



WGMGROUPTM

Report of Findings
Phase II Environmental Site Assessment and Building Materials Inspection
Samaritan House Property - Kalispell, Montana
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1.0 INTRODUCTION

WGM Group, Inc. (WGM) performed a Phase II Environmental Site Assessment (Phase II ESA) and Building Materials Inspection (BMI) of the Samaritan House, property (Site) located at 1110 2nd Street West in Kalispell, Montana (**Figures 1 and 2**). The Phase II ESA was completed for the City of Kalispell (the City) using a grant from the U.S. Environmental Protection Agency (EPA) Brownfields Program. The ESA was conducted in accordance with the Sampling and Analysis Plan (SAP) prepared by WGM, which was approved by the EPA on September 7, 2022 (WGM, 2022a).

1.1 PURPOSE

A Phase I ESA conducted at the Site by EarthTech Environmental identified three Recognized Environmental Conditions (RECs) for the Site and noted that hazardous building materials may be present at the Site (EarthTech, 2021). The key findings include:

- The presence of an abandoned concrete grease pit located in the maintenance shop building that may have released petroleum products or solvents which could have impacted soils under the grease pit.
- The historical use of an oil-sand interceptor (OSI) located south of the automotive wash rack may have released petroleum products or solvents into the underlying soil.
- The presence of lead dust inside and outside the north main building due to the historical use of the Site as an Armory (Sonsteli Hall, U.S. Army Reserve Center), including use of an indoor shooting range inside the north main building on Site.
- Although not a REC per ASTM E 1527-13, the Phase I ESA (EarthTech, 2021) identified potential asbestos-containing material (ACM), lead-based paint (LBP), and other hazardous building materials associated in on-site structures.

This Phase II ESA was conducted to determine if there was a historical release of contaminants from the abandoned concrete grease pit and/or OSI; if lead dust from historical use of the shooting range is present in the north main building and associated areas; and to assess whether hazardous building materials are present at the Site at concentrations requiring special handling or disposal for renovation and/or deconstruction of the onsite buildings. Results of the soil investigation were used to determine whether or not environmental impacts associated with the RECs represent encumbrances that could impact future use and development of the Site. Analytical results obtained through laboratory analysis of soil samples



collected during the Phase II ESA were compared to appropriate EPA and Montana Department of Environmental Quality (DEQ) soil screening levels to evaluate possible impacts. All data was generated in accordance with requirements described in the Programmatic Quality Assurance Project Plan (PQAPP) developed for the City of Kalispell Brownfields Program (Weston, 2018).

1.2 BACKGROUND & SITE DESCRIPTION

The Site is improved with three main buildings and is currently being used as administrative offices by Samaritan House, which is a homeless shelter and transitional living program. Prior to this, the Site was used as an armory by the U.S. Army Reserve. The main structure is a large building constructed in two sections (“north main building” and “south main building”) with a connecting hall between them. This structure, which is constructed of cement blocks, covers approximately 14,325 square feet. The Phase I ESA indicated this building was constructed in 1953. The maintenance shop building on the Site, which is also built of cement blocks, covers approximately 350 square feet and the Phase I ESA indicated this building was constructed in 1978. A partially enclosed automotive truck wash (wash rack) is located between the north main building and the maintenance shop. A small oil storage shed is located adjacent east of the maintenance shop building and has a concrete curb for spill containment. The lot is approximately 2.4 acres in size and is located in a mixed commercial/residential area in the western part of the city of Kalispell. The general vicinity includes residences, a school, and various commercial businesses clustered along South Meridian Road and Center Street.

1.3 GEOLOGY & HYDROLOGY

The Flathead valley is bounded on the east by the Swan-Whitefish fault, located along the base of the Swan Range, and on the west by the Kalispell fault at the base of the Salish Mountains. The mountains rise about 4,500 feet above the valley floor, with Miocene and Oligocene sediments resting on Precambrian bedrock. Pleistocene continental and mountain glaciation advanced southward through the trench in the vicinity of Kalispell depositing a layer of glacial till. As the glaciers receded, meltwater lakes pooled in areas where drainage was impeded, leaving lakebed deposits. In contrast, fluvial outwash deposits accumulated where discharge flowed unrestricted. It is estimated that 600 to 1,000 feet of Wisconsin-age Pleistocene glacial deposits overlie the Tertiary sediments (Smith, 2000).

Two primary aquifers in the Kalispell area include the shallow alluvial aquifer and the deep artesian aquifer. The shallow alluvial aquifer is composed of unconsolidated fluvial sediments (i.e., sand and gravel) deposited along the floodplain of the Flathead, Whitefish, and Stillwater Rivers. The aquifer



thickness ranges from 20 to 100 feet. Low permeability glacial till and lakebed deposits of various thicknesses separate the shallow aquifer from the deep artesian aquifer. The deep artesian aquifer consists of a series of intercalated sand and gravel layers, with fine-grained interbeds. These deposits probably represent the paleo-channel of the Flathead River (LaFave, 2003). Groundwater flow direction near the Site in the shallow aquifer is south-southeast and likely parallels the Ashley Creek located 0.25 miles southwest of the Site. Depth to groundwater (shallow aquifer) in the vicinity of the Site is assumed to fluctuate between 8 to 16 feet below ground surface (ft bgs). The estimated groundwater flow direction in the vicinity of the Site is south-southwest towards the Flathead River.



2.0 SITE INVESTIGATION

2.1 UPDATED CONCEPTUAL SITE MODEL

The conceptual site model (CSM) has been updated based on the onsite investigative data collected for this Report of Findings (ROF). Critical elements of the updated CSM include:

- Near-surface lithology is characterized by non-native gravel fill material from 4 to 5 ft bgs.
- Native lithology (predominantly clay with lesser amounts of silts and gravels) was encountered from approximately 4 to 8 ft bgs, which is the maximum depth of investigation.
- Contamination related to a release in the abandoned grease pit located in the maintenance shop or the OSI west of the wash rack would have been observed during investigation of soil in these areas and no visual or olfactory evidence of petroleum impacts was observed in any soil collected from soil borings advanced in these areas during the investigation.
- No groundwater or perched groundwater was observed in the soil borings.
- The lead dust assessment identified the presence of lead dust on the Site.
- Surface soil sampling showed no residual lead impacts from roof runoff.
- The BMI identified the presence of ACM and LBP on the Site.

2.2 DATA QUALITY OBJECTIVES

The contaminants of concern (COCs) for the Site include volatile petroleum hydrocarbons (VPH), extractable petroleum hydrocarbons (EPH), volatile organic compounds (VOCs), Resource Conservation and Recovery Act (RCRA) metals (arsenic, barium, cadmium, chromium, lead, selenium, silver, and mercury) and lead dust resulting from the army reserve indoor shooting range. COCs for hazardous building materials include suspect ACM, LBP, polychlorinated biphenyls (PCBs) in fluorescent light fixtures, and mercury-containing ampules in thermostats. Prior to conducting this Phase II ESA, data gaps concerning impacts to soil were as follows:

- Lack of COC data in surface and subsurface soil at the Site;
- Lack of COC data concerning the presence/absence of ACM, LBP, and other hazardous building materials in buildings; and
- Lack of COC data concerning the presence of lead dust in the north main building and associated areas.



The specific activities completed during this ESA to address these data gaps were as follows:

- The RECs identified by the Phase I ESA were investigated by advancing three direct-push borings (SB-1, SB-2, and SB-3) at the locations shown on **Figure 3** to determine if COCs were released to environmental media. Samples of soil were obtained from these borings and analyzed for VPH, EPH, VOCs, and RCRA 8 metals.
- A BMI was performed on all three buildings of the Site to determine whether ACM, LBP, and/or other hazardous building materials are present.
- A lead dust assessment was performed on the north main building and associated outside areas to determine concentrations of lead in dust.

2.3 SUBSURFACE SOIL SAMPLE COLLECTION

On October 4, 2022, WGM provided technical oversight during advancement of three soil borings using hydraulic percussive direct-push drilling techniques. The borings were completed by Water & Environmental Technologies (WET) of Butte, Montana. Boring locations, shown on **Figure 3**, were selected to investigate the RECs identified in the Phase I ESA. Soil borings were advanced to total depths of 8 ft bgs. Boring logs are provided in **Appendix A**.

WGM collected two soil samples from each boring and described the conditions in each of the boreholes on individual boring log forms. A total of six subsurface soil samples were collected from direct-push macrocores and field-screened with a calibrated photoionization detector (PID) in accordance with the SAP (WGM, 2022a). Six samples were submitted for laboratory analysis; two from each soil boring, one from 1 to 2 feet below the base of the concrete slab and one from the deepest extent of the borehole at 6 to 8 ft bgs. **Table 1** shows the sample collection depths, sample identification convention, and PID headspace readings for each sample.



TABLE 1 – SOIL SAMPLE COLLECTION AND IDENTIFICATION

BORING	SAMPLE ID	SAMPLE DEPTH (FT BGS)	HEADSPACE CONCENTRATION (PPM)	ANALYTICAL PARAMETERS
SB-1	220512-SB1-1	2 – 4	1.3	EPH Screen, VPH, VOCs, RCRA Metals
	220512-SB1-2	6 – 8	0.9	
SB-2	220512-SB2-1	2 – 4	1.7	
	220512-SB2-2	6 – 8	1.5	
SB-3	220512-SB3-1	2 – 4	0.1	
	220512-SB3-2	6 – 8	1.7	

Notes: ft bgs - feet below ground surface
 ppm – parts per million
 ns - no sample collected

Soil samples were submitted to Energy Laboratories in Helena, Montana for analysis of the COCs (EPH Screen, VPH, VOCs, and RCRA metals). Investigation results are discussed in **Section 3.0**. The field notes are included in **Appendix B**. Laboratory analytical results are included in **Appendix C**.

2.4 ASBESTOS SAMPLING

The Site has three buildings; the main building, the maintenance shop, and the attached oil storage shed (**Figure 2**). WGM sampled suspected ACM from the three buildings on October 4th and 5th, 2022. A total of 44 individual building materials were identified and 110 samples were collected and submitted to Quest MicroAnalytics in Dallas, Texas under chain-of-custody documentation for analysis of asbestos by Polarized Light Microscopy/Dispersion Staining (PLM/DS) test method 40 CFR Part 763, Appendix E to Subpart E. Investigation results are discussed in **Section 3.0**. Laboratory analytical results are included in **Appendix C**.

2.5 LEAD-BASED PAINT INSPECTION

LBP building inspections were performed on the maintenance shop, oil storage shed, and main building from October 4th through the 6th, 2022, by Brent Merritt with WGM. The interior and exterior painted surfaces were inspected using an X-Ray Fluorescence (XRF) spectrometer (Viken Detection Pb200i). A total of 17 building components were identified and 107 building material paints were analyzed for lead content. The locations, components, substrates, and colors of paint assayed for LBP were recorded in a field XRF Data Log Sheet (**Appendix B**). Investigation results are discussed in **Section 3.0**. Laboratory analytical results are included in **Appendix C**.



2.6 LEAD DUST ASSESSMENT

A lead dust assessment of the north main building and associated outside areas was conducted on October 6, 2022, by Brent Merritt with WGM. Settled lead dust sampling was conducted using the wipe sampling method and a total of 28 lead dust wipe samples were collected from the north main building. For wide, flat locations, a 12-inch square template-assisted sampling procedure was used. The surface inside the template was wiped with a laboratory-provided lead dust wipe. The area was wiped using firm pressure with 3 to 4 vertical S-strokes. Then the wipe was folded with the exposed side of the pad and the area was wiped with 3 to 4 horizontal S-strokes. The pad was folded once more and the area was wiped with 3 to 4 additional vertical S-strokes, then the pad was folded, exposed side in, and placed into a pre-labeled plastic bag. Only one template was used for each sample. For small and/or other locations, (for example, a windowsill, or door jamb), tape was used to delineate the sampling area as described in ASTM E 1728/E 1728M-20.

Dimensions of sampling areas and specific locations were recorded in Lead Dust Wipe Sampling Field Forms (**Appendix B**). All dust-wipe samples were sampled for lead content according to *ASTM Standard Practice for Collection of Settled Dust Samples Using Wipe Sampling Methods for Subsequent Lead Determination* (ASTM E 1728/E 1728M-20); *ASTM Standard Specification for Wipe Sampling Materials for Lead in Surface Dust* (ASTM E 1792-20) and U.S. Department of Housing and Urban Development Guidelines (HUD, 2012). All lead dust wipe samples were submitted to Energy Laboratories in Helena, Montana for analysis performed by the methods identified in the SAP (WGM, 2022a). Investigation results are discussed in **Section 3.0**. Laboratory analytical results are included in **Appendix C**.

2.7 DECONTAMINATION & INVESTIGATION-DERIVED WASTE

To avoid cross-contamination between borings and sampling intervals, all downhole sampling equipment was decontaminated onsite between drilling of individual borings using distilled water, phosphate-free soap, 25% methanol tap-water solution, 10% nitric acid solution, and a final distilled water rinse. Decontamination procedures were conducted at a designated decontamination area on the Site. Investigation-derived wastes (decontamination wash water) was handled in accordance with the SAP (WGM, 2022a). Because direct-push drilling techniques were used, there were no residual soil cuttings from the investigation. All sampling equipment was decontaminated between each sampling interval following WGM's standard operation procedure that includes the following protocol:



- Clean with tap water and a non-phosphate laboratory detergent, using a brush to remove particulate matter and surface film
- Triple rinse with tap water
- Single rinse with 25 percent methanol-tap water blend
- Single rinse with 10 percent dilute nitric acid-tap water blend
- Triple rinse with tap water
- Triple rinse with deionized water

All building materials and lead dust sampling equipment was conducted with one-time use disposable equipment.

2.8 SAMPLE SHIPMENT

The soil samples and lead dust wipe samples identified in **Sections 2.3** and **2.6** were containerized and placed into a shipping cooler with ice. The samples were shipped to Energy Labs in Helena, Montana, under chain-of-custody documentation on October 5th and 6th, 2022. The asbestos samples identified in **Section 2.4** were placed into a shipping container and shipped to Quest MicroAnalytics in Dallas, Texas under chain-of-custody documentation on October 12th, 2022.

2.9 FIELD AND LABORATORY QUALITY CONTROL SAMPLES

WGM followed the EPA-approved PQAPP (Weston, 2018), which establishes specific quality assurance and quality control (QA/QC) policies and activities. The PQAPP references standard EPA laboratory methods, which specify equipment requirements. New commercially available supplies and consumables from standard sources (i.e., hardware stores) were used for this Phase II ESA. The following field QA/QC samples were collected (or explanations are provided in cases where samples were not collected):

- At the end of each day of fieldwork, one equipment rinseate blank (ERB) sample was collected for soil analytes by running distilled water over the decontaminated field equipment used during the fieldwork. The ERB sample was submitted blind to the laboratory, and results from the ERB sample is used to verify the effectiveness of equipment decontamination procedures.
- One field duplicate (DUP) soil sample was collected during the Phase II ESA. The field replicate was collected as a split of a randomly selected sample and submitted blind to the laboratory.



- A laboratory-provided trip blank (TB) sample accompanied each cooler and was used to verify whether cross-contamination had been introduced during the sample container shipping process.
- Lead Dust field blanks were collected at a minimum frequency of 5% (one for every 20 field wipe samples collected). These “field blanks” were submitted to the laboratory “blind” with identification numbers similar to the collected dust wipe samples.
- The ERB and DUP samples were analyzed for COCs including VPH, VOCs, EPH, and RCRA Metals. The TB samples were analyzed for VPH and VOCs. The field blank samples were analyzed for lead.
- Duplicate samples of asbestos were not collected during the BMI because several samples were collected from each suspect ACM.
- No ERB samples of equipment used to collect building material were collected because disposable equipment was used.



3.0 INVESTIGATION RESULTS

WGM compared subsurface soil data to relevant screening levels to determine if soil would require additional investigation or response actions consistent with anticipated land uses. Detected concentrations were compared to the following regulatory screening or action levels:

- Background concentrations of Inorganic Constituents in Surface Soil (DEQ, 2013)
- DEQ Surface/Subsurface Soil Screening Levels as determined via the DEQ Surface/Subsurface Soil Screening Flowchart Part 1 – Direct Contact. This process was used in conjunction with the most current applicable DEQ and EPA screening level sources (DEQ, 2021a)
- DEQ Surface/Subsurface Soil Screening Levels as determined via the DEQ Surface/Subsurface Soil Screening Flowchart Part 2 – Leaching to Groundwater. This process was used in conjunction with the most current applicable DEQ and EPA screening level sources (DEQ, 2021b)

Soil analytical laboratory reports are included in **Appendix C** and results are tabulated along with screening levels in **Appendix D**. Results of sampling for the investigation are discussed below.

3.1 SB-1 RESULTS

Soil boring SB-1, located at the southwest end of the abandoned concrete grease pit, was advanced to a total depth of 8 ft bgs. No evidence of impacted soil (petroleum staining or odor) was observed in the macrocores or soil samples (SB1-1 and SB1-2) collected from SB-1. No PID headspace readings were elevated in any of the soil samples. Soil samples were submitted from two intervals (2 to 4 ft bgs and 6 to 8 ft bgs) for laboratory analysis of COCs. Results are summarized as follows:

- Concentrations of EPH in were significantly below DEQ Risk-Based Screening Levels (RBSLs).
- Concentrations of VPH were below laboratory detection levels (not detected).
- Concentrations of VOCs were below laboratory detection levels (not detected).
- RCRA metals were detected, but all concentrations were below soil Screening Levels as determined via the DEQ Surface/Subsurface Soil Screening Flowcharts Part 1 and Part 2.



3.2 SB-2 RESULTS

Soil boring SB-2, located at the northeast end of the abandoned concrete grease pit, was advanced to a total depth of 8 ft bgs. No evidence of impacted soil (petroleum staining or odor) was observed in the macrocores or soil samples (SB2-1 and SB2-2) collected from SB-2. No PID headspace readings were elevated in any of the soil samples. Soil samples were submitted from two intervals (2 to 4 ft bgs and 6 to 8 ft bgs) for laboratory analysis of COCs. Results are summarized as follows:

- Concentrations of EPH in were significantly below DEQ RBSLs.
- Concentrations of VPH were below laboratory detection levels (not detected).
- Concentrations of VOCs were below laboratory detection levels (not detected).
- RCRA metals were detected, and all concentrations were below soil Screening Levels as determined via the DEQ Surface/Subsurface Soil Screening Flowcharts Part 1 and Part 2.

3.3 SB-3 RESULTS

Soil boring SB-3, located at the southeast corner of the wash rack area, was advanced to a total depth of 8 ft bgs. No evidence of impacted soil (petroleum staining or odor) was observed in the macrocores or soil samples (SB3-1 and SB3-2) collected from SB-3. No PID headspace readings were elevated in any of the soil samples. Soil samples were submitted from two intervals (2 to 4 ft bgs and 6 to 8 ft bgs) for laboratory analysis of COCs. Results are summarized as follows:

- EPH was detected in Sample SB3-1 (2 to 4 ft bgs) at a concentration of 826 mg/kg, which exceeds the DEQ RBCA screening level (200 mg/kg) used to determine whether EPH fractions should be analyzed. The EPH fractions analysis for SB3-1 showed no concentrations above DEQ RBSLs. Concentrations of EPH in SB3-2 (6 to 8 ft bgs) were below DEQ RBSLs.
- Concentrations of VPH were below laboratory detection levels (not detected).
- Concentrations of VOCs were below laboratory detection levels (not detected).
- RCRA metals were detected in Sample SB3-1 (2 to 4 ft bgs), and all concentrations were below soil Screening Levels as determined via the DEQ Surface/Subsurface Soil Screening Flowcharts Part 1 and Part 2. RCRA metals were also detected in Sample SB3-2 (6 to 8 ft bgs) and all concentrations were below Screening Levels as determined via the DEQ Surface/Subsurface Soil Screening Flowcharts Part 1 and Part 2 except for barium. Barium was detected at 582 mg/kg, which exceeds the Montana background threshold value of 429 mg/kg and the DEQ leaching to



groundwater screening level of 421 mg/kg, but not the EPA residential direct contact screening level of 1,500 mg/kg.

3.4 ASBESTOS SAMPLING RESULTS

The asbestos inspection was performed on October 4th and 5th, 2022, by Brent Merritt, a Montana-accredited asbestos inspector per license #MTA-4362. The inspector assessed the north and south portions of the main building (14,325 ft²) and the maintenance garage (350 ft²). In accordance with SAP specifications and consistent with EPA and DEQ Asbestos Control Program (ACP) sampling guidelines, a total of 110 bulk samples were collected from suspect ACM (DEQ, 2019):

- 52 suspect ACM samples were collected from the north main building (**Figure 4**)
- 31 suspect ACM samples were collected from the south main building (**Figure 5**)
- 27 suspect ACM samples were collected from the maintenance garage (**Figure 6**)

Building materials are considered ACM if they contain greater than 1% asbestos, as defined in the asbestos National Emissions Standards for Hazardous Air Pollutants (NESHAP) under 40 CFR Part 61, Subpart M. Results of laboratory analysis for asbestos samples are summarized below. The complete asbestos laboratory report is included in **Appendix C**.

NORTH MAIN BUILDING

None of the 52 samples collected and analyzed from the north main building detected asbestos.

