EF_{6-16} (mutagenic exposure frequency third phase) days/year	350	350
EF_{16-26} (mutagenic exposure frequency fourth phase) days/year	350	350
ET_{res} (exposure time) hours/day	24	24
ET_{0-2} (mutagenic exposure time first phase) hours/day	24	24
ET_{2-6} (mutagenic exposure time second phase) hours/day	24	24
ET_{6-16} (mutagenic exposure time third phase) hours/day	24	24
ET_{16-26} (mutagenic exposure time fourth phase) hours/day	24	24
THQ (target hazard quotient) unitless	0.1	1
LT (lifetime) years	70	70
TR (target risk) unitless	1.0E-06	1.0E-05

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Resident Vapor Intrusion Screening Levels (VISL)

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = DWSHA; W = TEF applied; E = RPF applied; U = user provided; G = see RSL User's Guide Section 5; CA = cancer; NC = noncancer.

Chemical	CAS Number	Does the chemical meet the definition for volatility? (HLC>1E-5 or VP>1)	Does the chemical have inhalation toxicity data? (IUR and/or RfC)	Is Chemical Sufficiently Volatile and Toxic to Pose Inhalation Risk Via Vapor Intrusion from Soil Source? (C_{vp} > $C_{i,a}$,Target?)	Is Chemical Sufficiently Volatile and Toxic to Pose Inhalation Risk Via Vapor Intrusion from Groundwater Source? (C_{hc} > $C_{i,a}$,Target?)	Target Indoor Air Concentration (TCR=1E-05 or THQ=1) MIN($C_{ia,c}$,$C_{ia,nc}$) ($\mu g/m^3$)	Toxicity Basis	Target Sub-Slab and Near-source Soil Gas Concentration (TCR=1E-05 or THQ=1) C_{sg},Target ($\mu g/m^3$)	Target Groundwater Concentration (TCR=1E-05 or THQ=1) C_{gw},Target ($\mu g/L$)
Acetone	67-64-1	Yes	No	No Inhal. Tox. Info	No Inhal. Tox. Info	-		-	-
Benzene	71-43-2	Yes	Yes	Yes	Yes	3.60E+00	CA	1.20E+02	2.97E+01
Cumene	98-82-8	Yes	Yes	Yes	Yes	4.17E+02	NC	1.39E+04	2.42E+03
Dichloroethane, 1,1-	75-34-3	Yes	Yes	Yes	Yes	1.75E+01	CA	5.85E+02	1.35E+02
Ethylbenzene	100-41-4	Yes	Yes	Yes	Yes	1.12E+01	CA	3.74E+02	7.72E+01
Hexane, N-	110-54-3	Yes	Yes	Yes	Yes	7.30E+02	NC	2.43E+04	1.80E+01
Methyl tert-Butyl Ether (MTBE)	1634-04-4	Yes	Yes	Yes	Yes	1.08E+02	CA	3.60E+03	7.86E+03
Naphthalene	91-20-3	Yes	Yes	Yes	Yes	8.26E-01	CA	2.75E+01	1.27E+02
Propyl benzene	103-65-1	Yes	Yes	Yes	Yes	1.04E+03	NC	3.48E+04	5.90E+03
Toluene	108-88-3	Yes	Yes	Yes	Yes	5.21E+03	NC	1.74E+05	3.92E+04
Trimethylbenzene, 1,2,4-	95-63-6	Yes	Yes	Yes	Yes	6.26E+01	NC	2.09E+03	6.26E+02
Trimethylbenzene, 1,3,5-	108-67-8	Yes	Yes	Yes	Yes	6.26E+01	NC	2.09E+03	4.39E+02
Xylenes	1330-20-7	Yes	Yes	Yes	Yes	1.04E+02	NC	3.48E+03	8.56E+02

Resident Vapor Intrusion Screening Levels (VISL)

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = DWSHA; W = TEF applied; E = RPF applied; U = user provided; G = see RSL User's Guide Section 5; CA = cancer; NC = noncancer.

Is Target Groundwater Concentration < MCL? (C_{gw} < MCL?)	Pure Phase Vapor Concentration C_{vp}\ (11 °C)\ (µg/m³)	Maximum Groundwater Vapor Concentration C_{hc}\ (µg/m³)	Temperature for Maximum Groundwater Vapor Concentration (°C)	Lower Explosive Limit LEL (% by volume)	LEL Ref	IUR (ug/m³)$^{-1}$	IUR Ref	RfC (mg/m³)	RfC Ref	Mutagenic Indicator	Carcinogenic VISL TCR=1E-05 $C_{ia,c}$ (µg/m³)	Noncarcinogenic VISL THQ=1 $C_{ia,nc}$ (µg/m³)
	7.23E+08	8.02E+08	11	2.50	CRC	-		-		No	-	-
No (5)	3.98E+08	2.17E+08	11	1.20	CRC	7.80E-06	I	3.00E-02	I	No	3.60E+00	3.13E+01
--	2.91E+07	1.06E+07	11	0.90	CRC	-		4.00E-01	I	No	-	4.17E+02
--	1.21E+09	6.55E+08	11	5.40	CRC	1.60E-06	C	-		No	1.75E+01	-
Yes (700)	5.48E+07	2.46E+07	11	0.80	CRC	2.50E-06	C	1.00E+00	I	No	1.12E+01	1.04E+03
--	7.01E+08	3.86E+08	11	1.10	CRC	-		7.00E-01	I	No	-	7.30E+02
--	1.19E+09	7.01E+08	11	2.00	YAWS	2.60E-07	C	3.00E+00	I	No	1.08E+02	3.13E+03
--	5.86E+05	2.01E+05	11	0.90	CRC	3.40E-05	C	3.00E-03	I	No	8.26E-01	3.13E+00
--	2.21E+07	9.23E+06	11	0.80	CRC	-		1.00E+00	X	No	-	1.04E+03
No (1000)	1.41E+08	7.00E+07	11	1.10	CRC	-		5.00E+00	I	No	-	5.21E+03
--	1.36E+07	5.70E+06	11	0.90	CRC	-		6.00E-02	I	No	-	6.26E+01
--	1.60E+07	6.87E+06	11	1.00	CRC	-		6.00E-02	I	No	-	6.26E+01
Yes (10000)	4.56E+07	1.29E+07	11	-		-		1.00E-01	I	No	-	1.04E+02

Resident Vapor Intrusion Risk

Chemical	CAS Number	Site Groundwater Concentration C_{gw} \ (µg/L)	Site Indoor Air Concentration $C_{i,a}$ \ (µg/m³)	VI Carcinogenic Risk CDI (µg/m³)	VI Carcinogenic Risk CR
Acetone	67-64-1	26.1	-	-	-
Benzene	71-43-2	1230	1.49E+02	5.31E+01	4.14E-04
Cumene	98-82-8	91.5	1.58E+01	5.62E+00	-
Dichloroethane, 1,1-	75-34-3	0.441	5.73E-02	2.04E-02	3.26E-08
Ethylbenzene	100-41-4	20.1	2.92E+00	1.04E+00	2.60E-06
Hexane, N-	110-54-3	12.1	4.91E+02	1.75E+02	-
Methyl tert-Butyl Ether (MTBE)	1634-04-4	3.84	5.28E-02	1.88E-02	4.89E-09
Naphthalene	91-20-3	16.1	1.04E-01	3.72E-02	1.26E-06
Propyl benzene	103-65-1	96.9	1.71E+01	6.10E+00	-
Toluene	108-88-3	51.8	6.90E+00	2.46E+00	-
Trimethylbenzene, 1,2,4-	95-63-6	11	1.10E+00	3.92E-01	-
Trimethylbenzene, 1,3,5-	108-67-8	7.55	1.08E+00	3.83E-01	-
Xylenes	1330-20-7	88.2	1.07E+01	3.83E+00	-
*Sum		-	-	-	4.18E-04

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Resident Vapor Intrusion Risk