SOUTH MAIN BUILDING

Six of the 31 samples (SWI-FT1A, SWI-FT1-B, SWI-FT1-C, SWI-FT2-A, SWI-FT2-B, SWI-FT2-C) contained 5% Chrysotile asbestos and are considered ACM. The building materials that contained 5% Chrysotile asbestos were all floor tiles and included:

- 12"x12" White Floor Tile with Gray Swipe Pattern (A) and Black Mastic (B), Corridor North
- 12"x12" White Floor Tile with Gray Swipe Pattern (A) and Black Mastic (B), Corridor West
- 12"x12" White Floor Tile with Gray Swipe Pattern (A) and Black Mastic (B), Admin #1
- 12"x12" Orange Floor Tile (A) with Black Mastic (B), Unit Advisor Room
- 12"x12" Orange Floor Tile (A) with Black Mastic (B), Corridor



- 12"x12" Orange Floor Tile (A) with Black Mastic (B), Corridor

MAINTENANCE GARAGE

Six of the 27 samples (GAR-DC1-A, GAR-DC1-B, GAR-DC1-C, GARG1-A, GARG1-B, GAR-GL1-C) contained 3% Chrysotile asbestos and are considered ACM. The building materials that contained 3% Chrysotile asbestos were all door caulking and window glazing and included:

- White Door Caulking, Exterior of Main Door
- White Door Caulking, Exterior of Main Door
- White Door Caulking, Exterior of Bathroom Door
- Gray Window Glazing, Exterior South Side, East Window
- Gray Window Glazing, Exterior South Side, East Window
- Gray Window Glazing, Exterior South Side, West Window

3.5 LEAD-BASED PAINT RESULTS

The LBP inspection was performed by Brent Merritt on October 4th through the 6th, 2022. A total of 45 locations were assessed using the XRF spectrometer in the north main building, 26 in the south main building, and 36 in the maintenance garage. A total of 17 building components were identified and 107 building material paints were assessed for lead content (**Figures 7, 8, and 9**). XRF measurements classify paint as lead-based when the lead concentration is equal to or greater than 1.0 mg/cm². Results of the LBP inspection are summarized below. The LBP XRF survey locations are described in the XRF Data Log Sheet included in **Appendix B**.

NORTH MAIN BUILDING

None of the 45 locations exhibited XRF readings that would classify the paint as LBP.

SOUTH MAIN BUILDING

None of the 26 locations exhibited XRF readings that would classify the paint as LBP.

MAINTENANCE GARAGE

Seven of the 36 locations in the maintenance garage (see Figure 9) exhibited XRF readings that classify the paint as LBP. The locations include:



- Metal Garage Entrance Protection, garage west side, faded black color – 1.5 mg/cm²
- Metal Garage Entrance Protection, garage west side, faded yellow color – 1.2 mg/cm²
- Metal Bottom Slat Garage Door (interior), black color – 1.4 mg/cm²
- Metal Bottom Slat Garage Door (interior), yellow color – 2.2 mg/cm²
- Metal Pipe, south side HVAC (interior), yellow color – 1.1 mg/cm²
- Metal Roof Support on Ceiling, tan color (orange paint underneath) – 12.2 mg/cm²
- Metal Roof Support on Ceiling, tan color (orange paint underneath) – 9.8 mg/cm²

3.6 PCB (LIGHT BALLAST) RESULTS

The inspector assessed the north main building, the south main building, and the maintenance garage and identified PCB-containing ballasts and fluorescent tubes throughout the buildings.

3.7 MERCURY THERMOSTAT RESULTS

Vintage metal thermostats that may contain mercury glass ampules were found the north and south main buildings.

3.8 LEAD DUST ASSESSMENT RESULTS

The lead dust assessment was conducted on October 6, 2022, by Brent Merritt with WGM. A total of 28 wipe samples were collected from the north main building and submitted to Energy Laboratories for EPA Method SW6020 total lead (**Figure 10**). Laboratory results detected lead in eight of the 28 samples submitted for analysis. The detected concentrations of each sample were compared to EPA Dust-Lead Clearance Levels (DLCLs) of 10 micrograms per square foot (µg/ft² or µg/wipe) for floors and 100 µg/ft² for windowsills. These results are summarized below with details including sample ID, location, surface material, and concentration detected.

- LD-4, Assembly Hall Shooting Range Entrance, floor tile – 11 µg/wipe
- LD-5, Assembly Hall Shooting Range Entrance, floor tile – 27 µg/wipe
- LD-6, Middle Assembly Hall Shooting Range, painted concrete floor – 11 µg/wipe
- LD-7, West Assembly Hall Shooting Range, painted concrete floor – 42 µg/wipe
- LD-8, East Assembly Hall Shooting Range, painted concrete floor – 25 µg/wipe
- LD-24, Arms Vault, bare concrete floor – 25 µg/wipe



- LD-26, Kitchen Ceramic Floor Tiles (red) – 5.5 µg/wipe
- LD-28, Shooting Range Baffle, painted metal – 60 µg/wipe

Six of the eight samples that exceeded the DLCL of 10 µg/ft² (for floors) were located in the shooting range and one sample was located in the arms vault room. The sample collected from the Kitchen Ceramic Floor detected lead dust, but at a concentration below the DLCL of 1010 µg/ft² (for floors). The samples that detected lead dust were evaluated per ASTM E 2115-19, *Standard Guide for Conducting Lead Hazard Assessment of Dwellings and of Other Child-Occupied Facilities*. **Table 2** below includes the results of the lead-hazard risk rating.

TABLE 2 – LEAD HAZARD CATEGORIES FOR VARIOUS IDENTIFIED CONDITIONS

Sample ID	Use Pattern Indicates Frequent Contact ¹	Extent-of-Hazard Rating ²	Lead Level Hazard Classification ³	Potential Lead Hazard Risk Category ⁴
LD-4	No	Major	Group B	Moderate
LD-5	No	Major	Group B	Moderate
LD-6	No	Major	Group B	Moderate
LD-7	No	Major	Group B	Moderate
LD-8	No	Major	Group B	Moderate
LD-24	No	Major	Group B	Moderate
LD-26	Yes	Major	Group A	Moderate
LD-28	No	Major	Group C	Moderate

Notes: 1 Use patterns designate areas within the building that are frequently occupied or accessed by persons using the facility.

2 A “major” hazard rating is assigned to all hazards associated with lead dust.

3 Detected lead content compared to the regulatory action level. Group A indicates the lead content is less than the regulatory action level. Group B indicates lead content is equal to or greater than the action level, but not greater than 5 times the action level. Group C indicates lead content is equal to or greater than 5 times the action level.

4 Potential Lead Hazard Risk Category per Table 2 of ASTM E 2115-19, *Standard Guide for Conducting Lead Hazard Assessment of Dwellings and of Other Child-Occupied Facilities*.

The evaluation in **Table 2** assessed lead hazard risks for the north main building using ASTM E 2115-19 and showed a moderate hazard risk for samples collected in the shooting range, arms vault, and kitchen floor.

3.9 DATA VALIDATION

WGM completed a data usability review and data validation for soil and lead dust in conformance with the EPA-approved PQAPP (Weston, 2018). The reviews and validations are included in **Appendix E**. The review identified minor data validation issues which required qualification of some of the data, but all



data were deemed valid and met the data quality objectives for the site investigation. WGM completed data validation in conformance with the Montana DEQ Data Validation Summary Form (Version 1.3.0, revised 1/26/18). The Data Validation Summary Forms for this investigation are included as **Appendix E**. Specifically, the review identified some minor data validation issues which required “J” qualification (Estimated value - analyte was present but less than the Laboratory Reporting Limit) of some of the analytical data, but all data was deemed valid and met the data quality objectives for the site investigation.

3.10 DEVIATIONS FROM THE SAP

This section discusses deviations from the approved SAP and/or PQAPP. These include:

- The SAP indicated that, the indoor shooting range potentially had widespread lead dust contamination via dispersion through the ventilation system and expelled onto the roof via the ventilation exhaust. The SAP stated that lead dust may have been deposited by the ventilation systems onto the roof and concentrated by roof runoff at the base of downspouts, resulting in soil contamination. WGM determined that the roof of the firing range slopes to the north towards four downspouts that direct rainfall and snowmelt onto a large flat asphalt pavement area next to the wash rack. Additionally, WGM determined that there is a vaulted roof section for the cafeteria that is approximately six feet high adjacent to the exhaust fan area that blocks exhaust fan deposition to the south. Further, WGM determined there was no connectivity for any lead contaminated runoff to impact grassy areas from downspouts on the south side of the building. Because of these observations, no surface soil samples were collected from the downspouts and/or drip lines along the north main building.
- The SAP indicated that heating/cooling/ventilation system deposition locations and the plenum space within the north main building would be sampled for lead dust. A sample from the plenum space above the shooting bench was collected, but the wipe sample was misplaced and was not placed into the sample jar for subsequent laboratory analysis.
- The SAP indicated that if the roof of the building was identified as a ventilation deposition area, the roof would be sampled for lead dust. However, because the composition of the roofing material is a modified bitumen roofing system (asphalt roofing rolls with added sand/silica), collection of lead dust samples using lead dust wipes was not feasible (e.g., attempted collection using the dust wipes would destroy the wipe)

These deviations are considered minor and do not affect the usefulness or usability of the data collected.



4.0 DISCUSSION/ RECOMMENDATIONS

4.1 PETROLEUM HYDROCARBONS & VOLATILE ORGANIC COMPOUNDS IN SOIL

None of the soil samples showed evidence of petroleum hydrocarbon impacts. No samples exhibited a petroleum hydrocarbon odor, and no evidence of volatile petroleum compounds were observed during field screening with the PID. EPH Screen analysis (method SW 8015M) detected TEH in four soil borings, but the concentrations did not exceed the DEQ EPH screening level of 200 mg/kg in three of the four samples. In sample SB3-1, TEH was detected at a concentration of 826 mg/kg, requiring EPH Fractions analysis. No EPH fraction in SB3-1 exceeded any DEQ RBSLs. **Appendix C** contains the analytical report and **Appendix D** contains the analytical data in tabulated format along with screening levels used for this investigation.

4.2 RCRA METALS IN SOIL

Sample SB3-2, collected from 6 to 8 ft bgs, detected barium at a concentration of 582 mg/kg. The concentration detected in SB3-2 is above DEQ's background threshold value of 429 mg/kg and above DEQ's Leaching to Groundwater Screening Level of 421 mg/kg. None of the other five soil samples collected during this investigation displayed barium or other RCRA metals concentrations above any regulatory screening level or background level. No other RCRA metals were detected in soil above any screening level.

DEQ considers residential surface soils to be present from 0-2 ft bgs. The soil sample that had a barium exceedance of generic screening was collected from a soil depth of 6-8 ft bgs. At depths of 6-8 ft bgs, DEQ uses a direct contact construction/excavation worker scenario to determine if contaminant concentration exceeds acceptable direct contact risk levels. DEQ's direct contact construction/excavation worker screening level for barium is 14,000 mg/kg. The 582 mg/kg found in the 6-8 foot soil sample is well below the 14,000 mg/kg direct contact construction/excavation worker screening level for barium and therefore there is not a direct contact soil exceedance at this site.

DEQ's generic screening level for barium leaching to groundwater is 421 mg/kg. This generic screening uses a Montana average generic dilution attenuation factor of 10. However, a site-specific dilution attenuation factor calculated would likely be higher than 10 based on the presence of asphalt covering



the area, which would result in a higher *site-specific* leaching to groundwater screening level. Because of this, the potential for barium at 6 to 8 ft bgs to leach to groundwater is very low. Since no other samples detected barium at elevated levels, the barium concentration appears to be isolated and not indicative of a significant historical or current release. For these reasons, WGM does not believe the detection of barium in soil at 6 to 8 ft bgs precludes the use or redevelopment of the Site.

4.3 ASBESTOS IN BUILDING MATERIALS

In accordance with current EPA and DEQ ACP regulations (DEQ, 2019), building material which contains greater than one percent (>1%) asbestos is placed into one of the three following NESHAP categories:

1. Category I non-friable ACM, which includes any asbestos-containing packing, gasket, resilient floor covering, or asphalt roofing product which contains more than one percent (>1%) asbestos
2. Category II non-friable ACM, which includes any material, excluding Category I nonfriable ACM, containing more than one percent (>1%) asbestos, that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure such as cement asbestos board, asbestos-cement pipe, and window glazing materials;
3. Regulated Asbestos-Containing Materials (RACM), which includes friable materials, Category I non-friable ACM that will or may be subjected to sanding, grinding, cutting, or abrading and Category II non-friable ACM which has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by forces acting on it or expected to act upon it during the course of renovations and/or demolition activities

A total of 110 total bulk samples from 44 different building materials were sampled for asbestos content. None of the of 52 bulk samples collected from the north main building showed asbestos content greater than 1%. Thirty-one bulk samples were collected from the south main building and six showed asbestos content greater than 1%. Twenty-seven bulk asbestos samples were collected from the maintenance garage and six showed asbestos content greater than 1%. The locations from which the samples were collected that were determined to be ACM are listed below along with their NESHAP category:

SOUTH MAIN BUILDING

- Floor tiles in the north section of the hall corridor contained 5% asbestos and are Category I non-friable ACM



- Floor tiles in the west section of the hall corridor contained 5% asbestos and are Category I non-friable ACM
- Floor tiles in the Admin #1 room on the north side of the west hall corridor contained 5% asbestos and are Category I non-friable ACM
- Floor tiles in the south section of the hall corridor contained 5% asbestos and are Category I non-friable ACM
- Floor tiles in the Unit Advisor room on the east side of the south hall corridor contained 5% asbestos and are Category I non-friable ACM

MAINTENANCE GARAGE

- Door caulking on the exterior of the main door contained 3% asbestos and is Category I non-friable ACM
- Door caulking on the exterior of the bathroom door contained 3% asbestos and is Category I non-friable ACM
- Exterior glazing of both the east and west windows on the south side of the building contained 3% asbestos and are Category II non-friable ACM

Future renovation or demolition of the south main building or maintenance garage would be subject to the Occupational Safety and Health Administration (OSHA) Asbestos in Construction Standard 29 CFR 1926.1101, which applies to all construction work where an employee could be occupationally exposed to asbestos. Construction work is defined as work for construction, alteration, and/or repair, including painting and decorating. The presence of Category I non-friable ACM and Category II non-friable ACM in the South Main Building and the Maintenance Garage will require abatement during renovation or demolition of these buildings by an accredited abatement contractor.

4.4 LEAD BASED PAINT IN BUILDING MATERIALS

XRF measurements classify paint as lead-based when the XRF result is equal to or greater than 1.0 mg/cm². A general summary of findings for LBP is presented below. Inspection results are provided in **Appendix B**.

NORTH MAIN BUILDING

- LBP was not identified on any surface tested.



SOUTH MAIN BUILDING

- LBP was not identified on any surface tested. All paint was observed to be in good condition

Since no surfaces in the north main building or south main building were identified as positive for LBP, future construction work on these structures will not be subject to the OSHA Toxic and Hazardous Substances: Lead Standard 29 CFR 1910.1025; the general industry standard for occupational exposure to lead. Nor will future renovation be subject to the OSHA Lead in Construction Standard 29 CFR 1926.62, which applies to all construction work where an employee could be occupationally exposed to lead. Construction work is defined as work for construction, alteration and/or repair, including painting and decorating.

MAINTENANCE GARAGE

- LBP was identified on seven of the surfaces tested: both the black and yellow paint on the west side of the garage door; both the black and yellow paint on the bottom slat of the overhead garage door; the yellow paint on the HVAC pipe on the south side of the garage entrance; and the tan paint on the metal roof support. The paint on the west side of the garage entrance was noted to be fading. All other paint was observed to be in good condition.

Due to the identification of LBP in the maintenance garage, renovation activities for the maintenance garage will be subject to the OSHA Toxic and Hazardous Substances: Lead Standard 29 CFR 1910.1025. Future renovation of the maintenance garage will be subject to the OSHA Lead in Construction Standard 29 CFR 1926.62. In the event of deconstruction of the maintenance garage, a representative sample of the waste stream created during the project should be collected and tested for total lead using the TCLP method to demonstrate the waste generated is not a hazardous waste and can be disposed of at a Class II landfill. The composite sample shall consist of at least five subsamples collected to represent the entire volume of building materials. If the TCLP lead concentration is below 5.0 mg/L, the waste stream may be disposed of at the local landfill. If it's above 5.0 mg/L, additional sampling or LBP abatement may be required.

4.5 LEAD DUST

Laboratory results of the samples collected from the north main building showed eight samples with detectable concentrations of lead. These samples were assigned lead hazard risk categories using the



Standard Guide for Conducting Lead Hazard Assessment of Dwellings and of Other Child-Occupied Facilities, issued by the American Society for Testing and Materials (ASTM E 2115-19).

The evaluation (**Table 2** in **Section 3.8**) shows a moderate hazard risk for samples collected in the shooting range, arms vault, and kitchen. The presence of lead dust as a moderate hazard risk in the shooting range, arms vault, and kitchen area should be addressed through abatement by an accredited abatement contractor. Abatement of lead dust can include use of a high-efficiency particulate absorbing (HEPA) filter vacuum and wet cleaning in the areas where lead dust was found to be present. A HEPA vacuum and wet cleaning of any HVAC systems attached to those areas would be necessary as well. Although not sampled, the plenum space above the shooting bench and the roof of the north main building should be addressed by abatement by an accredited abatement contractor during renovation of these areas of the north main building.

4.6 PCBS & MERCURY IN BUILDING MATERIALS

At the time of building renovation and demolition, all PCB-containing ballasts and mercury-containing thermostats will require special handling and disposal. Fluorescent light tubes should be recycled or reused if they are to be removed or replaced.



5.0 LIMITATIONS AND RELIANCE

This Phase II ESA and BMI was conducted in a professional manner in accordance with generally accepted practices, using the degree of skill and care ordinarily exercised by environmental consultants under similar circumstances. WGM observed the degree of care and skill generally exercised by the profession under similar circumstances and conditions. No other warranties, expressed or implied, are made.

No site investigation can wholly eliminate uncertainty regarding the potential for contamination or hazardous material in connection with a property. The investigation was completed to reduce, but not eliminate, this uncertainty. Due to physical limitations inherent to this or any environmental assessment, WGM does not warrant the Site is free of pollutants or that all pollutants and hazardous materials have been identified at the Site. This report is not definitive and should not be assumed to be a complete or specific definition of all conditions above or below grade. Subsurface conditions may differ from the conditions implied by the site observations and sampling. As such, no absolute determination of environmental risks is made concerning the Site. WGM also makes no representation or warranty that the past or current operations at the Site are or have been in compliance with applicable federal, state, and local laws, regulations, and/or codes.

This Phase II ESA/BMI report has been prepared by WGM for the City of Kalispell, who may rely on the findings of the report. The Site owner may use the information to make informed decisions; however, in using the information in the report, the owner is doing so at their own risk and shall have no legal recourse against WGM, its parent, or its subsidiaries, as WGM was not contracted by the owner to complete the investigation.