VI Hazard CDI (mg/m^3)	VI Hazard HQ	IUR $(ug/m^3)^{-1}$	IUR Ref	Chronic RfC (mg/m^3)	RfC Ref	Temperature (℃)\ for Groundwater Vapor Concentration	Mutagen?
-	-	-		-		11	No
1.43E-01	4.77E+00	7.80E-06	I	3.00E-02	IRIS	11	No
1.51E-02	3.78E-02	-		4.00E-01	IRIS	11	No
5.49E-05	-	1.60E-06	C	-		11	No
2.80E-03	2.80E-03	2.50E-06	C	1.00E+00	IRIS	11	No
4.71E-01	6.73E-01	-		7.00E-01	IRIS	11	No
5.06E-05	1.69E-05	2.60E-07	C	3.00E+00	IRIS	11	No
1.00E-04	3.34E-02	3.40E-05	C	3.00E-03	IRIS	11	No
1.64E-02	1.64E-02	-		1.00E+00	SCREEN	11	No
6.61E-03	1.32E-03	-		5.00E+00	IRIS	11	No
1.05E-03	1.76E-02	-		6.00E-02	IRIS	11	No
1.03E-03	1.72E-02	-		6.00E-02	IRIS	11	No
1.03E-02	1.03E-01	-		1.00E-01	IRIS	11	No
-	*5.67E+00*	-		-		-	

Chemical Properties

Chemical	CAS Number	Does the chemical meet the definition for volatility? (HLC>1E-5 or VP>1)	Does the chemical have inhalation toxicity data? (IUR and/or RfC)	MW	MW Ref	S (mg/L)	S Ref	MCL (ug/L)	HLC (atm-m³/mole)	Henry's Law Constant (unitless)	Henry's Law Constant (11 ℃) (unitless)	Henry's Law Constant Used in Calcs (unitless)
Acetone	67-64-1	Yes	No	58.08	PHYSPROP	1.00E+06	PHYSPROP	-	3.50E-05	1.43E-03	8.02E-04	8.02E-04
Benzene	71-43-2	Yes	Yes	78.12	PHYSPROP	1.79E+03	PHYSPROP	5	5.55E-03	2.27E-01	1.21E-01	1.21E-01
Cumene	98-82-8	Yes	Yes	120.20	PHYSPROP	6.13E+01	PHYSPROP	-	1.15E-02	4.70E-01	1.73E-01	1.73E-01
Dichloroethane, 1,1-	75-34-3	Yes	Yes	98.96	PHYSPROP	5.04E+03	PHYSPROP	-	5.62E-03	2.30E-01	1.30E-01	1.30E-01
Ethylbenzene	100-41-4	Yes	Yes	106.17	PHYSPROP	1.69E+02	PHYSPROP	700	7.88E-03	3.22E-01	1.45E-01	1.45E-01
Hexane, N-	110-54-3	Yes	Yes	86.18	PHYSPROP	9.50E+00	PHYSPROP	-	1.80E+00	7.36E+01	4.06E+01	4.06E+01
Methyl tert-Butyl Ether (MTBE)	1634-04-4	Yes	Yes	88.15	PHYSPROP	5.10E+04	PHYSPROP	-	5.87E-04	2.40E-02	1.37E-02	1.37E-02
Naphthalene	91-20-3	Yes	Yes	128.18	PHYSPROP	3.10E+01	PHYSPROP	-	4.40E-04	1.80E-02	6.49E-03	6.49E-03
Propyl benzene	103-65-1	Yes	Yes	120.20	PHYSPROP	5.22E+01	PHYSPROP	-	1.05E-02	4.29E-01	1.77E-01	1.77E-01
Toluene	108-88-3	Yes	Yes	92.14	PHYSPROP	5.26E+02	PHYSPROP	1000	6.64E-03	2.71E-01	1.33E-01	1.33E-01
Trimethylbenzene, 1,2,4-	95-63-6	Yes	Yes	120.20	PHYSPROP	5.70E+01	PHYSPROP	-	6.16E-03	2.52E-01	1.00E-01	1.00E-01
Trimethylbenzene, 1,3,5-	108-67-8	Yes	Yes	120.20	PHYSPROP	4.82E+01	PHYSPROP	-	8.77E-03	3.59E-01	1.43E-01	1.43E-01
Xylenes	1330-20-7	Yes	Yes	106.17	PHYSPROP	1.06E+02	PHYSPROP	10000	6.63E-03	2.71E-01	1.22E-01	1.22E-01