6.0 REFERENCES

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FIGURES

FIGURE 1 – VICINITY MAP

FIGURE 2 – SITE MAP

FIGURE 3 – SITE PLAN

FIGURE 4 – NORTH MAIN BUILDING ASBESTOS
SAMPLE LOCATIONS

FIGURE 5 – SOUTH MAIN BUILDING SAMPLE
ASBESTOS LOCATIONS

FIGURE 6 – MAINTENANCE GARAGE SAMPLE
ASBESTOS LOCATIONS

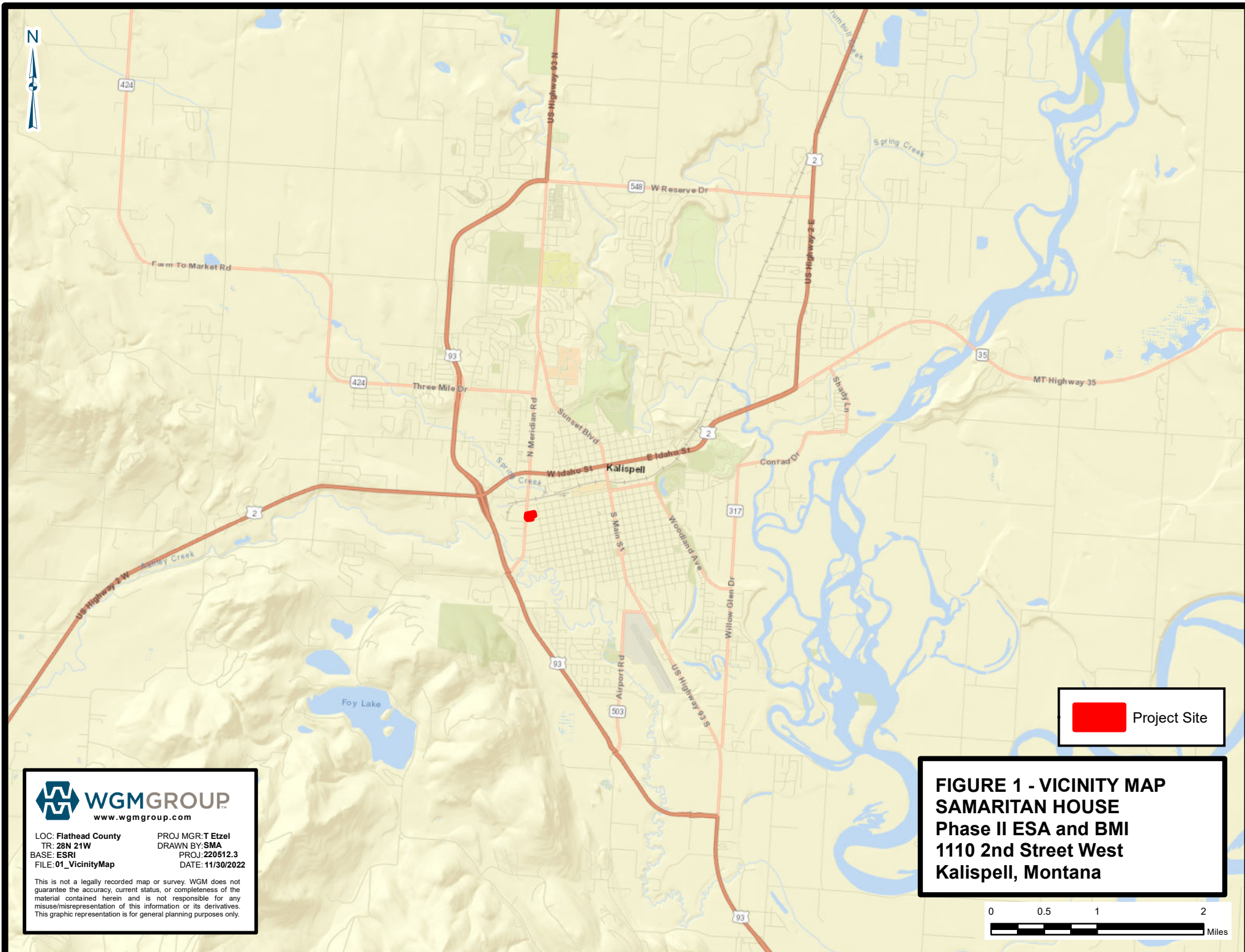
FIGURE 7 – NORTH MAIN BUILDING XRF LOCATIONS

FIGURE 8 – SOUTH MAIN BUILDING XRF LOCATIONS

FIGURE 9 – MAINTENANCE GARAGE XRF LOCATIONS

FIGURE 10 – LEAD DUST SAMPLE LOCATIONS







SMERIDIAN RD

Maint Shop

Wash Rack

Oil Storage Shed

North Main Building

South Main Building

2ND ST W



Property Boundary

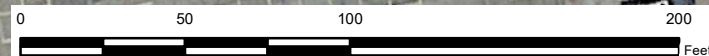


LOC: Flathead County
TR: 28N 21W
BASE: GoogleEarth
FILE: 02_SiteMap

PROJ MGR: T Etzel
DRAWN BY: SMA
PROJ: 220512.3
DATE: 11/30/2022

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**FIGURE 2 - SITE MAP
SAMARITAN HOUSE
Phase II ESA and BMI
1110 2nd Street West
Kalispell, Montana**





Abandoned
Grease Pit
Location

Maint
Shop

SB-2

SB-1

Oil
Storage
Shed

Wash Rack

Oil-Sand
Interceptor

SB-3

● Soil Boring Location

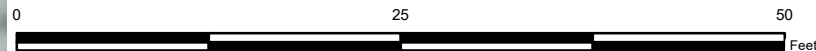


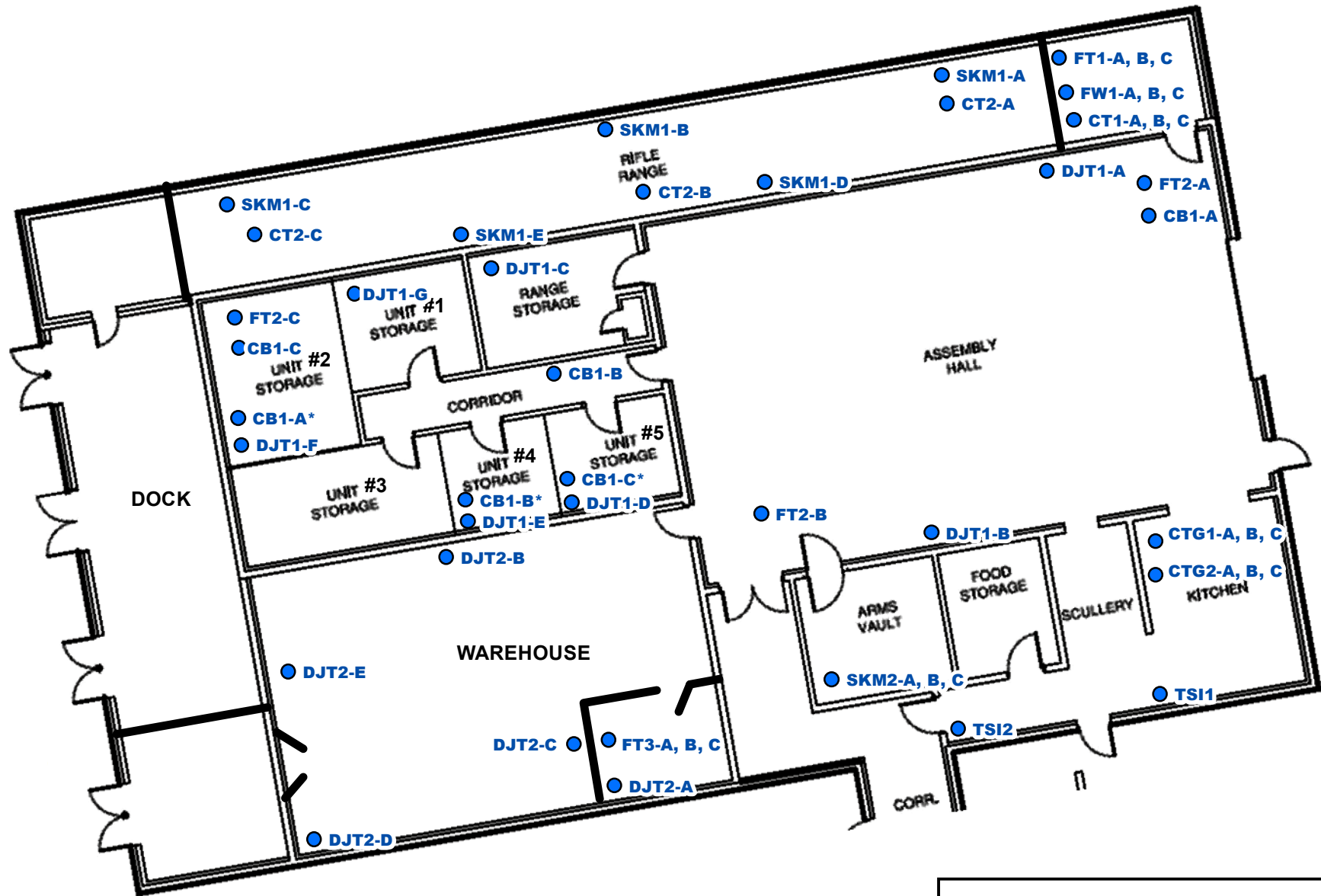
LOC: Flathead County
TR: 28N 21W
BASE: GoogleEarth
FILE: 03_SitePlan

PROJ MGR: T Etzel
DRAWN BY: SMA
PROJ: 220512.3
DATE: 12/15/2022

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**FIGURE 3 - SITE PLAN
SOIL BORING LOCATIONS
Phase II ESA and BMI
1110 2nd Street West
Kalispell, Montana**





FT floor tile
FW acoustic panel
CT ceiling tile
SKM skim coat
CB vinyl cove base
CB* cinder block and mortar
DJT drywall, joint compound, tape
CTG ceramic tile and grout
TSI thermal systems insulation

● Asbestos Sampling Locations (none present)

**FIGURE 4 - NORTH MAIN BUILDING ASBESTOS
SAMPLE LOCATIONS
Phase II ESA and BMI
1110 2nd Street West
Kalispell, Montana**





LOC: Flathead County
TR: 28N 21W
BASE: floorplan
FILE: 08_AsbestosNorth
PROJ MGR: T Etzel
DRAWN BY: SMA
PROJ: 220512.3
DATE: 12/15/2022

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Sampling Locations

-  Asbestos Present
-  No Asbestos



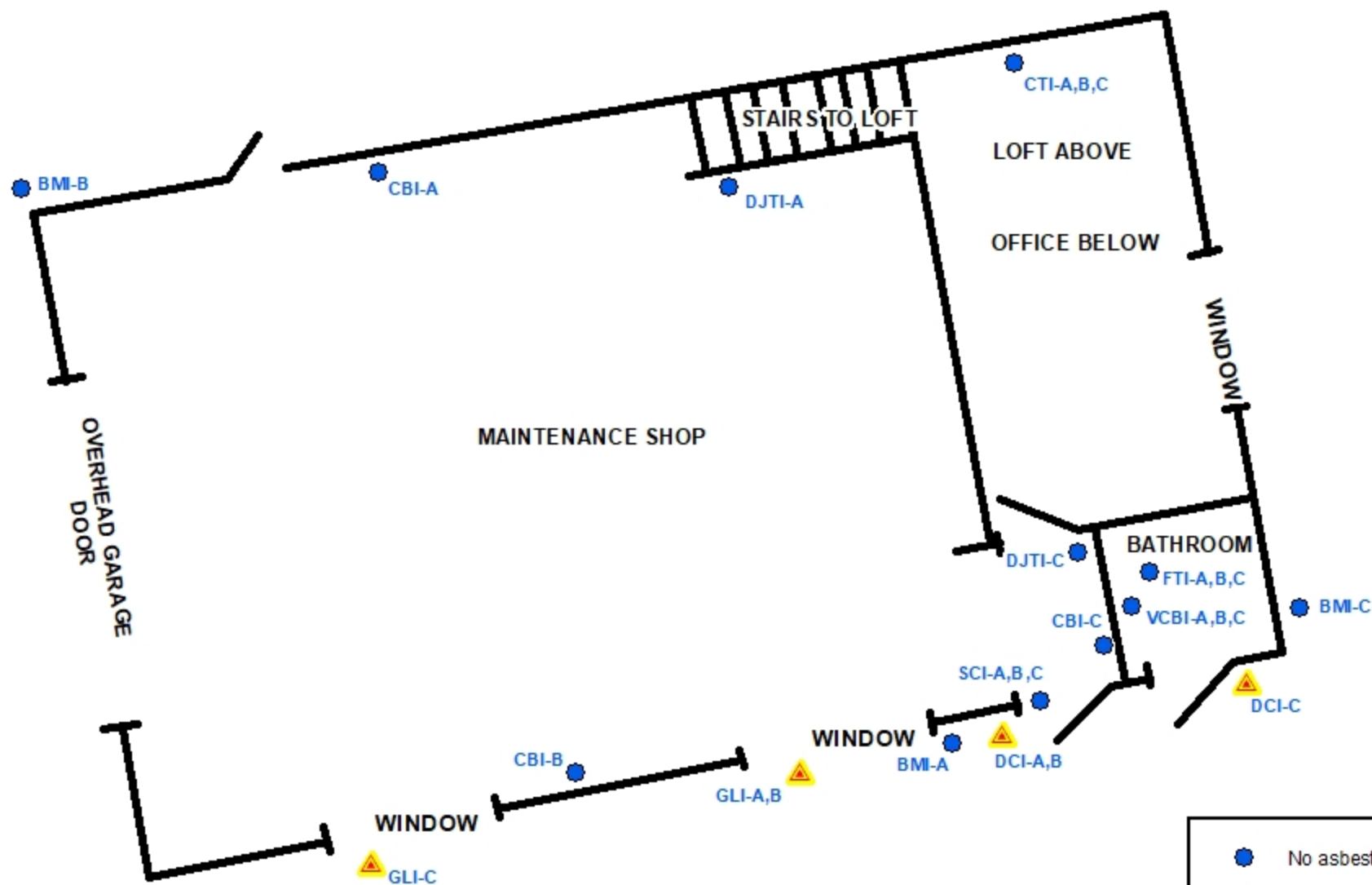
LOC: Flathead County
TR: 28N 21W
BASE: floorplan
FILE: 05FIGURE_AsbestosSouth

PROJ MGR: T Etzel
DRAWN BY: SMA
PROJ: 220512.3
DATE: 12/15/2022

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FT floor tile
CT ceiling tile
DJT drywall, joint compound, tape
CB vinyl cove base
CTG ceramic tile and grout
PW pipe wrap
EB elbow

**FIGURE 5 - SOUTH MAIN BUILDING ASBESTOS
SAMPLE LOCATIONS**
Phase II ESA and BMI
1110 2nd Street West
Kalispell, Montana

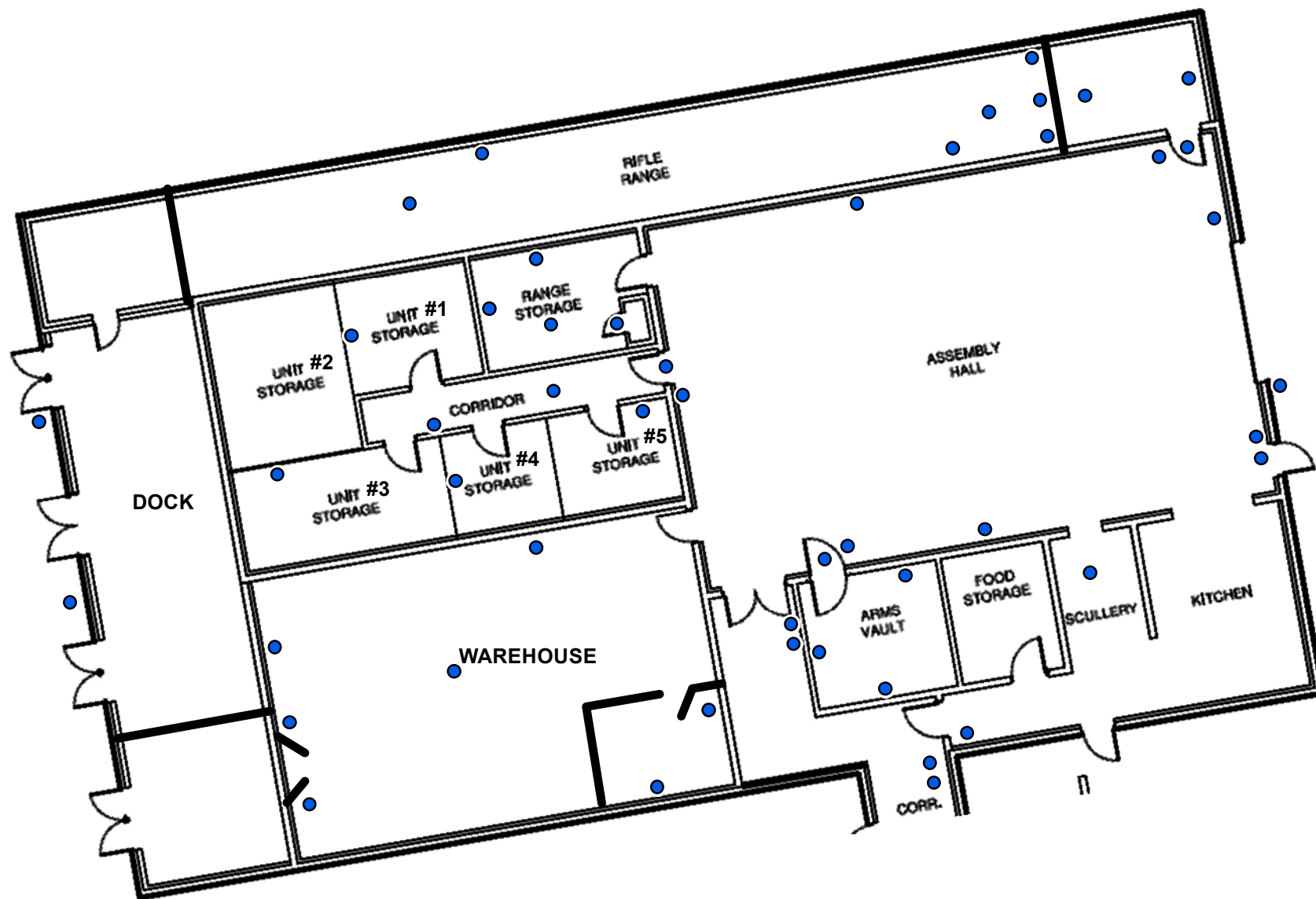


LOC: Flathead County
TRL: 25N 21W
BASE: google earth
FILE: 07_Asbestos Maint

PROJ MGR: TETzel
DRAWN BY: SMA
PROJ: 220512.3
DATE: 12/15/2022

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**FIGURE 6 - MAINTENANCE GARAGE BUILDING
ASBESTOS SAMPLE LOCATIONS**
Phase II ESA and BMI
1110 2nd Street West
Kalispell, Montana



• <1.0mg/cm²



LOC: Flathead County
TR: 28N 21W
BASE: floorplan
FILE: 07FIGURE_XRFNorth

PROJ MGR: T Etzel
DRAWN BY: SMA
PROJ: 220512.3
DATE: 12/15/2022

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FIGURE 7 - NORTH MAIN BUILDING XRF LOCATIONS
Phase II ESA and BMI
1110 2nd Street West
Kalispell, Montana



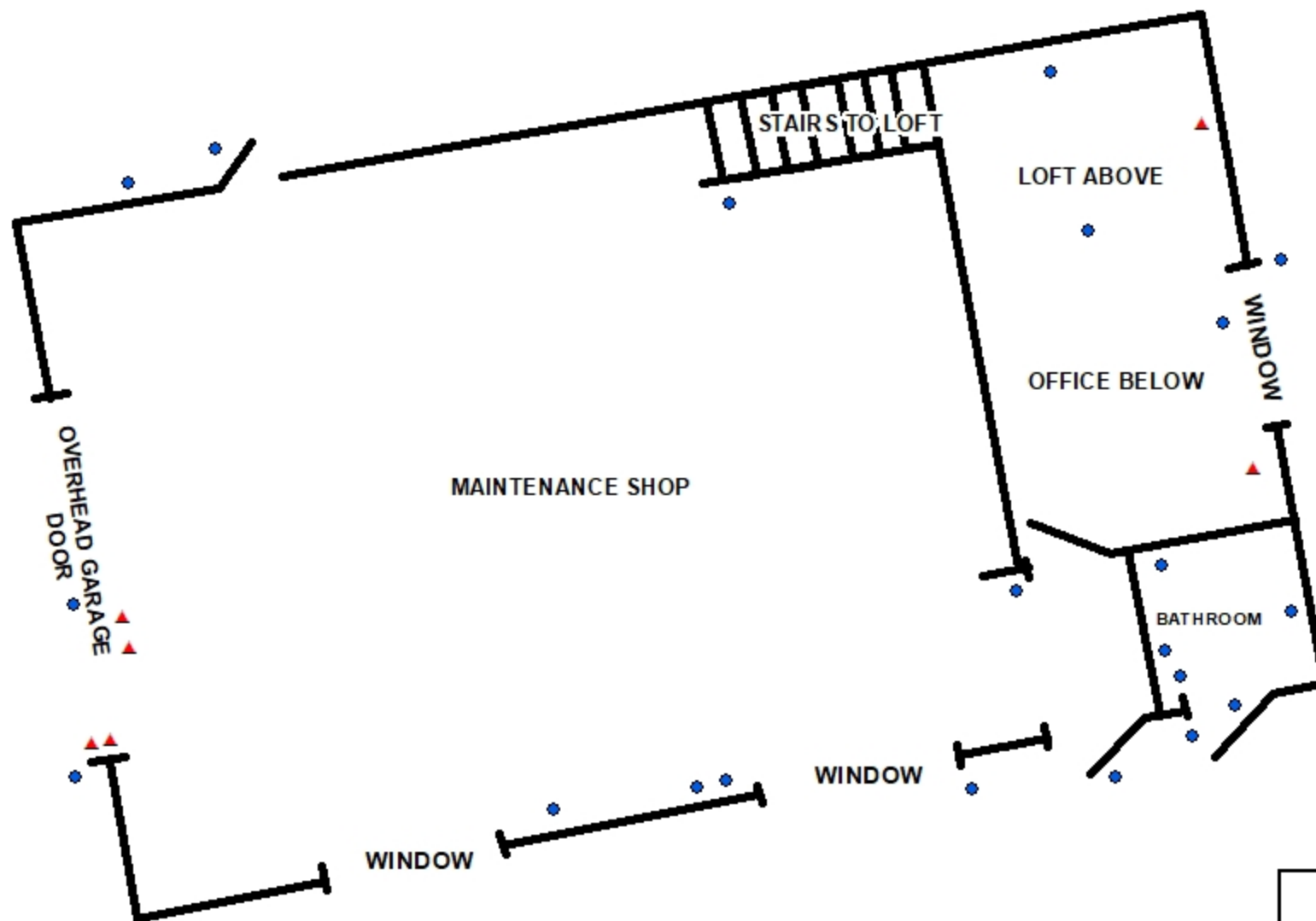
LOC: Flathead County
TR: 28N 21W
BASE: floorplan
FILE: 08FIGURE_XRFSouth

PROJ MGR: T Etzel
DRAWN BY: SMA
PROJ: 220512.3
DATE: 12/15/2022

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• <1.0mg/cm²

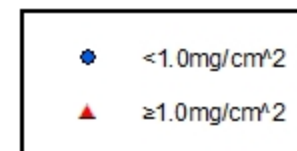
FIGURE 8 - SOUTH MAIN BUILDING XRF LOCATIONS
Phase II ESA and BMI
1110 2nd Street West
Kalispell, Montana



WINDOW

WINDOW

WINDOW



LOC: Flathead County
TTL: 25N 21W
BASE: google earth
FILE: 09_LeadPaintMaint

PROJ MGR: T. Etzel
DRAWN BY: SMA
PROJ: 220512.3
DATE: 12/15/2022

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FIGURE 9 - MAINTENANCE GARAGE BUILDING XRF LOCATIONS
Phase II ESA and BMI
1110 2nd Street West
Kalispell, Montana



- lead dust sample above floor DLCL
- lead dust sample below floor DLCL



LOC: Flathead County
TR: 28N 21W
BASE: floorplan
FILE: 10FIGURE_LeadDustNorth

PROJ MGR: T Etzel
DRAWN BY: SMA
PROJ: 220512.3
DATE: 12/16/2022

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FIGURE 10 - LEAD DUST SAMPLE LOCATIONS
Phase II ESA and BMI
1110 2nd Street West
Kalispell, Montana