Chemical Properties

H` and HLC Ref	Enthalpy of vaporization @ groundwater temperature $\Delta H_{v,gw}$ \ (cal/mol)	Enthalpy of vaporization at the normal boiling point $\Delta H_{v,b}$ \ (cal/mol)	$\Delta H_{v,b}$ \ Ref	Normal Boiling Point BP (K)	BP Ref	Exponent for $\Delta H_{v,gw}$	Vapor Pressure VP (mm Hg)	VP Ref	Vapor Pressure VP (11 ℃)\ (mm Hg)	Critical Temperature T_C \ (K)	T_C \ Ref	Lower Explosive Limit LEL (% by volume)	LEL Ref
PHYSPROP	7545.73	6955.07	CRC	329.15	PHYSPROP	0.36	2.32E+02	PHYSPROP	1.24E+02	5.08E+02	CRC	2.50	CRC
PHYSPROP	8111.43	7342.26	CRC	353.15	PHYSPROP	0.35	9.48E+01	PHYSPROP	4.83E+01	5.62E+02	CRC	1.20	CRC
PHYSPROP	12631.20	10335.30	TOXNET	425.55	PHYSPROP	0.38	4.50E+00	PHYSPROP	1.57E+00	6.31E+02	CRC	0.90	CRC
PHYSPROP	7437.91	6895.32	CRC	330.55	PHYSPROP	0.35	2.27E+02	PHYSPROP	1.22E+02	5.23E+02	CRC	5.40	CRC
PHYSPROP	10143.27	8501.43	CRC	409.25	PHYSPROP	0.37	9.60E+00	PHYSPROP	4.13E+00	6.17E+02	CRC	0.80	CRC
EPI	7730.28	6895.32	CRC	341.85	PHYSPROP	0.38	1.51E+02	PHYSPROP	7.96E+01	5.08E+02	CRC	1.10	CRC
PHYSPROP	7279.60	6677.82	CRC	328.15	PHYSPROP	0.37	2.50E+02	PHYSPROP	1.36E+02	4.97E+02	CRC	2.00	YAWS
PHYSPROP	12841.70	10325.05	CRC	491.05	PHYSPROP	0.37	8.50E-02	PHYSPROP	2.92E-02	7.48E+02	CRC	0.90	CRC
PHYSPROP	11241.70	9123.00	DECHEMA	432.35	PHYSPROP	0.39	3.42E+00	PHYSPROP	1.34E+00	6.38E+02	CRC	0.80	CRC
PHYSPROP	9142.41	7930.21	CRC	383.75	PHYSPROP	0.36	2.84E+01	PHYSPROP	1.33E+01	5.92E+02	CRC	1.10	CRC
PHYSPROP	11684.78	9368.80	TOXNET	442.45	PHYSPROP	0.39	2.10E+00	PHYSPROP	7.95E-01	6.49E+02	CRC	0.90	CRC
PHYSPROP	11663.35	9321.00	TOXNET	437.85	PHYSPROP	0.39	2.48E+00	PHYSPROP	9.40E-01	6.37E+02	CRC	1.00	CRC
PHYSPROP	10193.42	8523.00	Weast	411.65	PHYSPROP	0.38	7.99E+00	PHYSPROP	3.42E+00	6.20E+02	YAWS	-	

APPENDIX B

Virginia Department of Environmental Quality

VURAM

Virginia Unified Risk Assessment Model

VERSION: 3.1

Construction Worker Quantitative Risk Assessment Report

Site Name: 2700 Tranport Road

Program: Voluntary Remediation Program

Total Hazard Index/Risk for All Media

Non-Cancer Adult	Cancer
Total: 1.16E+01	Total: 7.91E-05
Exceeds Hazard Index!	*Exceeds Cumulative Risk!*

Risk Based Performance Criteria

Default Hazard Index	Default Cumulative Risk-All Chemicals
1	1.00E-04

Contact Depth to Groundwater: Direct Less than 15ft

All Report Pages are Required for Risk Assessment Submission
DETAILED REPORT FOLLOWS