APPENDIX A

SOIL BORING LOGS



DIRECT-PUSH BORING LOG

Project Name: Samaritan House Phase II ESA	Personnel: Brent Merritt	Dates Drilled: 10/04/22
Location: Kalispell, Montana	Boring No: SB-1	SWL / meas pt:
Project No: 220512.1 Phase II 05	Total Depth: 10'	Well / Soil Boring
Drilling Company/Driller: WET/John Babcock	Drilling Method: Direct-Push/Geoprobe	Sample Method: Continuous Dual Tube MiniRAE 3000

DEPTH	MATERIAL DESCRIPTION	% Recovery	SAMPLE #	PID ppm	COMMENTS
	~ 8" CONCRETE				
2	Dry/damp fill material	56%			PIC #5170 NO STAINING/ODOR
4			SB1-1 C 1139	1.3	
6	damp gray to 5' ? s + g HARD gray clay plug in END of sleeve	25%		0.4	PIC # 5171
8					
10					
					Maint SHOP OLD PIT SB-1 N ↑

DIRECT-PUSH BORING LOG

Project Name: Samaritan House Phase II ESA	Personnel: Brent Merritt	Dates Drilled: 10/04/22
Location: Kalispell, Montana	Boring No: SB-2	SWL / meas pt:
Project No: 220512.1 Phase 05	Total Depth: 8'	Well / Soil Boring
Drilling Company/Driller: WET/John Babcock	Drilling Method: Direct-Push/Geoprobe	Sample Method: Continuous Dual Tube Mini RAE 300

DEPTH	MATERIAL DESCRIPTION	% Recovery	SAMPLE #	PID ppm	COMMENTS
2	~8" CONCRETE dry brown, tan s+s	60%	SB2-1 @ 1024	1.7	#5163 NO ODOR/STAINING
4	10" more fill HARD	-		1.1	
6	damp v tan, gray clay	85%	SB2-2 @ 1029	1.5	5164 5165 5166
8					<div style="border: 1px solid black; padding: 5px; margin: 10px;"> main + shop </div> <div style="text-align: center;"> N ↑ </div>

DIRECT-PUSH BORING LOG

Project Name: Samaritan House Phase II ESA	Personnel: Brent Merritt	Dates Drilled: 10/04/22
Location: Kalispell, Montana	Boring No: SB-3	SWL / meas pt:
Project No: 220512.1 Phase 05	Total Depth: 8' BGS	Well / Soil Boring
Drilling Company/Driller: WET/John Babcock	Drilling Method: Direct-Push/Geoprobe	Sample Method: Continuous Dual Tube PID: MiniRAE 3000

DEPTH	MATERIAL DESCRIPTION	% Recovery	SAMPLE #	PID	COMMENTS
	3" ASPHALT			P7m	
2	Fill material Damp tan s+g	50%	SB1-1 0916	0.1	pic 5158 NO STAINING/ODOR ↓
4					
6	Damp HARD tan, gray clay w/ Tan s+g @ 4"	94%	SB1-2 0926	1.1 1.7	NO STAINING/ODOR #5159 ↓
8					WASH SHOP WASH RACK SB3 N ↑

DIRECT-PUSH BORING LOG

Project Name: Samaritan House Phase II ESA	Personnel: Brent Merritt <i>ACTUAL</i>	Dates Drilled: <i>10/4/22</i>
Location: Kalispell, Montana	Boring No: <i>SB-3</i>	SWL / meas pt:
Project No: 220512.1 Phase 04	Total Depth:	Well / Soil Boring
Drilling Company/Driller: WET/John Babcock	Drilling Method: Direct-Push/Geoprobe	Sample Method: Continuous Dual Tube

DEPTH	MATERIAL DESCRIPTION	% Recovery	SAMPLE #	PID	COMMENTS
			<i>SB4-2</i> <i>@ 0810</i>		<p><i>THIS IS A DUP sample of "SB3-2" 6-8' called "220512-SB4-2" @ 0810</i></p>



Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

www.energylab.com

Page 1 of 1

Account Information (Billing information)

Company/Name WGM GROUP INC		
Contact MIRANDA FLING		
Phone 406-728-4611		
Mailing Address		
City, State, Zip		
Email mfling@WGMGROUP.COM		
Receive Invoice <input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email	Receive Report <input type="checkbox"/> Hard Copy <input type="checkbox"/> Email	
Purchase Order 220512.1	Quote -	Bottle Order 41961

Report Information (If different than Account Information)

Company/Name		
Contact TYLER FETZEL		
Phone		
Mailing Address		
City, State, Zip		
Email TETZEL@WGMGROUP.COM		
Receive Report <input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email		
Special Report/Formats: <input type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC <input type="checkbox"/> EDD/EDT (contact laboratory) <input type="checkbox"/> Other		

Comments

PLEASE call
SAMPLER w/ ANY
QUESTIONS

Project Information

Project Name, PWSID, Permit, etc. SAHAKITAN House Ph II	
Sampler Name BRENT MERRITT	Sampler Phone 240-0573
Sample Origin State MT	EPA/State Compliance <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Lab provided preservatives were used <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
MINING CLIENTS, please indicate sample type. *If ore has been processed or refined, call before sending. <input type="checkbox"/> Byproduct 11 (e)2 material <input type="checkbox"/> Unprocessed ore (NOT ground or refined)*	

Matrix Codes

- A - Air
- W - Water
- S - Soils/
Solids
- V - Vegetation
- B - Bioassay
- O - Other
- DW - Drinking
Water

Analysis Requested

PCRA
LEADS + Mercury
SPH - SCREEN
MA VPH
VOCs
BZGO SHORT LIST

See Attached

All turnaround times are standard unless marked as RUSH.

Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling - See Instructions Page

Sample Identification (Name, Location, Interval, etc.)		Collection		Number of Containers	Matrix (See Codes Above)	Analysis Requested										RUSH TAT	ELI LAB ID Laboratory Use Only
		Date	Time														
1	220512-SB1-1	10/4/22	1139	3	S	X	X	X	X								
2	SB1-2		1149	3	S	X	X	X	X								
3	SB2-1		1024	3	S	X	X	X	X								
4	SB2-2		1029	3	S	X	X	X	X								
5	SB3-1		0916	3	S	X	X	X	X								
6	SB3-2		0926	3	S	X	X	X	X								
7	SB4-2		0810	3	S	X	X	X	X								
8	SW1		1130	9	W	X	X	X	X								
9																	
10	TRIP BLANK			1	W												

Custody Record MUST be signed	Relinquished by (print) BRENT MERRITT	Date/Time 10/4/22 1600	Signature <i>Brent Merritt</i>	Received by (print)	Date/Time	Signature
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp °C	Temp Blank Y N	On Ice Y N	CC	Payment Type Cash Check	Amount \$	Receipt Number (cash/check only)
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In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

APPENDIX B

FIELD DOCUMENTATION



GAR-XX - A, B, C

Page 1 of 2
GARAGE

Asbestos Bulk Sampling Field Form

Project: Sam HzePersonnel: B. MerrettLocation: 10 CalispellDate: 10/04/22Project #: 220512

Other: _____

GAR - NO PCBs Ballasts, Loft NO samples

NWI = NORTH WING

SWI = SOUTH WING

GAR = GARAGE

PET = PETRO SHED

Sample ID	Material Description	Location	Comments
GAR-CT1-A, B, C	2x11 Ceiling tile - 2 BOXES STORED HERE	GARAGE	
DJT1-A	Drywall, JC, TAPE Splotter TEXTURE	BY STAIRS TO LOFT	
- B		ABOVE OFFICE WINDOW	
- C		BY OFFICE DOOR	
CTB1-A	KINDERBLOCK + MORTAR	NORTH WALL - INTERIOR	MAUVE PAINT
- B		SOUTH WALL	
- C		EAST WALL	
SCI-A, B, C	SEALING COMPOUND - GRAY LIKE	TOP of DOOR	
DC1-A	CAULK	EXTERIOR OF MAIN DOOR	
B			
C		EXTERIOR BATHROOM DOOR	
GL1-A, B, C	WINDOW GLAZING	EXTERIOR, SOUTH WINDOWS	A, B = EAST WINDOW C = WEST WINDOW
BM1-A, B, C	BRICK + MORTAR	A - BY DOOR B - NW CORNER C = SE CORNER	

Gannge

Asbestos Bulk Sampling Field Form

Project: Scm HxPersonnel: BM

Location: _____

Date: 10/04/22Project #: 220512

Other: _____

Sample ID	Material Description	Location	Comments
<u>GAR-FT1-A,B,C</u>	<u>WHITE 12x Ft w/Light</u> <u>Flakes</u>	<u>GARAGE BATHROOM</u>	<u>< 50 ft²</u>
<u>VCB1-A,B,C</u>	<u>BROWN VINYL COVE BASE</u>	<u>↓</u>	<u>< 30ft</u>
<u>SOUTH WING supplement</u>			
<u>SWI-PW2-A</u>	<u>PIPE WRAP from water HEATER</u>	<u>HEATING ROOM</u>	<u>VERT PIPE</u>
<u>PW3-A</u>	<u>" " 4" line</u>	<u>" "</u>	<u>" "</u>
<u>PW4-A</u>	<u>" " 4" line</u>	<u>HORIZONTAL PIPE</u>	
<u>EB1-A</u>	<u>ELBOW</u>	<u>FIRST 90 coming off</u> <u>OF WATER HEATER</u>	
<u>EB2-A</u>	<u>ELBOW</u>	<u>90 BY TOP OF</u> <u>DOOR</u>	
<u>EB3-A</u>	<u>ELBOW</u>	<u>90 ABOVE TOTALIZER</u> <u>IN NW CORNER</u>	

South Wing

Asbestos Bulk Sampling Field Form

Project: San HeePersonnel: B. MERRITT

Location: _____

Date: 10/5/22Project #: 220512

Other: _____

Sample ID	Material Description	Location	Comments
SWI-FT1-A	12x FLOOR TILE - WHITE WITH SWIPE PATTERN + BLACK MASTIC	CORRIDOR - ENTRANCE TO ASSEMBLY HALL	
B		CORRIDOR BY FILE STORAGE DOOR - EAST	ADMIN #1
C		INSIDE FILE STORAGE ROOM BY SOUTH DOOR	NO BLACK MASTIC FOUND UNDER TILE
DIT1-A	DRYWALL, J.C. TAPE - SMOOTH TEXTURE	CORRIDOR - ENTRANCE TO ASSEMBLY HALL	
B	WALLS	CORRIDOR - WEST SIDE BY EXIT DOOR	
C	WHITE PAINT	CORRIDOR - EAST SIDE @ SOUTH END	
DJT2-A	DRYWALL, J.C. TAPE	CORRIDOR CEILING	BY KITCHEN DOOR
B	BLOB TEXTURE - WHITE PAINT	ONLY - NORTH HALF	
C		BY EXIT DOOR IN CORRIDOR	
CT1-A	2x4' CEILING TILE WHITE W/ PINHOLES AND FISSURES	@ SOUTH END OF MATERIAL IN CORRIDOR	
B		CORRIDOR	
C		ADMIN #1	FILE STORAGE ROOM = ADMIN #1
FT2-A, B, C	12x FLOOR TILE - ORANGE + BLACK MASTIC	CLASSROOM 2	
		CORRIDOR OVER UNIT ADVISOR ROOM	

SOUTH WING

Asbestos Bulk Sampling Field Form

Project: SAWI Hse

Location: _____

Project #: 220512Personnel: BYERRITTDate: 10/05/22

Other: _____

Sample ID	Material Description	Location	Comments
SWI- FT3 - A	12x FLOOR TILE tan w/Flakes	classroom 2 BY EXIT	
	+ BLACK MASTIC		
↓ B	↓	CORRIDOR BY ADMIN 1	
↓ C	↓	CORRIDOR BY EAST ENTRANCE	
CT2-ABC	ONE 2x4 CEILING TILE BATWING FISSURES	CORRIDOR - ENTRANCE TO ADMIN 1	
CT3-A BC	ONE 2x4 CEILING tile mostly PIN HOLES	CORRIDOR BY EXIT TO SOUTH SIGN	
CB1 - A	BROWN VINYL COVE BASE	CORRIDOR BY EAST ENTRANCE	
↓ - B	↓	CLASSROOM 2 EXIT DOOR	
↓ - C	↓	ADMIN 1 DOOR	
CT4 - A, B, C	12x12" TEXTURED CEILING TILE	ABOVE BOTH class-rooms AND ADMIN 1	DIFFICULT TO ACCESS - ABOVE
CT5-A BC	2x4 CEILING TILE	WOMENS BATHROOM	EXISTING DROP ceiling
PW1 - A	YELLOW PIPE WRAP	classroom 2	
CT91-A BC	2x2" GRAY CERAMIC TILE over CAROUT - mastic	MENS BATHROOM	
CT92-ABC	4x4" CERAMIC TILE + GROUT BLUE w/ mastic		

SEE GAVOIR pg 2

North Wing

Asbestos Bulk Sampling Field Form

Project: SAM HSE
 Location: Calispell, MT
 Project #: 220512

Personnel: Bill
 Date: 10/5/22
 Other: _____

Sample ID	Material Description	Location	Comments
NWI - FT1 - A, B, C	12x WHITE FLOOR TILE w/VERY LIGHT flakes	SHOOTING lane EAST	10x16 = 160 ft ²
FWI - A, B, C	FIBROUS WALL material	"	#5174, 5175
CTI - A, B, C	2x4' CEILING Tile - white WITH PIN PRICKS	"	
CTZ - A	12x CEILING TILE + MASTIC WHT w/PIN HOLES + FISSURES	SHOOTING lane EAST	ceiling 16 fixtures w per 1391034
↓ B	↓	MID	Baffle
↓ C	↓	WEST	ceiling
SKM1 - A	Tan SKIM COAT	NORTH wall EAST	ALSO collected
SKM1 - B	↓	NORTH wall MID	"D" and "E"
SKM1 - C	↓	NORTH wall WEST	AREA > 1000 ft ²
PL1 - A		EAST	SOUTH wall
PL1 - B		MID	MID EAST MID WEST
PL1 - C		WEST	NO PL PMNT, BUT
FT2 - A	12x FLOOR TILE LT Tan w/ DARK FLAKES + mastic	ASSEMBLY Hall NE	ceiling - will collect ELSEWHERE

LIGHT color

North Wing

Asbestos Bulk Sampling Field Form

Project: SAM Hse

Location: _____

Personnel: BMDate: 10/5/22

Other: _____

Project #: 220512

Sample ID	Material Description	Location	Comments
NWI-F12-T3	12x FLOOR TILE w PINK MOTTLED tan w DARK FLAKES	ASSEMBLY Hall SW	
↓ - C	↓	UNIT STORAGE 2 BEHIND DOOR	
CBI - A	BROWN VINYL COVE BASE	ASSEMBLY Hall BEHIND SHOOTING RANGE DOOR	ON DRY WALL
↓ B	↓	UNIT STORAGE HALLWAY BEHIND DOOR TO ASSEMBLY ROOM	ON CINDER BLOCK ROOM
↓ C	↓	UNIT STORAGE 2 BEHIND DOOR	ON DRY WALL
DJTI - A	DRYWALL, JOINT COMPOUND + TAPE TAN PAINT	ASSEMBLY Hall NORTH Wall - EAST END	Tan paint
↓ - B	↓	ASSEMBLY Hall SOUTH Wall BELOW clock	↓
↓ - C	↓	RANGE STORAGE ROOM	
↓ - D	↓	UNIT STORAGE 5 WEST Wall	
↓ - E	↓	UNIT STORAGE 4 SOUTH Wall	
↓ - F	↓	UNIT STORAGE 2 SOUTH Wall	
↓ - G	↓	UNIT STORAGE 1 NORTH Wall	
SKM2-A, B, C	SKIM COAT - GREEN PAINT	A WEST Wall C NORTH Wall B SOUTH Wall - ARMOR VAULT	NO PCBs IN RANGE STORAGE

NORTH wing

Asbestos Bulk Sampling Field Form

Project: Sam Hse

Location: _____

Project #: 220512

Personnel: TBIY

Date: 10/05/22

Other: _____

Sample ID	Material Description	Location	Comments
NWI-CB1-A	CINDER BLOCK + MORTAR	UNIT STOR 2	
	TAN PAINT		
↓ B		UNIT STOR 4	
↓ C		UNIT STOR 5	
FT3-A,B,C	12x FLOOR TILE - GRAY W FLAKES + BLACK MASTIC	WHSE office	~120 ft ²
DJ12-A	DRYWALL, JTC, TAPE	WHSE office	
	WHITE PAINT		
↓ B		WHSE ceiling DAMAGE	
	NO PAINT		
↓ C		WHSE OFFICE EXT WALL BY HEATER	WHSE - NO PCBs
↓ D		WHSE SOUTH WALL	2 Hg
↓ E		WHSE BY DOOR TO DOCK	
CTG1-A,B,C	MAROON 6x6" CERAMIC TILE and GROUT - FLOOR COVERING	KITCHEN	KITCHEN IS small
CTG2-A,B,C	GREEN 4x4" CERAMIC TILE and GROUT - ON WALLS	"	↓ Hg
TSI1-A	ELBOW w/ plastic shell	"KITCHEN POTABLE WATER" LABEL ON PIPE	South wall
TSI2-A	PIPE WRAP	"HOT WATER" LABEL ON PIPE	


DIRECT-PUSH BORING LOG

Project Name: Samaritan House Phase II ESA	Personnel: Brent Merritt	Dates Drilled: 10/04/22
Location: Kalispell, Montana	Boring No: SB-1	SWL / meas pt:
Project No: 220512.1 Phase II 05	Total Depth: 10'	Well / Soil Boring
Drilling Company/Driller: WET/John Babcock	Drilling Method: Direct-Push/Geoprobe	Sample Method: Continuous Dual Tube MiniRAE 3000

DEPTH	MATERIAL DESCRIPTION	% Recovery	SAMPLE #	PID ppm	COMMENTS
	~ 8" CONCRETE				
2	Dry/damp fill material	56%			PIC #5170 NO STAINING/ODOR
4			SB1-1 C 1139	1.3	
6	damp gray to 5' ? s + g HARD gray clay plug in END of sleeve	25%		0.4	PIC # 5171
8					
10					
					Maint SHOP OLD PIT SB-1 N ↑

DIRECT-PUSH BORING LOG

Project Name: Samaritan House Phase II ESA	Personnel: Brent Merritt	Dates Drilled: 10/04/22
Location: Kalispell, Montana	Boring No: SB-2	SWL / meas pt:
Project No: 220512.1 Phase 05	Total Depth: 8'	Well / Soil Boring
Drilling Company/Driller: WET/John Babcock	Drilling Method: Direct-Push/Geoprobe	Sample Method: Continuous Dual Tube Mini RAE 300

DEPTH	MATERIAL DESCRIPTION	% Recovery	SAMPLE #	PID ppm	COMMENTS
2	~8" CONCRETE dry brown, tan s+s	60%	SB2-1 @ 1024	1.7	#5163 NO ODOR/STAINING
4	10" more fill HARD			1.1	
6	damp v tan, gray clay	85%	SB2-2 @ 1029	1.5	5164 5165 5166
8					
					<div style="border: 1px solid black; padding: 10px; margin: 10px; text-align: center;"> main + shop  OLD PIT SB2 </div> <div style="text-align: center;"> N ↑ </div>

DIRECT-PUSH BORING LOG

Project Name: Samaritan House Phase II ESA	Personnel: Brent Merritt	Dates Drilled: 10/04/22
Location: Kalispell, Montana	Boring No: SB-3	SWL / meas pt:
Project No: 220512.1 Phase 05	Total Depth: 8' BGS	Well / Soil Boring
Drilling Company/Driller: WET/John Babcock	Drilling Method: Direct-Push/Geoprobe	Sample Method: Continuous Dual Tube PID: MiniRAE 3000

DEPTH	MATERIAL DESCRIPTION	% Recovery	SAMPLE #	PID PPM	COMMENTS
2	3" ASPHALT				pic 5158
2	Fill material Damp tan s+g	50%	SB1-1 0916	0.1	NO STAINING/ODOR
4					
6	Damp HARD tan, gray clay w/ Tan s+g @ 4"	94%	SB1-2 0926	1.1 1.7	NO STAINING/ODOR
8					#5159
					WASH SHOP
					WASH RACK
					SB3
					N ↑

DIRECT-PUSH BORING LOG

Project Name: Samaritan House Phase II ESA	Personnel: Brent Merritt <i>ACTUAL</i>	Dates Drilled: <i>10/4/22</i>
Location: Kalispell, Montana	Boring No: <i>SB-3</i>	SWL / meas pt:
Project No: 220512.1 Phase 04	Total Depth:	Well / Soil Boring
Drilling Company/Driller: WET/John Babcock	Drilling Method: Direct-Push/Geoprobe	Sample Method: Continuous Dual Tube

DEPTH	MATERIAL DESCRIPTION	% Recovery	SAMPLE #	PID	COMMENTS
			<i>SB4-2</i> <i>@ 0810</i>		<p><i>THIS IS A DUP sample of "SB3-2" 6-8' called "220512-SB4-2" @ 0810</i></p>



Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

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Page 1 of 1

Account Information (Billing information)

Company/Name WGM GROUP INC		
Contact MIRANDA MING		
Phone 406-728-4611		
Mailing Address		
City, State, Zip		
Email mming@WGMGROUP.COM		
Receive Invoice <input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email	Receive Report <input type="checkbox"/> Hard Copy <input type="checkbox"/> Email	
Purchase Order 220512.1	Quote -	Bottle Order 41961

Report Information (If different than Account Information)

Company/Name		
Contact TYLER FETZEL		
Phone		
Mailing Address		
City, State, Zip		
Email TETZEL@WGMGROUP.COM		
Receive Report <input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email		
Special Report/Formats: <input type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC <input type="checkbox"/> EDD/EDT (contact laboratory) <input type="checkbox"/> Other		

Comments

PLEASE call
SAMPLER w/ ANY
QUESTIONS

Project Information

Project Name, PWSID, Permit, etc. SAHAKITAN House Ph II	
Sampler Name BRENT MERRITT	Sampler Phone 240-0573
Sample Origin State MT	EPA/State Compliance <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Lab provided preservatives were used <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
MINING CLIENTS, please indicate sample type. *If ore has been processed or refined, call before sending. <input type="checkbox"/> Byproduct 11 (e)2 material <input type="checkbox"/> Unprocessed ore (NOT ground or refined)*	

Matrix Codes

- A - Air
- W - Water
- S - Soils/
Solids
- V - Vegetation
- B - Bioassay
- O - Other
- DW - Drinking
Water

Analysis Requested

RCRA
LEADS + Mercury
SPH - SCREEN
MA VPH
VOCs
BZGO SHORT LIST

See Attached

All turnaround times are
standard unless marked as
RUSH.

Energy Laboratories
MUST be contacted prior to
RUSH sample submittal for
charges and scheduling -
See Instructions Page

Sample Identification (Name, Location, Interval, etc.)		Collection		Number of Containers	Matrix (See Codes Above)	Analysis Requested										See	RUSH TAT	ELI LAB ID Laboratory Use Only
		Date	Time															
1	220512-SB1-1	10/4/22	1139	3	S	X	X	X	X									
2	SB1-2		1149	3	S	X	X	X	X									
3	SB2-1		1024	3	S	X	X	X	X									
4	SB2-2		1029	3	S	X	X	X	X									
5	SB3-1		0916	3	S	X	X	X	X									
6	SB3-2		0926	3	S	X	X	X	X									
7	SB4-2		0810	3	S	X	X	X	X									
8	SW1		1130	9	W	X	X	X	X									
9																		
10	TRIP BLANK			1	W													

Custody Record MUST be signed	Relinquished by (print) BRENT MERRITT	Date/Time 10/4/22 1600	Signature <i>Brent Merritt</i>	Received by (print)	Date/Time	Signature
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp °C	Temp Blank Y N	On Ice Y N	CC	Payment Type Cash Check	Amount \$	Receipt Number (cash/check only)
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In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested.
This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

ELI-COC-06/08 v.2

Lead Dust Wipe Sampling Field Form

Page 1 of 2

Project: Samaritan House

Location: Kalispell, Montana

Project #: 220512.1 Phase 04

Personnel: Brent Merritt

Date: 10/6

Other: 1 BLIND BLANK FOR
EVERY 20 samplesFL = floor
WS = window sill

220512-LD-LD-1 ...

	Sample ID	Location	Surface	Dimensions	Comment
745	1	Corridor/Assembly Hall entrance	12x floor tile	12x12	Floor #5182
55	2	Assembly HL middle	"	"	Floor
800	3	" " BY EAST ENT	"	"	Floor
805	4	" " BY SHOOTING RANGE ENT	"	"	" 5183
815	5	SHOOTING RANGE ENTRANCE	"	"	" 5184, 85
825	6	" " MID	PAINTED CONCRETE	"	" ramp
30	7	" " WEST	"	"	"
35	8	" " EAST	"	"	"
45	9	ASSEMBLY HL / RANGE STO THRESHOLD	12x FT	"	} PLENUM ACCESS TOO small to enter and sample 5186
50	10	RANGE STO UNDER VENT	"	"	
09110	11	ASSEMBLY HL / US CORRIDOR ENTRY	"	"	
0915	12	ENTRY to US3 IN: Hall	"	"	5187
20	13	Middle of US1	↓	↓	Most of floor COVERED BY BOXES ABOUT 10' from LD-12
25	14	Middle of US2 UNDER VENT			
30	15	BEHIND DOOR US4			
35	16	Middle of US5 UNDER VENT			
40	17	" " US CORRIDOR			
50	18	ENTRYway to WHSE	Painted concrete	↓	
1000	19	WHSE NW AREA	"		

Lead Dust Wipe Sampling Field Form

Page 2 of 2

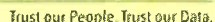
Project: Samaritan House
 Location: Kalispell, Montana
 Project #: 220512.1 Phase 04

Personnel: Brent Merritt
 Date: 10/6/22
 Other: _____

220512 - LD - XX

	Sample ID	Location	Surface	Dimensions	Comment
1005	20	WHSE SW AREA	PAINTED CONCRETE	12x12"	
1015	21	WHSE WSILL OUTSIDE ^{of} OFFICE	" GYP	3x12"	
1020	22	WHSE office w/ill INSIDE office	" "	6.5x12"	} NO AIR VENTS IN office
1025	23	WHSE office floor	12x FT	12x12"	
1030	24	ARMS vault	BARE concrete	"	
1040	25	CORRIDOR - ARMHL - KITCHEN	12x FT	"	
45	26	Kitchen - RED floor tiles	6x" CERAMIC tile	"	
50	27	" FOOD STORAGE RM	metal Stainless	12x12	TOP of FRIDGE
1110	28	SHOOT RING Baffle	PAINTED METAL	12x	TOP of Baffle 5188, 89 XRF READS 0.3mg/cm ² "negative"
1130	29	Plenum ABOVE SHOOTING BENCH	Painted metal	12x	XRF = 0.4mg/cm ² - Neg 5190, 91, 92
1200	30	TS LANK	—	—	





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Page 1 of 3

Report Information (if different than Account Information)

Comments

Company/Name	
Contact	TYLER ETZEL
Phone	406-728-4611
Mailing Address	
City, State, Zip	
Email	TCTZEL@WGMGROUP.COM
Receive Report	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email
Special Report/Formats:	
<input type="checkbox"/> LEVEL IV	<input type="checkbox"/> NELAC <input type="checkbox"/> EDD/EDT (contact laboratory) <input type="checkbox"/> Other _____

Please call sampler
w/ANY SUBMITTAL
QUESTIONS

Matrix Codes

Matrix Codes

- A - Air
- W- Water
- S - Soils/
Solids
- V - Vegetation
- B - Bioassay
- O - Other
- DW - Drinking
Water

Analysis Requested

[illegible]

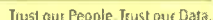
Energy Laboratories
MUST be contacted prior to
RUSH sample submittal for
charges and scheduling –
See Instructions Page

See Attached

[illegible]

Custody Record MUST be signed	Relinquished by (print) <i>BRENT MERRITT</i>	Date/Time <i>10/6/22 1400</i>	Signature <i>Brent Merritt</i>	Received by (print)	Date/Time	Signature			
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature			
LABORATORY USE ONLY									
Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp °C	Temp Blank Y N	On Ice Y N	Payment Type CC Cash Check _____	Amount \$	Receipt Number <i>(cash/check only)</i>

ELI-COC-06/08 v.2




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Page 2 of 3

Comments

Company/Name
Contact
Phone
Mailing Address
City, State, Zip
Email
Receive Report <input type="checkbox"/> Hard Copy <input type="checkbox"/> Email
Special Report/Formats: <input type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC <input type="checkbox"/> EDD/EDT (<i>contact laboratory</i>) <input type="checkbox"/> Other _____



See Attached

A - Air
W- Water
S - Soils/
Solids
V - Vegetation
B - Bioassay
O - Other
DW - Drinking
Water

[illegible]

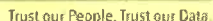
Energy Laboratories
MUST be contacted prior to
RUSH sample submittal for
charges and scheduling –
See Instructions Page

Custody Record MUST be signed	Relinquished by (print) <i>BARRY MERRITT</i>	Date/Time <i>10/6/22 1400</i>	Signature	Received by (print)	Date/Time	Signature
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp °C	Temp Blank Y N	On Ice Y N	Payment Type CC Cash Check _____	Amount \$	Receipt Number <i>(cash/check only)</i>
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ELI-COC-06/08 v.2



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Page 3 of 3

Comments

Company/Name	
Contact	TYRIK ETEL
Phone	
Mailing Address	
City, State, Zip	
Email	TELTEL@WWW.ETEL.COM
Receive Report	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email
Special Report/Formats:	
<input type="checkbox"/> LEVEL IV	<input type="checkbox"/> NELAC
<input type="checkbox"/> EDD/EDT (contact laboratory)	<input type="checkbox"/> Other _____

Age Group	Percentage of respondents
18-29	~65%
30-49	~75%
50-69	~80%
70+	~85%

Analysis Requested

- A - Air
- W- Water
- S - Soils/
Solids
- V - Vegetation
- B - Bioassay
- O - Other
- DW - Drinking
Water

[illegible]

All turnaround times are standard unless marked as RUSH.

Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling – See Instructions Page

See Attached

LABORATORY USE ONLY

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

XRF Field Sampling Form

Page 1 of 2
Garage

Project: Samaritan House
Location: Kalispell, Montana
Project #: 220512.1 Phase 04

Personnel: Brent Merritt
Date: 10/24/22
Equipment: Viken PB200i XRF Lead Paint Analyzer

Main Bldg - Garage

mg/cm²

Read #	Substrate	Component	Color	Location	Condition	Result
1	Colb 1	Cal strip	X	0.8 - 1.2 pass	Cal strip	1.0
2	Colb 2		X			1.1
3	Colb 3		X			1.0
4	M	DO	TAN	GA BA INT	G	0.1
5	M	DJ		RED GA BA EXT		8.5
6	M	DJ		WHT " " INT		0.5
7	CIN BLK	WA		WHT GA BA INT		0.5
8	"	WA		" " " INT		0.4
9	PVC	PIPE		" " " "		0.0
10	M	DO	TAN	GA SOUTH SIDE EXT	G	0.4
11	M	WF	TAN	GA " " "	Faded	0.1
12	M GARAGE ENTRANCE PROTECTION			GA W SIDE TAN	Faded	0.2
13	M		BLK	" " "		1.5
14	M		yellow	" " "		1.2
15	M		TAN	main garage door	G	.5
16	CIN BLK	WA	TAN	N SIDE EXT		.5
17	M	DO	TAN	N SIDE EXT		.5
18	M	WF	TAN	E SIDE EXT	Faded	1.2
19	M	DO	TAN	Petroleum	G	0.7
20	M	DF	TAN	"	G	0.6

Substrate: W = Wood P = Plaster G = Gypsum B = Brick M = Metal S = Stucco V = Vinyl C = Concrete

21 CIN BLK WA TAN EAST wall ext G 0.7

Components:

WN	Window	DO	Door	WA	Wall	FL	Floor	HT	Heater
WS	Window Sill	DF	Door Frame	SK	Sink	CB	Cove Base	RD	Radiator
WT	Window Trough	DJ	Door Jamb	TO	Toilet	CO	Column	AC	Air Cond
WF	Window Frame	CE	Ceiling	BT	Bathtub	SR	Stair Riser	FP	Fireplace
GU	Gutter	SO	Soffit	CA	Cabinet	ST	Stair Tread	CM	Crown Mold
DS	Downspout	FA	Fascia	SH	Shelf	HR	Handrail		

Location:

INT	Interior	BR#	Bedroom	KI	Kitchen	GA	Garage		
EXT	Exterior	BA	Bathroom	PA	Pantry	CP	Carport		
AT	Attic	CL	Closet	LN	Laundry Room	SP	Shop		
BM	Basement	LR	Living Room	MU	Mud Room	SD	Shed		

Condition: CR = Cracking CP = Chipping PL = Peeling CH = Chalking FL = Flaky

Page 2 of 2
Gauge

Personnel: Brent Merritt
Date: 10/4
Equipment: Viken PB200i XRF Lead Paint Analyzer

$$V_{GA} \downarrow$$

INT
INT

15

110 Aug



WGM GROUP
WORLDWIDE GROUP MANAGEMENT

XRF Field Sampling Form

Page 1 of 2
NORTH WING
INTERIOR

Project: Samaritan House
 Location: Kalispell, Montana
 Project #: 220512.1 Phase 04

Personnel: Brent Merritt
 Date: 10/05
 Equipment: Viken PB200i XRF Lead Paint Analyzer

1625

1.0 avg

Read #	Substrate	Component	Color	Location	Condition	Result
1	Calb	/	/	/	/	1.0
2	↓	/	/	/	/	1.0
3	↓	/	/	/	/	1.0
4	Fibrous wall	WA	WHT	EAST END SHOOTING RANG	G	0.6
5	Ce	FL	"	" " " " "	CP	0.1
6	Ce	WA	"	" " " SOUTH WALL	G	0.3
7	Ce	WA	"	MIDDLE N WALL	FL	0.5
8	Me	-	GRAY	GUN RENCH SUPPORT	G	0.3
9	Me	DJ	MVE	SHOOTING ENTRY	G	0.1
10	Me	DO	MVE	" " "	G	0.1
11	Gy	WA	TAN	Assembly Hall North	G	0.1
12	Gy	WA	"	" " EAST	G	0.1
13	Me	DJ	"	" " "	G	0.1
14	Me	DO	"	" " "	G	0.0
15	Gy	WA	"	" " South	G	0.2
16	Me	DO	"	" " " Vault Door	G	0.5
17	Ce	WA	GRN	Arms Vault south	G	0.3
18	↓	↓	↓	" " WEST	G	0.2
19	↓	↓	↓	" " North	/	0.4
20	Me	DJ	TAN	" "	/	0.4
21	Gy	WA	RED	Assembly rm west	/	0.1
22	Me	DO	TAN	RANGE STORAGE	↓	0.1

Substrate: W = Wood P = Plaster G = Gypsum B = Brick M = Metal S = Stucco V = Vinyl C = Concrete

Components:

WN	Window	DO	Door	WA	Wall	FL	Floor	HT	Heater	
WS	Window Sill	DF	Door Frame	SK	Sink	CB	Cove Base	RD	Radiator	
WT	Window Trough	DJ	Door Jamb	TO	Toilet	CO	Column	AC	Air Cond	
WF	Window Frame	CE	Ceiling	BT	Bathtub	SR	Stair Riser	FP	Fireplace	
GU	Gutter	SO	Soffit	CA	Cabinet	ST	Stair Tread	CM	Crown Mold	
DS	Downspout	FA	Fascia	SH	Shelf	HR	Handrail			

Location:

INT	Interior	BR#	Bedroom	KI	Kitchen	GA	Garage			
EXT	Exterior	BA	Bathroom	PA	Pantry	CP	Carport			
AT	Attic	CL	Closet	LN	Laundry Room	SP	Shop			
BM	Basement	LR	Living Room	MU	Mud Room	SD	Shed			

Condition: CR = Cracking CP= Chipping PL = Peeling CH = Chalking FL = Flaky

XRF Field Sampling Form

Page 2 of 2
North Wing

Project: Samaritan House
Location: Kalispell, Montana
Project #: 220512.1 Phase 04

Personnel: Brent Merritt
Date: _____
Equipment: Viken PB200i XRF Lead Paint Analyzer

Read #	Substrate	Component	Color	Location	Condition	Result
23	Gy	WA	GRN	RANGE STORAGE	G	0.13
24	Ce	WA	"	" "	G	0.0
25	Gy	CL	WHT	" "	G	0.12
26	Me	DO	TAN	US CORRIDOR MAIN	G	0.1
27	Ce	WA	GRN	" "		0.0
28	"	"	TAN	" "		0.0
29	Gy	WA	WHT	US 5		0.1
30	Gy	WA	PRK	US 4		0.12
31	Gy	WA	TAN	US 1		0.12
32	Gy	WA	PRK	US 3		0.12
33	"	"	WHT	WHSE office SOUTH		0.1
34	"	"	RED	" " EAST		0.1
35	BRICK	"	TAN	WHSE NORTH		0.0
36	FL	FL	GRN	WHSE - 11		0.1
37	Gy	WA	TAN	WHSE WEST		0.1
38	Me	DJ	GRN	WHSE DOCK		0.0
39	Me	DO	TAN	" "		0.1
40	Gy	WA	OLIVE	CORRIDOR		0.1
41	Gy	WA	WHT	"		0.1
42	ME	WA	YEL	Kitchen circuit panel		0.1
43	Ce	WA	"	Kitchen scullery		0.1
44	Gy	WA	OLIVE	CORRIDOR		0.1

Substrate: W = Wood P = Plaster G = Gypsum B = Brick M = Metal S = Stucco V = Vinyl C = Concrete

45 " " TAN "

Components:

CONT ON DAFL

WN	Window	DO	Door	WA	Wall	FL	Floor	HT	Heater	
WS	Window Sill	DF	Door Frame	SK	Sink	CB	Cove Base	RD	Radiator	
WT	Window Trough	DJ	Door Jamb	TO	Toilet	CO	Column	AC	Air Cond	
WF	Window Frame	CE	Ceiling	BT	Bathtub	SR	Stair Riser	FP	Fireplace	
GU	Gutter	SO	Soffit	CA	Cabinet	ST	Stair Tread	CM	Crown Mold	
DS	Downspout	FA	Fascia	SH	Shelf	HR	Handrail			

Location:

INT	Interior	BR#	Bedroom	KI	Kitchen	GA	Garage			
EXT	Exterior	BA	Bathroom	PA	Pantry	CP	Carport			
AT	Attic	CL	Closet	LN	Laundry Room	SP	Shop			
BM	Basement	LR	Living Room	MU	Mud Room	SD	Shed			

Condition: CR = Cracking CP = Chipping PL = Peeling CH = Chalking FL = Flaky

XRF Field Sampling Form

Daily Field Activity Log

Project: Samaritan House
 Project #: 220512

Personnel: BRENT MERRITT
 Date: 10/5

Other Forms: _____

SOUTH WING - 1 of 1

Time	Description						
READ	SUBST	Comp	Color	Loc	COND	Result	
46	Cb	WA	Tan	DRINKING FOUNTAIN	G	0.5	
47	Me	DJ	"	JANITOR closet	G	0.5	
48	Me	DJ	"	UNIT ADVISOR	G	0.6	
49	Cb	WA	WHT	AR UNIT ADM	G	0.5	
50	Me	DJ	olive	" " "	G	0.7	
51	Cb	WA	SAWD	Admin		0.1	
52	Cb	WA	Tan	"		0.4	
53	Me	DO	"	"		0.5	
54	me	DJ	WHT	MENS BATHROOM		0.5	
55	Ce	WA	maroon	classroom 2		0.5	
56	Me	DO	Tan	"		0.4	
57	Me	DJ	"	"		0.6	
58	Cb	WA	WHT	Classroom 1		0.4	
59	Me	DO	TAN/BLU	"		0.5	
60	Me	DO	olive	WOMENS BATHROOM		0.0	
61	Me	DJ	"	"		0.1	
62	Cb	WA	GRN	JANITORS closet		0.5	
63	me	DJ	Tan	NWI EAST old Garage Door Frame		0.2	
64	Me	see →	Tan	WASH BACK support		0.1	
65	Ce		"	" " "		0.3	
66	Me	DO	Tan	DOCK WEST SIDE		0.6	
67	Me	DJ	"	"		0.6	
68	Ce	Dock	BAIT CEMENT	STAINING ON DOCK	✓	0.4	
69	Me	DO	Tan	HEATING RM?		0.3	
70	FABRIC		GRN	FURNACE WRAP	✓	0.2	
71	ME	HVAC	"	HVAC	✓		

Weather	
Visitors on Site	



1755 - FINISHING calb SHOTS

READ	RESULT
72	1.0
73	1.0
74	1.1

1.03 avg

Page 1 of 1
MISC SHOTS

Personnel: Brent Merritt
Date: 10/6
Equipment: Viken PB200i XRF Lead Paint Analyzer

1100

93448

1.03 avg



WGM GROUP

APPENDIX C

LABORATORY REPORTS





11052 Shady Trail, Suite 217, Dallas, Texas 75229

214-351-4441 questmicro@gmail.com

PLM REPORT

TDSHS License No. 30-0218



Testing

Lab No. 200249-0

Client: WGM Group, Inc.