Risk Based Performance Criteria

Default Hazard Index	Default Risk Individual Chemical	Default Cumulative Risk-All Chemicals
1	1.00E-05	1.00E-05

Contact Depth to Groundwater: Direct Less than 15ft

Groundwater

Analyte: Acenaphthene
CAS: 83-32-9

Concentration ug/L :	6.22E+00
RfDo:	2.00E-01
RfCi:	
SFO:	
IUR:	
Mutagen:	
VOC:	Y

Calculated Hazard Quotient/Risk

Non-Cancer Adult		Cancer	
Ingestion:	2.78E-06	Ingestion:	
Dermal:	2.08E-04	Dermal:	
Inhalation:		Inhalation:	
Total:	**2.11E-04**	**Total:**	**0.00E+00**

% Contribution to Media Risk 0.00% 0.00%

Analyte: Acetone
CAS: 67-64-1

Concentration ug/L :	2.61E+01
RfDo:	2.00E+00
RfCi:	3.09E+01
SFO:	
IUR:	
Mutagen:	
VOC:	Y

Calculated Hazard Quotient/Risk

Non-Cancer Adult		Cancer	
Ingestion:	1.17E-06	Ingestion:	
Dermal:	4.67E-07	Dermal:	
Inhalation:	1.94E-04	Inhalation:	
Total:	**1.95E-04**	**Total:**	**0.00E+00**

% Contribution to Media Risk 0.00% 0.00%

Analyte: Anthracene
CAS: 120-12-7

Concentration ug/L :	5.77E-01
RfDo:	1.00E+00
RfCi:	
SFO:	
IUR:	
Mutagen:	
VOC:	Y

Calculated Hazard Quotient/Risk

Non-Cancer Adult		Cancer	
Ingestion:	5.15E-08	Ingestion:	
Dermal:	7.30E-06	Dermal:	
Inhalation:		Inhalation:	
Total:	**7.35E-06**	**Total:**	**0.00E+00**

% Contribution to Media Risk 0.00% 0.00%

Risk Based Performance Criteria

Default Hazard Index	Default Risk Individual Chemical	Default Cumulative Risk-All Chemicals
1	1.00E-05	1.00E-05

Contact Depth to Groundwater: Direct Less than 15ft

Groundwater

Analyte: Benz[a]anthracene
CAS: 56-55-3

Concentration ug/L :	5.15E-01
RfDo:	
RfCi:	
SFO:	1.00E-01
IUR:	6.00E-05
Mutagen:	Y
VOC:	Y

Calculated Hazard Quotient/Risk

Non-Cancer Adult		Cancer	
Ingestion:		Ingestion:	6.30E-11
Dermal:		Dermal:	4.79E-08
Inhalation:		Inhalation:	2.63E-08
Total:	**0.00E+00**	**Total:**	**7.43E-08**

% Contribution to Media Risk 0.00% 0.09%

Analyte: Benzene
CAS: 71-43-2

Concentration ug/L :	1.23E+03
RfDo:	1.00E-02
RfCi:	8.00E-02
SFO:	5.50E-02
IUR:	7.80E-06
Mutagen:	
VOC:	Y

Calculated Hazard Quotient/Risk

Non-Cancer Adult		Cancer	
Ingestion:	1.10E-02	Ingestion:	8.27E-08
Dermal:	1.27E-01	Dermal:	9.59E-07
Inhalation:	8.55E+00	Inhalation:	7.31E-05
Total:	**8.69E+00**	**Total:**	**7.41E-05**

% Contribution to Media Risk 74.62% 93.74%

Exceeds Hazard! Exceeds Risk!