Project: Samaritan House, South Wing (SWI)

Project No.: 220512.1

Request No.: 33851

Report Date: 10/14/22

Sample Date: 10/5/22

Identification: Polarized Light Microscopy/Dispersion Staining (PLM/DS)

Test Method: 40 CFR, Part 763, Appendix E to Subpart E

On 10/12/22, 43 bulk material samples were submitted by Brent Merritt of WGM Group for PLM/DS analysis. The results are outlined below:

Client No.	Sample Description	Fibrous Components	Asbestos Content
SWI-FT1-A	12"x12" White Floor Tile with Gray Swipe Pattern (A) and Black Mastic (B), Corridor North	None	A) None Detected B) 5% Chrysotile
SWI-FT1-B	12"x12" White Floor Tile with Gray Swipe Pattern (A) and Black Mastic (B), Corridor West	None	A) None Detected B) 5% Chrysotile
SWI-FT1-C	12"x12" White Floor Tile with Gray Swipe Pattern (A) and Black Mastic (B), Admin #1	None	A) None Detected B) 5% Chrysotile
SWI-DJT1-A	Wallboard: White Paint (A), White Smooth Texture (B), White Tape (C), White Joint Compound (D), Tan Paper (E) and White Drywall (F), Corridor North	C) 98% Cellulose E) 98% Cellulose F) 35% Gypsum 15% Fiberglass	A) None Detected B) None Detected C) None Detected D) None Detected E) None Detected F) None Detected
SWI-DJT1-B	Wallboard: White Paint (A), White Smooth Texture (B), White Tape (C), White Joint Compound (D), Tan Paper (E) and White Drywall (F), Corridor West	C) 98% Cellulose E) 98% Cellulose F) 35% Gypsum 15% Fiberglass	A) None Detected B) None Detected C) None Detected D) None Detected E) None Detected F) None Detected
SWI-DJT1-C	Wallboard: White Paint (A), White Smooth Texture (B), White Tape (C), White Joint Compound (D), Tan Paper (E) and White Drywall (F), Corridor East	C) 98% Cellulose E) 98% Cellulose F) 35% Gypsum 15% Fiberglass	A) None Detected B) None Detected C) None Detected D) None Detected E) None Detected F) None Detected
SWI-DJT2-A	Ceiling Board: White Paint (A), White Blob Texture (B), White Tape (C), White Joint Compound (D), Tan Paper (E) and White Drywall (F), Corridor Ceiling North	C) 98% Cellulose E) 98% Cellulose F) 35% Gypsum 15% Fiberglass	A) None Detected B) None Detected C) None Detected D) None Detected E) None Detected F) None Detected

SWI-DJT2-B	Wallboard: White Paint (A), White Blob Texture (B), White Tape (C), White Joint Compound (D), Tan Paper (E) and White Drywall (F), Corridor by Exit Door	C) 98% Cellulose E) 98% Cellulose F) 35% Gypsum 15% Fiberglass	A) None Detected B) None Detected C) None Detected D) None Detected E) None Detected F) None Detected
SWI-DJT2-C	Wallboard: White Paint (A), White Blob Texture (B), White Tape (C), White Joint Compound (D), Tan Paper (E) and White Drywall (F), Corridor South	C) 98% Cellulose E) 98% Cellulose F) 35% Gypsum 15% Fiberglass	A) None Detected B) None Detected C) None Detected D) None Detected E) None Detected F) None Detected
SWI-CT1-A	White Paint (A) on 2'x4' Gray Pinhole and Fissure Pattern Ceiling Tile (B), Corridor	B) 40% Fiberglass 30% Cellulose 20% Perlite	A) None Detected B) None Detected
SWI-CT1-B	White Paint (A) on 2'x4' Gray Pinhole and Fissure Pattern Ceiling Tile (B), Admin #1	B) 40% Fiberglass 30% Cellulose 20% Perlite	A) None Detected B) None Detected
SWI-CT1-C	White Paint (A) on 2'x4' Gray Pinhole and Fissure Pattern Ceiling Tile (B), Classroom 2	B) 40% Fiberglass 30% Cellulose 20% Perlite	A) None Detected B) None Detected
SWI-FT2-A	12"x12" Orange Floor Tile (A) with Black Mastic (B), Unit Advisor Room	None	A) None Detected B) 5% Chrysotile
SWI-FT2-B	12"x12" Orange Floor Tile (A) with Black Mastic (B), Corridor	None	A) None Detected B) 5% Chrysotile
SWI-FT2-C	12"x12" Orange Floor Tile (A) with Black Mastic (B), Corridor	None	A) None Detected B) 5% Chrysotile
SWI-FT3-A	12"x12" Beige Floor Tile with Tan Flake Pattern (A) and Black Mastic (B), Classroom 2	B) 5% Cellulose	A) None Detected B) None Detected
SWI-FT3-B	12"x12" Beige Floor Tile with Tan Flake Pattern (A) and Black Mastic (B), Corridor by Admin #1	B) 5% Cellulose	A) None Detected B) None Detected
SWI-FT3-C	12"x12" Beige Floor Tile with Tan Flake Pattern (A) and Black Mastic (B), Corridor by Exit to South Sign	B) 5% Cellulose	A) None Detected B) None Detected
SWI-CT2-A	White Paint (A) on 2'x4' Gray Batwing Fissure Pattern Ceiling Tile (B), Corridor by Admin #1	B) 40% Cellulose 30% Fiberglass 20% Perlite	A) None Detected B) None Detected
SWI-CT2-B	White Paint (A) on 2'x4' Gray Batwing Fissure Pattern Ceiling Tile (B), Corridor by Admin #1	B) 40% Cellulose 30% Fiberglass 20% Perlite	A) None Detected B) None Detected
SWI-CT2-C	White Paint (A) on 2'x4' Gray Batwing Fissure Pattern Ceiling Tile (B), Corridor by Admin #1	B) 40% Cellulose 30% Fiberglass 20% Perlite	A) None Detected B) None Detected
SWI-CT3-A	White Paint (A) on 2'x4' Gray Mostly Pinhole Pattern Ceiling Tile (B), Corridor by Exit to South Sign	B) 40% Fiberglass 30% Perlite 20% Cellulose	A) None Detected B) None Detected
SWI-CT3-B	White Paint (A) on 2'x4' Gray Mostly Pinhole Pattern Ceiling Tile (B), Corridor by Exit to South Sign	B) 40% Fiberglass 30% Perlite 20% Cellulose	A) None Detected B) None Detected

SWI-CT3-C	White Paint (A) on 2'x4' Gray Mostly Pinhole Pattern Ceiling Tile (B), Corridor by Exit to South Sign	B) 40% Fiberglass 30% Perlite 20% Cellulose	A) None Detected B) None Detected
SWI-CB1-A	Brown Vinyl Cove Base (A) with Brown Mastic (B), Corridor by East Entrance	B) 5% Wollastonite	A) None Detected B) None Detected
SWI-CB1-B	Brown Vinyl Cove Base (A) with Brown Mastic (B), Classroom 2	B) 5% Wollastonite	A) None Detected B) None Detected
SWI-CB1-C	Brown Vinyl Cove Base (A) with Brown Mastic (B), Admin #1	B) 5% Wollastonite	A) None Detected B) None Detected
SWI-CT4-A	White Paint (A) on 12"x12" Gray Texture Pattern Ceiling Tile (B), above Drop Ceiling in Classroom 2	B) 70% Fiberglass 20% Perlite 2% Cellulose	A) None Detected B) None Detected
SWI-CT4-B	White Paint (A) on 12"x12" Gray Texture Pattern Ceiling Tile (B), above Drop Ceiling in Classroom 2	B) 70% Fiberglass 20% Perlite 2% Cellulose	A) None Detected B) None Detected
SWI-CT4-C	White Paint (A) on 12"x12" Gray Texture Pattern Ceiling Tile (B), above Drop Ceiling in Classroom 2	B) 70% Fiberglass 20% Perlite 2% Cellulose	A) None Detected B) None Detected
SWI-PW1-A	Pipe Wrap: Brown Sealant (A), Off-White Mastic (B), White Paper (C), White Loose Weave (D), Silver Foil (E) and Yellow Insulation (F), Classroom 2	A) 2% Synthetic C) 98% Cellulose D) 100% Fiberglass F) 99% Fiberglass	A) None Detected B) None Detected C) None Detected D) None Detected E) None Detected F) None Detected
SWI-CTG1-A	2"x2" Gray Ceramic Tile (A) with Gray Grout (B), Men's Bathroom	None	A) None Detected B) None Detected
SWI-CTG1-B	2"x2" Gray Ceramic Tile (A) with Gray Grout (B), Men's Bathroom	None	A) None Detected B) None Detected
SWI-CTG1-C	2"x2" Gray Ceramic Tile (A) with Gray Grout (B), Men's Bathroom	None	A) None Detected B) None Detected
SWI-CTG2-A	4"x4" Blue Ceramic Tile (A) with White Grout (B) and Cream Mastic (C), Men's Bathroom	None	A) None Detected B) None Detected C) None Detected
SWI-CTG2-B	4"x4" Blue Ceramic Tile (A) with White Grout (B) and Cream Mastic (C), Men's Bathroom	None	A) None Detected B) None Detected C) None Detected
SWI-CTG2-C	4"x4" Blue Ceramic Tile (A) with White Grout (B) and Cream Mastic (C), Men's Bathroom	None	A) None Detected B) None Detected C) None Detected
SWI-PW2-A	Water Heater Pipe Wrap: Light Green Paint (A), White Paper (B), White Loose Weave (C), Silver Foil (D) and Yellow Insulation (E), Heating Room	B) 98% Cellulose C) 100% Fiberglass E) 99% Fiberglass	A) None Detected B) None Detected C) None Detected D) None Detected E) None Detected
SWI-PW3-A	Pipe Wrap from 4" Line: Light Green Paint (A), White Paper (B), White Loose Weave (C), Silver Foil (D) and Yellow Insulation (E), Heating Room	B) 98% Cellulose C) 100% Fiberglass E) 99% Fiberglass	A) None Detected B) None Detected C) None Detected D) None Detected E) None Detected
SWI-PW4-A	Pipe Wrap from 4" Line: Light Green Paint (A), White Paper (B), White Loose Weave (C), Silver Foil (D) and Yellow Insulation	B) 98% Cellulose C) 100% Fiberglass E) 99% Fiberglass	A) None Detected B) None Detected C) None Detected

	(E), Heating Room		D) None Detected E) None Detected
SWI-EB1-A	Off-White Elbow Insulation from Water Heater, Heating Room	15% Mineral Wool	None Detected
SWI-EB2-A	Elbow by Top of Door: Light Green Paint (A), White Wrap (B) and Off-White Insulation (C), Water Heater Room	B) 90% Cotton C) 15% Mineral Wool	A) None Detected B) None Detected C) None Detected
SWI-EB3-A	Elbow from Totalizer in NW Corner: Light Green Paint (A), White Plastic Cover (B) and Yellow Insulation (C), Heating Room	C) 99% Fiberglass	A) None Detected B) None Detected C) None Detected

The EPA test method for bulk analysis (EPA/600/R-93/116) states in paragraph 2.2.2. that "the detection limit for visual estimation is a function of the quantity of the sample analyzed, the nature of matrix interference, sample preparation, and fiber size and distribution. Asbestos may be detected in concentrations of less than one percent by area if sufficient material is analyzed. Samples may contain fibers too small to be resolved by PLM (<0.25 micrometers in diameter) so detection of those fibers by this method may not be possible."

Samples are analyzed by layers, and percentages estimated visually during microscopic examination. Individual analysis sheets available upon request. Results may not be reproduced except in full. This test report relates only to the samples tested, and results must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. Materials containing >1% asbestos are considered by the EPA to be asbestos containing materials, and must be handled as such.

Analyst: Jennifer Jaber

Lab Director: Jennifer D. Jaber

Approved Signatory :





11052 Shady Trail, Suite 217, Dallas, Texas 75229

214-351-4441 questmicro@gmail.com

PLM REPORT

TDSHS License No. 30-0218



Testing

Lab No. 200249-0

Client: WGM Group, Inc.

Project: Samaritan House Phase II ESA, Garage

Project No.: 220512.1

Request No.: 33852

Report Date: 10/13/22

Sample Date: 10/04/22

Identification: Polarized Light Microscopy/Dispersion Staining (PLM/DS)

Test Method: 40 CFR, Part 763, Appendix E to Subpart E

On 10/12/2022, 27 bulk material samples were submitted by Brent Merritt of WGM Group, Inc.
for PLM/DS analysis. The results are outlined below:

Client No.	Sample Description	Fibrous Components	Asbestos Content
GAR-CT1-A	White Paint (A) on Gray 2x4' Fissure and Dots Texture Ceiling Tile (B), Loft	B) 30% Cellulose 30% Fiberglass 30% Perlite	A) None Detected B) None Detected
GAR-CT1-B	White Paint (A) on Gray 2x4' Fissure and Dots Texture Ceiling Tile (B), Loft	B) 30% Cellulose 30% Fiberglass 30% Perlite	A) None Detected B) None Detected
GAR-CT1-C	White Paint (A) on Gray 2x4' Fissure and Dots Texture Ceiling Tile (B), Loft	B) 30% Cellulose 30% Fiberglass 30% Perlite	A) None Detected B) None Detected
GAR-DJT1-A	Wallboard: White Paint (A), White Splatter Texture (B), White Tape (C), White Joint Compound (D), Tan Paper (E), and White Drywall (F), Stairs to Loft	C) 98% Cellulose E) 98% Cellulose F) 35% Gypsum 15% Fiberglass	A) None Detected B) None Detected C) None Detected D) None Detected E) None Detected F) None Detected
GAR-DJT1-B	Wallboard: White Paint (A), White Splatter Texture (B), White Tape (C), White Joint Compound (D), Tan Paper (E), and White Drywall (F), Above Office Window	C) 98% Cellulose E) 98% Cellulose F) 35% Gypsum 15% Fiberglass	A) None Detected B) None Detected C) None Detected D) None Detected E) None Detected F) None Detected
GAR-DJT1-C	Wallboard: White Paint (A), White Splatter Texture (B), White Tape (C), White Joint Compound (D), Tan Paper (E), and White Drywall (F), by Office Door	C) 98% Cellulose E) 98% Cellulose F) 35% Gypsum 15% Fiberglass	A) None Detected B) None Detected C) None Detected D) None Detected E) None Detected F) None Detected
GAR-CB1-A	Gray Paint (A) on Gray Cinder Block (B) with Gray Mortar (C), North Wall Interior	None	A) None Detected B) None Detected C) None Detected
GAR-CB1-B	Gray Paint (A) on Gray Cinder Block (B) with Gray Mortar (C), South Wall Interior	None	A) None Detected B) None Detected C) None Detected

GAR-CB1-C	Gray Paint (A) on Gray Cinder Block (B) with Gray Mortar (C), East Wall Interior	None	A) None Detected B) None Detected C) None Detected
GAR-SC1-A	Gray Grout-Like Sealing Compound, Top of Door	None	None Detected
GAR-SC1-B	Gray Grout-Like Sealing Compound, Top of Door	None	None Detected
GAR-SC1-C	Gray Grout-Like Sealing Compound, Top of Door	None	None Detected
GAR-DC1-A	White Door Caulking, Exterior of Main Door	None	3% Chrysotile
GAR-DC1-B	White Door Caulking, Exterior of Main Door	None	3% Chrysotile
GAR-DC1-C	White Door Caulking, Exterior of Bathroom Door	None	3% Chrysotile
GAR-GL1-A	Gray Window Glazing, Exterior South Side, East Window	None	3% Chrysotile
GAR-GL1-B	Gray Window Glazing, Exterior South Side, East Window	None	3% Chrysotile
GAR-GL1-C	Gray Window Glazing, Exterior South Side, West Window	None	3% Chrysotile
GAR-BM1-A	Unpainted Orange Brick (A) with Gray Mortar (B), by Door on South Side Exterior	B) <1% Cellulose	A) None Detected B) None Detected
GAR-BM1-B	Unpainted Orange Brick (A) with Gray Mortar (B), NW Corner of Garage Exterior	B) <1% Cellulose	A) None Detected B) None Detected
GAR-BM1-C	Unpainted Orange Brick (A) with Gray Mortar (B), SE Corner of Garage Exterior	B) <1% Cellulose	A) None Detected B) None Detected
GAR-FT1-A	White with Light Flakes Pattern 12x12" Floor Tile (A) with Black Mastic (B), Garage Bathroom	B) <1% Cellulose	A) None Detected B) None Detected
GAR-FT1-B	White with Light Flakes Pattern 12x12" Floor Tile (A) with Black Mastic (B), Garage Bathroom	B) <1% Cellulose	A) None Detected B) None Detected
GAR-FT1-C	White with Light Flakes Pattern 12x12" Floor Tile (A) with Black Mastic (B), Garage Bathroom	B) <1% Cellulose	A) None Detected B) None Detected
GAR-VCB1-A	Brown Vinyl Cove Base (A) with Brown Mastic (B), Garage Bathroom	B) 5% Wollastonite	A) None Detected B) None Detected
GAR-VCB1-B	Brown Vinyl Cove Base (A) with Brown Mastic (B), Garage Bathroom	B) 5% Wollastonite	A) None Detected B) None Detected
GAR-VCB1-C	Brown Vinyl Cove Base (A) with Brown Mastic (B), Garage Bathroom	B) 5% Wollastonite	A) None Detected B) None Detected

The EPA test method for bulk analysis (EPA/600/R-93/116) states in paragraph 2.2.2. that "the detection limit for visual estimation is a function of the quantity of the sample analyzed, the nature of matrix interference, sample preparation, and fiber size and distribution. Asbestos may be detected in concentrations of less than one percent by area if sufficient material is analyzed. Samples may contain fibers too small to be resolved by PLM (<0.25 micrometers in diameter) so detection of those fibers by this method may not be possible." Samples are analyzed by layers, and percentages estimated visually during microscopic examination. Individual analysis sheets available upon request. Results may not be reproduced except in full. This test report relates only to the samples tested, and results must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. Materials containing >1% asbestos are considered by the EPA to be asbestos containing materials, and must be handled as such.

Analyst: Jennifer Jaber

Lab Director: Jennifer D. Jaber

Approved Signatory :





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214-351-4441 questmicro@gmail.com

PLM REPORT

TDSHS License No. 30-0218



Testing

Lab No. 200249-0

Client: WGM Group, Inc.

Project: Samaritan House North Wing (NWI)

Project No.: 220512.1

Request No.: 33853

Report Date: 10/14/22

Sample Date: 10/5/22

Identification: Polarized Light Microscopy/Dispersion Staining (PLM/DS)

Test Method: 40 CFR, Part 763, Appendix E to Subpart E

On 10/12/22, 52 bulk material samples were submitted by Brent Merritt of WGM Group for PLM/DS analysis. The results are outlined below:

Client No.	Sample Description	Fibrous Components	Asbestos Content
NWI-FT1-A	12"x12" White Floor Tile with Beige Flakes (A), Yellow Mastic (B) and Gray Mastic (C), Shooting Range East End	C) 3% Cellulose	A) None Detected B) None Detected C) None Detected
NWI-FT1-B	12"x12" White Floor Tile with Beige Flakes (A), Yellow Mastic (B) and Gray Mastic (C), Shooting Range East End	C) 3% Cellulose	A) None Detected B) None Detected C) None Detected
NWI-FT1-C	12"x12" White Floor Tile with Beige Flakes (A), Yellow Mastic (B) and Gray Mastic (C), Shooting Range East End	C) 3% Cellulose	A) None Detected B) None Detected C) None Detected
NWI-CT1-A	White Paint (A) on 2'x4' Gray Pinhole Pattern Ceiling Tile (B), Shooting Range East End	B) 40% Cellulose 30% Fiberglass 20% Perlite	A) None Detected B) None Detected
NWI-CT1-B	White Paint (A) on 2'x4' Gray Pinhole Pattern Ceiling Tile (B), Shooting Range East End	B) 40% Cellulose 30% Fiberglass 20% Perlite	A) None Detected B) None Detected
NWI-CT1-C	White Paint (A) on 2'x4' Gray Pinhole Pattern Ceiling Tile (B), Shooting Range East End	B) 40% Cellulose 30% Fiberglass 20% Perlite	A) None Detected B) None Detected
NWI-CT2-A	White Paint (A) on 12"x12" Gray Pinhole and Fissure Pattern Ceiling Tile (B), Shooting Range East	B) 40% Cellulose 30% Fiberglass 20% Perlite	A) None Detected B) None Detected
NWI-CT2-B	White Paint (A) on 12"x12" Gray Pinhole and Fissure Pattern Ceiling Tile (B), Shooting Range Mid	B) 40% Cellulose 30% Fiberglass 20% Perlite	A) None Detected B) None Detected
NWI-CT2-C	White Paint (A) on 12"x12" Gray Pinhole and Fissure Pattern Ceiling Tile (B), Shooting Range West	B) 40% Cellulose 30% Fiberglass 20% Perlite	A) None Detected B) None Detected
NWI-SKM1-A	Tan Skim Coat on North Wall, Shooting Range East	None	None Detected
NWI-SKM1-B	Tan Skim Coat on North Wall, Shooting Range Mid	None	None Detected

NWI-SKM1-C	Tan Skim Coat on North Wall, Shooting Range West	None	None Detected
NWI-SKM1-D	Tan Skim Coat on North Wall, Shooting Range Mid East	None	None Detected
NWI-SKM1-E	Tan Skim Coat on North Wall, Shooting Range Mid West	None	None Detected
NWI-FT2-A	12"x12" Tan Floor Tile with Dark Flakes (A) and Black Mastic (B), Assembly Hall NE	B) 3% Cellulose	A) None Detected B) None Detected
NWI-FT2-B	12"x12" Tan Floor Tile with Dark Flakes (A) and Black Mastic (B), Assembly Hall SW	B) 3% Cellulose	A) None Detected B) None Detected
NWI-FT2-C	12"x12" Tan Floor Tile with Dark Flakes (A) and Black Mastic (B), Unit Storage 2	B) 3% Cellulose	A) None Detected B) None Detected
NWI-CB1-A	Brown Vinyl Cove Base (A) with Yellow Mastic (B), Assembly Hall NE	None	A) None Detected B) None Detected
NWI-CB1-B	Brown Vinyl Cove Base (A) with Yellow Mastic (B), Unit Storage Hallway	None	A) None Detected B) None Detected
NWI-CB1-C	Brown Vinyl Cove Base (A) with Yellow Mastic (B), Unit Storage 2	None	A) None Detected B) None Detected
NWI-DJT1-A	Wallboard: Beige Paint (A), White Texture (B), White Tape (C), White Joint Compound (D), Tan Paper (E) and Pink Drywall (F), Assembly Hall North Wall, East End	C) 98% Cellulose E) 98% Cellulose F) 40% Gypsum 10% Fiberglass	A) None Detected B) None Detected C) None Detected D) None Detected E) None Detected F) None Detected
NWI-DJT1-B	Wallboard: Beige Paint (A), White Texture (B), White Tape (C), White Joint Compound (D), Tan Paper (E) and Pink Drywall (F), Assembly Hall South Wall	C) 98% Cellulose E) 98% Cellulose F) 40% Gypsum 10% Fiberglass	A) None Detected B) None Detected C) None Detected D) None Detected E) None Detected F) None Detected
NWI-DJT1-C	Wallboard: White Paint (A), White Texture (B), White Tape (C), White Joint Compound (D), Tan Paper (E) and Pink Drywall (F), Range Storage Room	C) 98% Cellulose E) 98% Cellulose F) 40% Gypsum 10% Fiberglass	A) None Detected B) None Detected C) None Detected D) None Detected E) None Detected F) None Detected
NWI-DJT1-D	Wallboard: White Paint (A), White Texture (B), White Tape (C), White Joint Compound (D), Tan Paper (E) and Pink Drywall (F), Unit Storage 5, West Wall	C) 98% Cellulose E) 98% Cellulose F) 40% Gypsum 10% Fiberglass	A) None Detected B) None Detected C) None Detected D) None Detected E) None Detected F) None Detected
NWI-DJT1-E	Wallboard: White Paint (A), White Texture (B), White Tape (C), White Joint Compound (D), Tan Paper (E) and Pink Drywall (F), Unit Storage 4, South Wall	C) 98% Cellulose E) 98% Cellulose F) 40% Gypsum 10% Fiberglass	A) None Detected B) None Detected C) None Detected D) None Detected E) None Detected F) None Detected
NWI-DJT1-F	Wallboard: White Paint (A), White Texture (B), White Tape (C), White Joint Compound (D), Tan Paper (E) and Pink Drywall (F), Unit Storage 2, South Wall	C) 98% Cellulose E) 98% Cellulose F) 40% Gypsum 10% Fiberglass	A) None Detected B) None Detected C) None Detected D) None Detected E) None Detected

			F) None Detected
NWI-DJT1-G	Wallboard: White Paint (A), White Texture (B), White Tape (C), White Joint Compound (D), Tan Paper (E) and Pink Drywall (F), Unit Storage 1, North Wall	C) 98% Cellulose E) 98% Cellulose F) 40% Gypsum 10% Fiberglass	A) None Detected B) None Detected C) None Detected D) None Detected E) None Detected F) None Detected
NWI-SKM2-A	White Skim Coat, Arms Vault, West Wall	None	None Detected
NWI-SKM2-B	White Skim Coat, Arms Vault, South Wall	None	None Detected
NWI-SKM2-C	White Skim Coat, Arms Vault, North Wall	None	None Detected
NWI-CB1-A	Gray Cinderblock (A) with Gray Mortar (B), Unit Storage 2	None	A) None Detected B) None Detected
NWI-CB1-B	Gray Cinderblock (A) with Gray Mortar (B), Unit Storage 4	None	A) None Detected B) None Detected
NWI-CB1-C	Gray Cinderblock (A) with Gray Mortar (B), Unit Storage 5	None	A) None Detected B) None Detected
NWI-FT3-A	12"x12" Gray Floor Tile with Darker Gray Flakes (A) and Black Mastic (B), Warehouse Office	B) 2% Cellulose	A) None Detected B) None Detected
NWI-FT3-B	12"x12" Gray Floor Tile with Darker Gray Flakes (A) and Black Mastic (B), Warehouse Office	B) 2% Cellulose	A) None Detected B) None Detected
NWI-FT3-C	12"x12" Gray Floor Tile with Darker Gray Flakes (A) and Black Mastic (B), Warehouse Office	B) 2% Cellulose	A) None Detected B) None Detected
NWI-DJT2-A	Wallboard: White Paint (A), White Texture (B), White Tape (C), White Joint Compound (D), Tan Paper (E) and Pink Drywall (F), Warehouse Office	C) 98% Cellulose E) 98% Cellulose F) 40% Gypsum 10% Fiberglass	A) None Detected B) None Detected C) None Detected D) None Detected E) None Detected F) None Detected
NWI-DJT2-B	Ceiling Board: White Paint (A), White Texture (B), White Tape (C), White Joint Compound (D), Tan Paper (E) and Pink Drywall (F), Warehouse Ceiling	C) 98% Cellulose E) 98% Cellulose F) 40% Gypsum 10% Fiberglass	A) None Detected B) None Detected C) None Detected D) None Detected E) None Detected F) None Detected
NWI-DJT2-C	Wallboard: White Paint (A), White Texture (B), White Tape (C), White Joint Compound (D), Tan Paper (E) and Pink Drywall (F), Warehouse East Wall	C) 98% Cellulose E) 98% Cellulose F) 40% Gypsum 10% Fiberglass	A) None Detected B) None Detected C) None Detected D) None Detected E) None Detected F) None Detected
NWI-DJT2-D	Wallboard: White Paint (A), White Texture (B), White Tape (C), White Joint Compound (D), Tan Paper (E) and Pink Drywall (F), Warehouse South Wall	C) 98% Cellulose E) 98% Cellulose F) 40% Gypsum 10% Fiberglass	A) None Detected B) None Detected C) None Detected D) None Detected E) None Detected F) None Detected

NWI-DJT2-E	Wallboard: White Paint (A), White Texture (B), White Tape (C), White Joint Compound (D), Tan Paper (E) and Pink Drywall (F), Warehouse West Wall	C) 98% Cellulose E) 98% Cellulose F) 40% Gypsum 10% Fiberglass	A) None Detected B) None Detected C) None Detected D) None Detected E) None Detected F) None Detected
NWI-CTG1-A	6"x6" Maroon Ceramic Tile (A) with Gray Grout (B), Kitchen	None	A) None Detected B) None Detected
NWI-CTG1-B	6"x6" Maroon Ceramic Tile (A) with Gray Grout (B), Kitchen	None	A) None Detected B) None Detected
NWI-CTG1-C	6"x6" Maroon Ceramic Tile (A) with Gray Grout (B), Kitchen	None	A) None Detected B) None Detected
NWI-CTG2-A	4"x4" Green Ceramic Tile (A) with White Grout (B), Kitchen	None	A) None Detected B) None Detected
NWI-CTG2-B	4"x4" Green Ceramic Tile (A) with White Grout (B), Kitchen	None	A) None Detected B) None Detected
NWI-CTG2-C	4"x4" Green Ceramic Tile (A) with White Grout (B), Kitchen	None	A) None Detected B) None Detected
NWI-TSI1-A	Light Green Paint (A), White Plastic Cover (B) and Yellow Insulation (C), Kitchen	C) 99% Fiberglass	A) None Detected B) None Detected C) None Detected
NWI-TSI2-A	White Pipe Wrap (A) over Yellow Insulation (B), Kitchen	A) 90% Fiberglass B) 99% Fiberglass	A) None Detected B) None Detected
NWI-FW1-A	Beige Fibrous Wall Material, East End Shooting Range	95% Cellulose	None Detected
NWI-FW1-B	Beige Fibrous Wall Material, East End Shooting Range	95% Cellulose	None Detected
NWI-FW1-C	Beige Fibrous Wall Material, East End Shooting Range	95% Cellulose	None Detected

The EPA test method for bulk analysis (EPA/600/R-93/116) states in paragraph 2.2.2. that "the detection limit for visual estimation is a function of the quantity of the sample analyzed, the nature of matrix interference, sample preparation, and fiber size and distribution. Asbestos may be detected in concentrations of less than one percent by area if sufficient material is analyzed. Samples may contain fibers too small to be resolved by PLM (<0.25 micrometers in diameter) so detection of those fibers by this method may not be possible." Samples are analyzed by layers, and percentages estimated visually during microscopic examination. Individual analysis sheets available upon request. Results may not be reproduced except in full. This test report relates only to the samples tested, and results must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. Materials containing >1% asbestos are considered by the EPA to be asbestos containing materials, and must be handled as such.

Analyst: Jennifer Jaber

Lab Director: Jennifer D. Jaber

Approved Signatory :



ANALYTICAL SUMMARY REPORT

November 07, 2022

WGM Group Inc
1111 E Broadway
Missoula, MT 59802-4909

Work Order: H22100218
Project Name: Samaritan House

Energy Laboratories Inc Helena MT received the following 30 samples for WGM Group Inc on 10/7/2022 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H22100218-001	220512-LD-1	10/06/22 7:45	10/07/22	Wipe	Metals by ICP/ICPMS, Total Total Metals Digestion by SW3050B
H22100218-002	220512-LD-2	10/06/22 7:55	10/07/22	Wipe	Same As Above
H22100218-003	220512-LD-3	10/06/22 8:00	10/07/22	Wipe	Same As Above
H22100218-004	220512-LD-4	10/06/22 8:05	10/07/22	Wipe	Same As Above
H22100218-005	220512-LD-5	10/06/22 8:15	10/07/22	Wipe	Same As Above
H22100218-006	220512-LD-6	10/06/22 8:25	10/07/22	Wipe	Same As Above
H22100218-007	220512-LD-7	10/06/22 8:30	10/07/22	Wipe	Same As Above
H22100218-008	220512-LD-8	10/06/22 8:35	10/07/22	Wipe	Same As Above
H22100218-009	220512-LD-9	10/06/22 8:45	10/07/22	Wipe	Same As Above
H22100218-010	220512-LD-10	10/06/22 8:50	10/07/22	Wipe	Same As Above
H22100218-011	220512-LD-11	10/06/22 9:10	10/07/22	Wipe	Same As Above
H22100218-012	220512-LD-12	10/06/22 9:15	10/07/22	Wipe	Same As Above
H22100218-013	220512-LD-13	10/06/22 9:20	10/07/22	Wipe	Same As Above
H22100218-014	220512-LD-14	10/06/22 9:25	10/07/22	Wipe	Same As Above
H22100218-015	220512-LD-15	10/06/22 9:30	10/07/22	Wipe	Same As Above
H22100218-016	220512-LD-16	10/06/22 9:35	10/07/22	Wipe	Same As Above
H22100218-017	220512-LD-17	10/06/22 9:40	10/07/22	Wipe	Same As Above
H22100218-018	220512-LD-18	10/06/22 9:50	10/07/22	Wipe	Same As Above
H22100218-019	220512-LD-19	10/06/22 10:00	10/07/22	Wipe	Same As Above
H22100218-020	220512-LD-20	10/06/22 10:05	10/07/22	Wipe	Same As Above
H22100218-021	220512-LD-21	10/06/22 10:15	10/07/22	Wipe	Same As Above
H22100218-022	220512-LD-22	10/06/22 10:20	10/07/22	Wipe	Same As Above
H22100218-023	220512-LD-23	10/06/22 10:25	10/07/22	Wipe	Same As Above
H22100218-024	220512-LD-24	10/06/22 10:30	10/07/22	Wipe	Same As Above
H22100218-025	220512-LD-25	10/06/22 10:40	10/07/22	Wipe	Same As Above
H22100218-026	220512-LD-26	10/06/22 10:45	10/07/22	Wipe	Same As Above
H22100218-027	220512-LD-27	10/06/22 10:50	10/07/22	Wipe	Same As Above



ANALYTICAL SUMMARY REPORT

H22100218-028	220512-LD-28	10/06/22 11:10	10/07/22	Wipe	Same As Above
H22100218-029	220512-LD-29	10/06/22 11:30	10/07/22	Wipe	
H22100218-030	220512-LD-30	10/06/22 12:00	10/07/22	Wipe	Metals by ICP/ICPMS, Total Total Metals Digestion by SW3050B

The analyses presented in this report were performed by Energy Laboratories, Inc., 3161 E. Lyndale Ave., Helena, MT 59604, unless otherwise noted. Any exceptions or problems with the analyses are noted in the report package. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

If you have any questions regarding these test results, please contact your Project Manager.

Report Approved By:



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House
Lab ID: H22100218-001
Client Sample ID: 220512-LD-1

Report Date: 11/07/22
Collection Date: 10/06/22 07:45
Date Received: 10/07/22
Matrix: Wipe

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, TOTAL - EPA SW846							
Lead	ND	ug/wipe		5.0		SW6020	10/12/22 13:47 / dck

Report
Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House
Lab ID: H22100218-002
Client Sample ID: 220512-LD-2

Report Date: 11/07/22
Collection Date: 10/06/22 07:55
Date Received: 10/07/22
Matrix: Wipe

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, TOTAL - EPA SW846							
Lead	ND	ug/wipe		5.0		SW6020	10/12/22 13:59 / dck

Report Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House
Lab ID: H22100218-003
Client Sample ID: 220512-LD-3

Report Date: 11/07/22
Collection Date: 10/06/22 08:00
Date Received: 10/07/22
Matrix: Wipe

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, TOTAL - EPA SW846							
Lead	ND	ug/wipe		5.0		SW6020	10/12/22 14:01 / dck

Report Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House
Lab ID: H22100218-004
Client Sample ID: 220512-LD-4

Report Date: 11/07/22
Collection Date: 10/06/22 08:05
Date Received: 10/07/22
Matrix: Wipe

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, TOTAL - EPA SW846							
Lead	11	ug/wipe		5.0		SW6020	10/12/22 14:04 / dck

Report Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House
Lab ID: H22100218-005
Client Sample ID: 220512-LD-5

Report Date: 11/07/22
Collection Date: 10/06/22 08:15
Date Received: 10/07/22
Matrix: Wipe

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, TOTAL - EPA SW846							
Lead	27	ug/wipe		5.0		SW6020	10/12/22 14:06 / dck

Report
Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House
Lab ID: H22100218-006
Client Sample ID: 220512-LD-6

Report Date: 11/07/22
Collection Date: 10/06/22 08:25
Date Received: 10/07/22
Matrix: Wipe

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, TOTAL - EPA SW846							
Lead	11	ug/wipe		5.0		SW6020	10/12/22 14:09 / dck

Report
Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House
Lab ID: H22100218-007
Client Sample ID: 220512-LD-7

Report Date: 11/07/22
Collection Date: 10/06/22 08:30
Date Received: 10/07/22
Matrix: Wipe

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, TOTAL - EPA SW846							
Lead	42	ug/wipe		5.0		SW6020	10/12/22 14:11 / dck

Report
Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House
Lab ID: H22100218-008
Client Sample ID: 220512-LD-8

Report Date: 11/07/22
Collection Date: 10/06/22 08:35
Date Received: 10/07/22
Matrix: Wipe

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, TOTAL - EPA SW846							
Lead	25	ug/wipe		5.0		SW6020	10/12/22 14:13 / dck

Report Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House
Lab ID: H22100218-009
Client Sample ID: 220512-LD-9

Report Date: 11/07/22
Collection Date: 10/06/22 08:45
Date Received: 10/07/22
Matrix: Wipe

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, TOTAL - EPA SW846							
Lead	ND	ug/wipe		5.0		SW6020	10/12/22 14:16 / dck

Report Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House
Lab ID: H22100218-010
Client Sample ID: 220512-LD-10

Report Date: 11/07/22
Collection Date: 10/06/22 08:50
Date Received: 10/07/22
Matrix: Wipe

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, TOTAL - EPA SW846							
Lead	ND	ug/wipe		5.0		SW6020	10/12/22 14:23 / dck

Report Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House
Lab ID: H22100218-011
Client Sample ID: 220512-LD-11

Report Date: 11/07/22
Collection Date: 10/06/22 09:10
Date Received: 10/07/22
Matrix: Wipe

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, TOTAL - EPA SW846							
Lead	ND	ug/wipe		5.0		SW6020	10/12/22 14:26 / dck

Report
Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House
Lab ID: H22100218-012
Client Sample ID: 220512-LD-12

Report Date: 11/07/22
Collection Date: 10/06/22 09:15
Date Received: 10/07/22
Matrix: Wipe

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, TOTAL - EPA SW846							
Lead	ND	ug/wipe		5.0		SW6020	10/12/22 14:28 / dck

Report Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House
Lab ID: H22100218-013
Client Sample ID: 220512-LD-13

Report Date: 11/07/22
Collection Date: 10/06/22 09:20
Date Received: 10/07/22
Matrix: Wipe

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, TOTAL - EPA SW846							
Lead	ND	ug/wipe		5.0		SW6020	10/12/22 14:30 / dck

Report Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House
Lab ID: H22100218-014
Client Sample ID: 220512-LD-14

Report Date: 11/07/22
Collection Date: 10/06/22 09:25
Date Received: 10/07/22
Matrix: Wipe

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, TOTAL - EPA SW846							
Lead	ND	ug/wipe		5.0		SW6020	10/12/22 14:33 / dck

Report Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House
Lab ID: H22100218-015
Client Sample ID: 220512-LD-15

Report Date: 11/07/22
Collection Date: 10/06/22 09:30
Date Received: 10/07/22
Matrix: Wipe

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, TOTAL - EPA SW846							
Lead	ND	ug/wipe		5.0		SW6020	10/12/22 14:35 / dck

Report Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House
Lab ID: H22100218-016
Client Sample ID: 220512-LD-16

Report Date: 11/07/22
Collection Date: 10/06/22 09:35
Date Received: 10/07/22
Matrix: Wipe

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, TOTAL - EPA SW846							
Lead	ND	ug/wipe		5.0		SW6020	10/12/22 14:38 / dck

Report Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House
Lab ID: H22100218-017
Client Sample ID: 220512-LD-17

Report Date: 11/07/22
Collection Date: 10/06/22 09:40
Date Received: 10/07/22
Matrix: Wipe

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, TOTAL - EPA SW846							
Lead	ND	ug/wipe		5.0		SW6020	10/12/22 14:40 / dck

Report Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House
Lab ID: H22100218-018
Client Sample ID: 220512-LD-18

Report Date: 11/07/22
Collection Date: 10/06/22 09:50
Date Received: 10/07/22
Matrix: Wipe

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, TOTAL - EPA SW846							
Lead	ND	ug/wipe		5.0		SW6020	10/12/22 14:42 / dck

Report Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House
Lab ID: H22100218-019
Client Sample ID: 220512-LD-19

Report Date: 11/07/22
Collection Date: 10/06/22 10:00
Date Received: 10/07/22
Matrix: Wipe

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, TOTAL - EPA SW846							
Lead	ND	ug/wipe		5.0		SW6020	10/12/22 14:45 / dck

Report
Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House
Lab ID: H22100218-020
Client Sample ID: 220512-LD-20

Report Date: 11/07/22
Collection Date: 10/06/22 10:05
Date Received: 10/07/22
Matrix: Wipe

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, TOTAL - EPA SW846							
Lead	ND	ug/wipe		5.0		SW6020	10/12/22 14:47 / dck

Report Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House
Lab ID: H22100218-021
Client Sample ID: 220512-LD-21

Report Date: 11/07/22
Collection Date: 10/06/22 10:15
Date Received: 10/07/22
Matrix: Wipe

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, TOTAL - EPA SW846							
Lead	ND	ug/wipe		5.0		SW6020	10/12/22 15:06 / dck

Report Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House
Lab ID: H22100218-022
Client Sample ID: 220512-LD-22

Report Date: 11/07/22
Collection Date: 10/06/22 10:20
Date Received: 10/07/22
Matrix: Wipe

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, TOTAL - EPA SW846							
Lead	ND	ug/wipe		5.0		SW6020	10/12/22 15:18 / dck

Report
Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House
Lab ID: H22100218-023
Client Sample ID: 220512-LD-23

Report Date: 11/07/22
Collection Date: 10/06/22 10:25
Date Received: 10/07/22
Matrix: Wipe

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, TOTAL - EPA SW846							
Lead	ND	ug/wipe		5.0		SW6020	10/12/22 15:21 / dck

Report Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House
Lab ID: H22100218-024
Client Sample ID: 220512-LD-24

Report Date: 11/07/22
Collection Date: 10/06/22 10:30
Date Received: 10/07/22
Matrix: Wipe

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, TOTAL - EPA SW846							
Lead	25	ug/wipe		5.0		SW6020	10/12/22 15:23 / dck

Report Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House
Lab ID: H22100218-025
Client Sample ID: 220512-LD-25

Report Date: 11/07/22
Collection Date: 10/06/22 10:40
Date Received: 10/07/22
Matrix: Wipe

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, TOTAL - EPA SW846							
Lead	ND	ug/wipe		5.0		SW6020	10/12/22 15:26 / dck

Report
Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House
Lab ID: H22100218-026
Client Sample ID: 220512-LD-26

Report Date: 11/07/22
Collection Date: 10/06/22 10:45
Date Received: 10/07/22
Matrix: Wipe

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, TOTAL - EPA SW846							
Lead	5.5	ug/wipe		5.0		SW6020	10/12/22 15:28 / dck

Report Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House
Lab ID: H22100218-027
Client Sample ID: 220512-LD-27

Report Date: 11/07/22
Collection Date: 10/06/22 10:50
Date Received: 10/07/22
Matrix: Wipe

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, TOTAL - EPA SW846							
Lead	ND	ug/wipe		5.0		SW6020	10/12/22 15:30 / dck

Report Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House
Lab ID: H22100218-028
Client Sample ID: 220512-LD-28

Report Date: 11/07/22
Collection Date: 10/06/22 11:10
Date Received: 10/07/22
Matrix: Wipe

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, TOTAL - EPA SW846							
Lead	60	ug/wipe		5.0		SW6020	10/12/22 15:33 / dck

Report Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House
Lab ID: H22100218-030
Client Sample ID: 220512-LD-30

Report Date: 11/07/22
Collection Date: 10/06/22 12:00
Date Received: 10/07/22
Matrix: Wipe

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, TOTAL - EPA SW846							
Lead	ND	ug/wipe		5.0		SW6020	10/12/22 15:35 / dck