Analyte: Benzo(g,h,i)perylene
CAS: 191-24-2

Concentration ug/L :	1.05E+00
RfDo:	3.00E-01
RfCi:	
SFO:	
IUR:	
Mutagen:	
VOC:	Y

Calculated Hazard Quotient/Risk

Non-Cancer Adult		Cancer	
Ingestion:	3.13E-07	Ingestion:	
Dermal:	4.06E-04	Dermal:	
Inhalation:		Inhalation:	
Total:	**4.06E-04**	**Total:**	**0.00E+00**

% Contribution to Media Risk 0.00% 0.00%

Risk Based Performance Criteria

Default Hazard Index	Default Risk Individual Chemical	Default Cumulative Risk-All Chemicals
1	1.00E-05	1.00E-05

Contact Depth to Groundwater: Direct Less than 15ft

Groundwater

Analyte: Benzo[a]pyrene
CAS: 50-32-8

Concentration ug/L :	5.22E-01
RfDo:	3.00E-04
RfCi:	2.00E-06
SFO:	1.00E+00
IUR:	6.00E-04
Mutagen:	Y
VOC:	

Calculated Hazard Quotient/Risk

Non-Cancer Adult		Cancer	
Ingestion:	1.55E-04	Ingestion:	6.38E-10
Dermal:	1.78E-01	Dermal:	7.32E-07
Inhalation:		Inhalation:	
Total:	**1.78E-01**	**Total:**	**7.33E-07**

% Contribution to Media Risk 1.53% 0.93%

Analyte: Benzo[b]fluoranthene
CAS: 205-99-2

Concentration ug/L :	4.65E-01
RfDo:	
RfCi:	
SFO:	1.00E-01
IUR:	6.00E-05
Mutagen:	Y
VOC:	

Calculated Hazard Quotient/Risk

Non-Cancer Adult		Cancer	
Ingestion:		Ingestion:	5.69E-11
Dermal:		Dermal:	3.81E-08
Inhalation:		Inhalation:	
Total:	**0.00E+00**	**Total:**	**3.82E-08**

% Contribution to Media Risk 0.00% 0.05%

Analyte: Benzo[k]fluoranthene
CAS: 207-08-9

Concentration ug/L :	4.71E-02
RfDo:	
RfCi:	
SFO:	1.00E-02
IUR:	6.00E-06
Mutagen:	Y
VOC:	

Calculated Hazard Quotient/Risk

Non-Cancer Adult		Cancer	
Ingestion:		Ingestion:	5.76E-13
Dermal:		Dermal:	5.76E-10
Inhalation:		Inhalation:	
Total:	**0.00E+00**	**Total:**	**5.77E-10**

% Contribution to Media Risk 0.00% 0.00%

Risk Based Performance Criteria

Default Hazard Index	Default Risk Individual Chemical	Default Cumulative Risk-All Chemicals
1	1.00E-05	1.00E-05

Contact Depth to Groundwater: Direct Less than 15ft

Groundwater

Analyte: Chloronaphthalene, Beta-
CAS: 91-58-7

Concentration ug/L :	2.57E-01
RfDo:	2.00E-01
RfCi:	
SFO:	
IUR:	
Mutagen:	
VOC:	Y

Calculated Hazard Quotient/Risk

Non-Cancer Adult		Cancer	
Ingestion:	1.15E-07	Ingestion:	
Dermal:	7.91E-06	Dermal:	
Inhalation:		Inhalation:	
Total:	**8.03E-06**	**Total:**	**0.00E+00**

% Contribution to Media Risk 0.00% 0.00%

Analyte: Chrysene
CAS: 218-01-9

Concentration ug/L :	4.56E-01
RfDo:	
RfCi:	
SFO:	1.00E-03
IUR:	6.00E-07
Mutagen:	Y
VOC:	

Calculated Hazard Quotient/Risk

Non-Cancer Adult		Cancer	
Ingestion:		Ingestion:	5.58E-13
Dermal:		Dermal:	4.58E-10
Inhalation:		Inhalation:	
Total:	**0.00E+00**	**Total:**	**4.58E-10**

% Contribution to Media Risk 0.00% 0.00%

Analyte: Cumene
CAS: 98-82-8

Concentration ug/L :	9.15E+01
RfDo:	4.00E-01
RfCi:	9.00E-02
SFO:	
IUR:	
Mutagen:	
VOC:	Y

Calculated Hazard Quotient/Risk

Non-Cancer Adult		Cancer	
Ingestion:	2.04E-05	Ingestion:	
Dermal:	1.37E-03	Dermal:	
Inhalation:	4.58E-01	Inhalation:	
Total:	**4.60E-01**	**Total:**	**0.00E+00**

% Contribution to Media Risk 3.95% 0.00%

Risk Based Performance Criteria

Default Hazard Index	Default Risk Individual Chemical	Default Cumulative Risk-All Chemicals
1	1.00E-05	1.00E-05

Contact Depth to Groundwater: Direct Less than 15ft

Groundwater

Analyte: #Error

CAS: #Error

Concentration	#Error:	#Error
RfDo:		#Error
RfCi:		#Error
SFO:		#Error
IUR:		#Error
Mutagen:		#Error
VOC:		#Error

Calculated Hazard Quotient/Risk

Non-Cancer Adult		Cancer	
Ingestion:	#Error	Ingestion:	#Error
Dermal:	#Error	Dermal:	#Error
Inhalation:	#Error	Inhalation:	#Error
Total:	**#Error**	**Total:**	**#Error**

% Contribution to Media Risk #Type! #Type!

#Error ***#Error***

Total Calculated Hazard Index/Risk For Media: Groundwater

Non-Cancer Adult		Cancer	
Ingestion:	1.15E-02	Ingestion:	8.89E-08
Dermal:	3.29E-01	Dermal:	2.60E-06
Inhalation:	1.13E+01	Inhalation:	7.64E-05
Total:	**1.16E+01**	**Total:**	**7.91E-05**

Risk Based Performance Criteria

Default Hazard Index	Default Risk Individual Chemical	Default Cumulative Risk-All Chemicals
1	1.00E-05	1.00E-05

Contact Depth to Groundwater: Direct Less than 15ft

Total Hazard Index/Risk for All Media

Non-Cancer Adult

Ingestion:	1.15E-02
Dermal:	3.29E-01
Inhalation:	1.13E+01
Total:	**1.16E+01**

Exceeds Hazard Index!

Cancer

Ingestion:	8.89E-08
Dermal:	2.60E-06
Inhalation:	7.64E-05
Total:	**7.91E-05**

Exceeds Cumulative Risk!

Risk Based Performance Criteria

Default Hazard Index	Default Risk Individual Chemical	Default Cumulative Risk-All Chemicals
1	1.00E-05	1.00E-05

Contact Depth to Groundwater: Direct Less than 15ft

Construction Exposure Default Values

Symbol	Description	Value	Units
A	Construction Worker Soil Inhalation Dispersion Constant - Philadelphia	14.0111	(unitless)
AFcw	Construction Worker Soil Adherence Factor	0.3	(mg/cm2)
As	Areal extent of the site or contamination	0.5	(acres)
ATcw	Construction Worker Averaging Time: 365 x LT	25550	(days)
ATcw	Construction Worker Averaging Time	365	(days/yr)
ATcw-a	Construction Worker Averaging Time: EWcw x 7 x EDcw	350	(days)
B	Construction Worker Soil Inhalation Dispersion Constant - Philadelphia	19.6154	(unitless)
BWcw	Construction Worker Body Weight	80	(kg)
C	Construction Worker Soil Inhalation Dispersion Constant - Philadelphia	225.3397	(unitless)
DWcw	Construction Worker Days Worked	5	(days/week)
EDcw	Construction Worker Exposure Duration	1	(yrs)
EFcw	Construction Worker Exposure Frequency	250	(days/yrs)
EFcw-a	Construction Worker Air Exposure Frequency	250	(days/yr)
EFcw-s	Construction Worker Soil Exposure Frequency	250	(days/yr)
EFcw-vrp	Construction Worker Soil Exposure Frequency - VRP ONLY - Virginia DEQ	125	(days/yr)
ETcw	Construction Worker Exposure Time	8	(hrs/day)
ETcw-s	Construction Worker Soil Exposure Time	8	(hrs/day)
EWcw	Construction Worker Weeks Worked	50	(weeks/yr)
F(x)	Function Dependent on 0.886 × (Ut/Um)	0.194	(unitless)
Fd	Dispersion Correction Factor	0.185	(unitless)
IRcw	Construction Worker Soil Ingestion Rate	330	(mg/day)
n	Total soil porosity: 1-(ρb/ρs)	0.433962264150943	(unitless)
PEFsc	Particulate Emission Factor Subchronic - Virginia DEQ calculated	1266503136.97919	(m3/kg)

Risk Based Performance Criteria

Default Hazard Index	Default Risk Individual Chemical	Default Cumulative Risk-All Chemicals
1	1.00E-05	1.00E-05

Contact Depth to Groundwater: Direct Less than 15ft

Q/C	Inverse of the ratio of the 1-h geometric mean concentration to the emission flux along a straight road segment bisecting a square site - Virginia DEQ calculated	87.3689772162309	(g/m2-s per kg/m)
SAcw	Construction Worker Surface Area	3527	(cm2/day)
Tc	Total time over which construction occurs: EDcw*EWcw*7days/wk*24hrs/day*3600s/hr	30240000	(s)
TR-ACH	Trench Air Changes per Hour - Virginia DEQ	2	(h)-1
TR-ACvad	Trench Advection Coefficient Groundwater greater than 15ft - Virginia DEQ	0.25	(cm3/cm3)
TR-CF1	Trench Conversion Factor-1	0.001	(L/cm3)
TR-CF2	Trench Conversion Factor-2	10000	(cm2/m2)
TR-CF3	Trench Conversion Factor-3	3600	(s/hr)
TR-CF4	Trench Conversion Factor-4	1000000	(cm3/m3)
TR-D-dir	Trench Depth - groundwater less Than 15ft - Virginia DEQ	2.44	(m)
TR-D-ind	Trench Depth - groundwater greater than 15ft - Virginia DEQ	4.57	(m)
TR-Dsg	Trench - Depth to soil gas vapor source - Virginia DEQ	1	(cm)
TR-EFcw	Trench Construction Worker Exposure Frequency - Virginia DEQ	125	(days/yr)
TR-ETcw	Trench Construction Worker Exposure Time - Virginia DEQ	4	(hrs/day)
TR-EVcw	Trench Construction Worker Events - Virginia DEQ	1	(events/day)
TR-F	Trench Fraction of floor through which contaminant can enter - Virginia DEQ	1	(unitless)
TR-HV	Trench Thickness of Vadose Zone - groundwater greater than 15 ft - Virginia DEQ	30	(cm)
TR-IRcw	Trench Construction Worker Groundwater Ingestion Rate - Virginia DEQ	0.02	(L/day)
TR-KGH2O	Trench Gas-phase mass transfer coefficient of water vapor at 25deg C - Virginia DEQ	0.833	(cm/s)
TR-KLO2	Trench Liquid-phase mass transfer coefficient of oxygen at 25deg C - Virginia DEQ	0.002	(cm/s)
TR-L	Trench Length - Virginia DEQ	2.44	(m)
TR-Lgw	Trench Depth to groundwater - Virginia DEQ	488	(cm)
TR-MWH2O	Trench Molecular Weight of Water - Virginia DEQ	18	(unitless)
TR-MWO2	Trench Molecular Weight of Oxygen - Virginia DEQ	32	(unitless)
TR-Porvad	Trench Porosity in Vadose Zone - groundwater greater than 15ft - Virginia DEQ	0.44	(cm3/cm3)
TR-R	Trench Ideal Gas Constant - Virginia DEQ	0.000082	(atm-m3/mol-K)

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Contact Depth to Groundwater: Direct Less than 15ft

TR-Temp-F	Trench Temperature Fahrenheit - Virginia DEQ	77	(F)
TR-Temp-K	Trench Temperature - Virginia DEQ	298	(K)
TR-W	Trench Width - Virginia DEQ	0.91	(m)
TR-W/D	Trench Width to Depth Ratio - Virginia DEQ	0.38	(unitless)
Um	Mean Annual Wind Speed	4.69	(m/s)
Ut	Equivalent Threshold Value of Wind Speed at 7m	11.32	(m/s)
V	V Fraction of Vegetative Cover	0.5	(unitless)
Θa	Air filled soil porosity: n-Θw	0.133962264150943	(unitless)
Θw	Water filled soil porosity	0.3	(unitless)
ρb	Dry soil bulk density	1.5	(kg/L)
ρs	Soil particle density	2.65	(kg/L)

END OF REPORT