Report
Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100218

Report Date: 11/07/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020										Analytical Run: ICPMS205-H_221012A
Lab ID: ICV		Initial Calibration Verification Standard								10/12/22 12:47
Lead		0.0612	mg/L	0.0010	102	90	110			
Lab ID: ICSA		Interference Check Sample A								10/12/22 12:54
Lead		-0.0000486	mg/L	0.0010						
Lab ID: ICSAB		Interference Check Sample AB								10/12/22 12:59
Lead		-0.0000510	mg/L	0.0010		0	0			
Lab ID: CCV		Continuing Calibration Verification Standard								10/12/22 13:30
Lead		0.0490	mg/L	0.0010	98	90	110			
Lab ID: CCV		Continuing Calibration Verification Standard								10/12/22 14:18
Lead		0.0490	mg/L	0.0010	98	90	110			
Lab ID: CCV		Continuing Calibration Verification Standard								10/12/22 14:50
Lead		0.0495	mg/L	0.0010	99	90	110			
Lab ID: ICV		Initial Calibration Verification Standard								10/12/22 17:07
Lead		0.0597	mg/L	0.0010	100	90	110			
Lab ID: ICSA		Interference Check Sample A								10/12/22 17:14
Lead		0.0000416	mg/L	0.0010						
Lab ID: ICSAB		Interference Check Sample AB								10/12/22 17:19
Lead		0.0000500	mg/L	0.0010		0	0			
Method: SW6020										Batch: 63841
Lab ID: MB-63841		Method Blank								Run: ICPMS205-H_221012A 10/12/22 13:35
Lead		ND	ug/wipe	0.5						
Lab ID: LCS-63841		Laboratory Control Sample								Run: ICPMS205-H_221012A 10/12/22 13:37
Lead		100	ug/wipe	5.0	99	74.4	108.6			
Lab ID: LFB-63841		Laboratory Fortified Blank								Run: ICPMS205-H_221012A 10/12/22 13:40
Lead		51	ug/wipe	5.0	101	80	120			
Lab ID: LFBD-63841		Laboratory Fortified Blank Duplicate								Run: ICPMS205-H_221012A 10/12/22 13:42
Lead		52	ug/wipe	5.0	106	80	120	2.0	20	
Lab ID: H22100218-001AMS		Sample Matrix Spike								Run: ICPMS205-H_221012A 10/12/22 13:52
Lead		14	ug/wipe	5.0	109	75	125			
POST-DIGESTION SPIKE										
Lab ID: H22100218-001AMSD		Sample Matrix Spike Duplicate								Run: ICPMS205-H_221012A 10/12/22 13:54
Lead		14	ug/wipe	5.0	111	75	125	1.6	20	
POST-DIGESTION SPIKE										
Method: SW6020										Batch: 63842
Lab ID: MB-63842		Method Blank								Run: ICPMS205-H_221012A 10/12/22 14:54
Lead		ND	ug/wipe	0.5						

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100218

Report Date: 11/07/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020										Batch: 63842
Lab ID: LCS-63842		Laboratory Control Sample				Run: ICPMS205-H_221012A				10/12/22 14:57
Lead		100 ug/wipe		5.0	98	74.4	108.6			
Lab ID: LFB-63842		Laboratory Fortified Blank				Run: ICPMS205-H_221012A				10/12/22 14:59
Lead		52 ug/wipe		5.0	103	80	120			
Lab ID: LFBD-63842		Laboratory Fortified Blank Duplicate				Run: ICPMS205-H_221012A				10/12/22 15:02
Lead		51 ug/wipe		5.0	101	80	120			
Lab ID: H22100218-021AMS		Sample Matrix Spike				Run: ICPMS205-H_221012A				10/12/22 15:11
Lead		14 ug/wipe		5.0	96	75	125			
POST-DIGESTION SPIKE										
Lab ID: H22100218-021AMSD		Sample Matrix Spike Duplicate				Run: ICPMS205-H_221012A				10/12/22 15:14
Lead		14 ug/wipe		5.0	98	75	125	1.5	20	
POST-DIGESTION SPIKE										

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



Work Order Receipt Checklist

WGM Group Inc

H22100218

Login completed by: Wanda Johnson

Date Received: 10/7/2022

Reviewed by: tjones

Received by: rrf

Reviewed Date: 10/10/2022

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on all shipping container(s)/cooler(s)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on all sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input type="checkbox"/>
Container/Temp Blank temperature:	3.5°C On Ice		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input checked="" type="checkbox"/>

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as —dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

The reference date for Radon analysis is the sample collection date. The reference date for all other Radiochemical analyses is the analysis date. Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

Contact and Corrective Action Comments:

Sample jar received for 220512-LD-29 however, there was no sample inside. wjj 10/7/2022



Send our People Your Test Data

Chain of Custody & Analytical Request Record

www.energylab.com

Account Information (filling information)

Company Name Wah Group Inc
Contact Melinda Ming
Phone 406-728-4611
Billing Address _____
City, State, Zip _____
Email www.ARC@WahGroup.com
Purchase Order 220512.1 Quote 42038
Receiving Invoice ☐ Hard Copy ☒ Email ☐ Receiving Report ☐ Hard Copy ☐ Email

Report Information (if different than Account Information)

Company Name _____
Contact Tyler Etzel
Phone 406-728-4611
Billing Address _____
City, State, Zip _____
Email TEtzel@WahGroup.com
Receiving Report ☐ Hard Copy ☒ Email
Special Report Format: ☐ LEVEL IV ☐ NEIAC ☐ EDO/EDT (forward laboratory) ☐ Other _____

Comments

Page 1 of 3
Please call sampler w/ any questions

Project Information

Project Name, PWSD, Permit, etc. SANITARY HOUSE
Sample Name Bacter Meranti Sample ID 240-0573
Sample Origin State MT EPA/State Compliance ☒ Yes ☐ No
Lab provided preservatives were used ☐ Yes ☐ No
WARNING CLIENTS: please indicate sample type.
☐ If one has been processed or refined, call before sending.
☐ Byproduct 11 (e.g. material) ☐ Unprocessed ore (NOT ground or refined)

Matrix Codes

- A - Air
- W - Water
- S - Solid
- V - Vegetation
- B - Biomass
- O - Other
- DW - Drinking Water

Analysis Requested

Sample Identification

Sample ID	Matrix	Time	Number of Containers	Matrix Code	Analysis Requested
220512-LD-1	1	745	1	0	LEAD DUST Metals 6010.20
2	2	755	1	0	
3	3	800	1	0	
4	4	805	1	0	
5	5	815	1	0	
6	6	825	1	0	
7	7	830	1	0	
8	8	835	1	0	
9	9	845	1	0	
10	10	850	1	0	

See Attached

All turnaround times are standard unless marked as RUSH.
Energy Laboratories MUST be contacted prior to RUSH sample submission for charges and scheduling - See Instructions Page

ELI LAB ID Laboratory Use Only

Custody Record MUST be signed Great Meranti Date 10/6/12 Time 1400 Signature [Signature]
Received by (print) [Signature] Date/Time 10/12/12 0840 Signature [Signature]

LABORATORY USE ONLY

Shipped By FEDEX Cooler (D/I) Y Custody Seals Y N C B Receipt Temp 3.5 °C Y N On Ice Y N CC Y N Cash Y N Payment Type Check Amount \$ _____ Receipt Number (optional) _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.



Trust your People. Trust our Data.

Chain of Custody & Analytical Request Record

www.energylab.com

Page 3 of 3

Account Information (Billing Information)

Company/Name		W&M Camp Inc	
Contact			
Phone			
Mailing Address			
City, State, Zip			
Email			
Receive Invoice	<input type="checkbox"/> Hard Copy	<input type="checkbox"/> Email	Receive Report
Purchase Order	<input type="checkbox"/> Hard Copy	<input type="checkbox"/> Email	Buyer Order
22512.1			42038

Report information (if different than Account Information)

Company Name _____
Contact _____
Phone _____
Mailing Address _____
City, State, Zip _____
Email _____

Receival Report ☐ Hard Copy ☐ Email
Special Report Formals _____
☐ LEVEL IV ☐ NELAC ☐ EDO/EDT (contact laboratory) ☐ Other _____

Project Information

Project Name, PWSID, Permit, etc.		SARINATA House	
Sample Name	BLDERM	Sample ID	290-0513
Sample Origin State	MT	EPA/State Compliance	X Yes <input type="checkbox"/> No
Lab provided preservatives were used <input type="checkbox"/> Yes <input type="checkbox"/> No			
Shipping (CERCLA, please indicate sample type, if one has been processed or refined, call before sending)			
<input type="checkbox"/> Byproduct 11 (e)2 material <input type="checkbox"/> Unrefined ore (NOT ground or refined)*			

Matrix Codes

- | |
|--------------------|
| A - Air |
| W - Water |
| S - Solid |
| S - Solids |
| V - Vegetation |
| B - Biomass |
| O - Other |
| DM - Drying Matter |

Analysis Requested

Sample Identification (Name, Location, Interval, etc.)		Collection Date Time		Number of Containers	Matrix (See Cases Above)	ELI LAB ID (Laboratory Use Only)
1	220512 - LD - 21	10/6/22	1015	1	0	HA2100218
2	22		1020	1	0	
3	23		1025	1	0	
4	24		1030	1	0	
5	25		1040	1	0	
6	26		1045	1	0	
7	27		1050	1	0	
8	28		1110	1	0	
9	29		1130	1	0	
10	30		1200	1	0	

See Attached

All turnaround times are standard unless marked as RUSH.

ELI LAB ID
Laboratory Use Only

Custody Record MUST be signed	Handwritten by (name) <i>BRADY MORRIS</i>	Date/Time <i>10/6/12 1400</i>	Signature	Placed by (print)	Date/Time	Signature
	Handwritten by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
LABORATORY USE ONLY						
Shipped By <i>ROBERT CO</i>	Cooler ID(s) <i>Y</i>	Custody Serial <i>(Y) N (C) B</i>	Recept Temp <i>3.5 °C</i>	Turno Blank <i>(Y) N</i>	Payment Type Cash <input type="checkbox"/> Check <input type="checkbox"/>	Amount \$
				On Ice <i>(Y) N</i>		Receipt Number (available on reqd)

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.



ANALYTICAL SUMMARY REPORT

October 31, 2022

WGM Group Inc
1111 E Broadway
Missoula, MT 59802-4909

Work Order: H22100108

Project Name: Samaritan House Ph II

Energy Laboratories Inc Helena MT received the following 9 samples for WGM Group Inc on 10/5/2022 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H22100108-001	220512-SB1-1	10/04/22 11:39	10/05/22	Soil	Metals by ICP/ICPMS, Total Mercury in Solid By CVAA EPH-Ultrasonic Extraction SW3550C Methanol Extraction for Volatiles SW5035 Hydrocarbons, Extractable Petroleum-Scrn Volatile Petroleum Hydrocarbons Percent Moisture Total Metals Digestion by SW3050B Mercury Digestion by SW7471B Soil Preparation USDA1 Volatile Organics, Methanol Extraction SW5035 8260-Volatile Organic Compounds - Short List
H22100108-002	220512-SB1-2	10/04/22 11:49	10/05/22	Soil	Metals by ICP/ICPMS, Total Mercury in Solid By CVAA EPH-Ultrasonic Extraction SW3550C Methanol Extraction for Volatiles SW5035 Hydrocarbons, Extractable Petroleum-Scrn Volatile Petroleum Hydrocarbons Percent Moisture Total Metals Digestion by SW3050B Mercury Digestion by SW7471B Volatile Organics, Methanol Extraction SW5035 8260-Volatile Organic Compounds - Short List
H22100108-003	220512-SB2-1	10/04/22 10:24	10/05/22	Soil	Same As Above
H22100108-004	220512-SB2-2	10/04/22 10:29	10/05/22	Soil	Same As Above

ANALYTICAL SUMMARY REPORT

H22100108-005	220512-SB3-1	10/04/22 9:16	10/05/22	Soil	Metals by ICP/ICPMS, Total Mercury in Solid By CVAA EPH-Ultrasonic Extraction SW3550C Methanol Extraction for Volatiles SW5035 EPH-Fractionation Hydrocarbons, Aliphatic Extractable Petroleum Hydrocarbons, Aromatic Extractable Petroleum Hydrocarbons, Extractable Petroleum-Scrn Volatile Petroleum Hydrocarbons Percent Moisture Total Metals Digestion by SW3050B Mercury Digestion by SW7471B Volatile Organics, Methanol Extraction SW5035 8260-Volatile Organic Compounds - Short List
H22100108-006	220512-SB3-2	10/04/22 9:26	10/05/22	Soil	Metals by ICP/ICPMS, Total Mercury in Solid By CVAA EPH-Ultrasonic Extraction SW3550C Methanol Extraction for Volatiles SW5035 Hydrocarbons, Extractable Petroleum-Scrn Volatile Petroleum Hydrocarbons Percent Moisture Total Metals Digestion by SW3050B Mercury Digestion by SW7471B Volatile Organics, Methanol Extraction SW5035 8260-Volatile Organic Compounds - Short List
H22100108-007	220512-SB4-2	10/04/22 8:10	10/05/22	Soil	Same As Above
H22100108-008	220512-SW1	10/04/22 11:30	10/05/22	Aqueous	Metals by ICP/ICPMS, Total Recoverable Mercury, Total EPH-Sep Funnel Extraction SW3510C Hydrocarbons, Extractable SW8015MPetroleum Screen Volatile Petroleum Hydrocarbons Metals pH check by the Laboratory FIRST Metals Digestion by SW3010A Mercury Digestion by SW7470A 8260-Volatile Organic Compounds- Short List
H22100108-009	Trip Blank-11245	10/04/22 11:30	10/05/22	Trip Blank	8260-Volatile Organic Compounds- Short List

The analyses presented in this report were performed by Energy Laboratories, Inc., 3161 E. Lyndale Ave., Helena, MT 59604, unless otherwise noted. Any exceptions or problems with the analyses are noted in the report package. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

If you have any questions regarding these test results, please contact your Project Manager.



ANALYTICAL SUMMARY REPORT

Report Approved By:



CLIENT: WGM Group Inc
Project: Samaritan House Ph II
Work Order: H22100108

Report Date: 10/31/22

CASE NARRATIVE

Per client we are to fractionate samples over the MCL. wjj 10/10/2022



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House Ph II
Lab ID: H22100108-001
Client Sample ID: 220512-SB1-1

Report Date: 10/31/22
Collection Date: 10/04/22 11:39
Date Received: 10/05/22
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	8.2	wt%		0.2		D2974	10/06/22 08:49 / jip
3050 EXTRACTABLE METALS							
Arsenic	6	mg/kg-dry		1		SW6020	10/07/22 12:05 / dck
Barium	73	mg/kg-dry		1		SW6020	10/07/22 12:05 / dck
Cadmium	ND	mg/kg-dry		1		SW6020	10/07/22 12:05 / dck
Chromium	10	mg/kg-dry		1		SW6020	10/07/22 12:05 / dck
Lead	6	mg/kg-dry		1		SW6020	10/07/22 12:05 / dck
Selenium	ND	mg/kg-dry		1		SW6020	10/07/22 12:05 / dck
Silver	ND	mg/kg-dry		1		SW6020	10/07/22 12:05 / dck
METALS, TOTAL							
Mercury	ND	mg/kg-dry		0.50		SW7471B	10/07/22 12:10 / kjb
VOLATILE ORGANIC COMPOUNDS							
Bromoform	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
Benzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
Bromobenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
Bromochloromethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
Bromodichloromethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
Bromomethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
Carbon tetrachloride	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
Chlorobenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
Chloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
2-Chloroethyl vinyl ether	ND	mg/kg-dry		0.20		SW8260B	10/12/22 19:48 / tmj
Chloroform	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
Chloromethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
2-Chlorotoluene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
4-Chlorotoluene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
Chlorodibromomethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
1,2-Dibromoethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
Dibromomethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
1,2-Dichlorobenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
1,3-Dichlorobenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
1,4-Dichlorobenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
Dichlorodifluoromethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
1,1-Dichloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
1,2-Dichloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
cis-1,2-Dichloroethene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
1,1-Dichloroethene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
trans-1,2-Dichloroethene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
1,2-Dichloropropane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
1,3-Dichloropropane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
2,2-Dichloropropane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj

Report RL - Analyte Reporting Limit
Definitions: QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House Ph II
Lab ID: H22100108-001
Client Sample ID: 220512-SB1-1

Report Date: 10/31/22
Collection Date: 10/04/22 11:39
Date Received: 10/05/22
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
1,1-Dichloropropene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
cis-1,3-Dichloropropene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
trans-1,3-Dichloropropene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
Ethylbenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
Methyl tert-butyl ether (MTBE)	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
Methylene chloride	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
Methyl ethyl ketone	ND	mg/kg-dry		4.0		SW8260B	10/12/22 01:15 / tmj
Styrene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
1,1,1,2-Tetrachloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
1,1,2,2-Tetrachloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
Tetrachloroethene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
Toluene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
1,1,1-Trichloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
1,1,2-Trichloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
Trichloroethene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
Trichlorofluoromethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
1,2,3-Trichloropropane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
Vinyl chloride	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
m+p-Xylenes	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
o-Xylene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
Xylenes, Total	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:15 / tmj
Surr: p-Bromofluorobenzene	105	%REC		60-143		SW8260B	10/12/22 01:15 / tmj
Surr: Dibromofluoromethane	87.0	%REC		71-135		SW8260B	10/12/22 01:15 / tmj
Surr: 1,2-Dichloroethane-d4	101	%REC		65-147		SW8260B	10/12/22 01:15 / tmj
Surr: Toluene-d8	100	%REC		76-133		SW8260B	10/12/22 01:15 / tmj
PETROLEUM HYDROCARBONS-VOLATILE (VPH)							
Methyl tert-butyl ether (MTBE)	ND	mg/kg-dry		0.11	0.078	MA-VPH	10/12/22 07:51 / GMS
Benzene	ND	mg/kg-dry		0.054	0.07	MA-VPH	10/12/22 07:51 / GMS
Toluene	ND	mg/kg-dry		0.054	21	MA-VPH	10/12/22 07:51 / GMS
Ethylbenzene	ND	mg/kg-dry		0.054	6.4	MA-VPH	10/12/22 07:51 / GMS
m+p-Xylenes	ND	mg/kg-dry		0.054		MA-VPH	10/12/22 07:51 / GMS
o-Xylene	ND	mg/kg-dry		0.054		MA-VPH	10/12/22 07:51 / GMS
Xylenes, Total	ND	mg/kg-dry		0.054	72	MA-VPH	10/12/22 07:51 / GMS
Naphthalene	ND	mg/kg-dry		0.11	2.2	MA-VPH	10/12/22 07:51 / GMS
C9 to C10 Aromatics	ND	mg/kg-dry		2.2	130	MA-VPH	10/12/22 07:51 / GMS
C5 to C8 Aliphatics	ND	mg/kg-dry		2.2	52	MA-VPH	10/12/22 07:51 / GMS
C9 to C12 Aliphatics	ND	mg/kg-dry		2.2	77	MA-VPH	10/12/22 07:51 / GMS
Total Purgeable Hydrocarbons	ND	mg/kg-dry		2.2	100	MA-VPH	10/12/22 07:51 / GMS
Surr: VPH Aromatics Surrogate	83.0	%REC		70-130		MA-VPH	10/12/22 07:51 / GMS
Surr: VPH Aliphatics Surrogate	85.0	%REC		70-130		MA-VPH	10/12/22 07:51 / GMS

- Note 1: The C5 to C8 Aliphatics value is corrected for aromatic constituents Benzene and Toluene.

- Note 2: The C9 to C12 Aliphatics value is corrected for aromatic constituents Ethylbenzene, m+p-Xylenes, o-Xylene and C9 to C10 Aromatics.

Report RL - Analyte Reporting Limit
Definitions: QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House Ph II
Lab ID: H22100108-001
Client Sample ID: 220512-SB1-1

Report Date: 10/31/22
Collection Date: 10/04/22 11:39
Date Received: 10/05/22
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
EXTRACTABLE PETROLEUM HYDROCARBONS-SCREEN ANALYSIS							
Total Extractable Hydrocarbons	7.9	mg/kg-dry	J	20	200	SW8015M	10/06/22 16:37 / jdh
Surr: o-Terphenyl	73.0	%REC		40-140		SW8015M	10/06/22 16:37 / jdh

- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.

Report Definitions:	RL - Analyte Reporting Limit	MCL - Maximum Contaminant Level
	QCL - Quality Control Limit	ND - Not detected at the Reporting Limit (RL)
	J - Estimated value - analyte was present but less than the Reporting Limit (RL)	



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House Ph II
Lab ID: H22100108-002
Client Sample ID: 220512-SB1-2

Report Date: 10/31/22
Collection Date: 10/04/22 11:49
Date Received: 10/05/22
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	15.5	wt%		0.2		D2974	10/06/22 08:49 / jjp
3050 EXTRACTABLE METALS							
Arsenic	6	mg/kg-dry		1		SW6020	10/07/22 12:19 / dck
Barium	271	mg/kg-dry	D	4		SW6020	10/10/22 09:48 / dck
Cadmium	ND	mg/kg-dry		1		SW6020	10/07/22 12:19 / dck
Chromium	20	mg/kg-dry		1		SW6020	10/07/22 12:19 / dck
Lead	13	mg/kg-dry		1		SW6020	10/07/22 12:19 / dck
Selenium	ND	mg/kg-dry		1		SW6020	10/07/22 12:19 / dck
Silver	ND	mg/kg-dry		1		SW6020	10/07/22 12:19 / dck
METALS, TOTAL							
Mercury	ND	mg/kg-dry		0.50		SW7471B	10/07/22 12:18 / kjb
VOLATILE ORGANIC COMPOUNDS							
Bromoform	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
Benzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
Bromobenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
Bromochloromethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
Bromodichloromethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
Bromomethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
Carbon tetrachloride	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
Chlorobenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
Chloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
2-Chloroethyl vinyl ether	ND	mg/kg-dry		0.20		SW8260B	10/12/22 20:20 / tmj
Chloroform	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
Chloromethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
2-Chlorotoluene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
4-Chlorotoluene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
Chlorodibromomethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
1,2-Dibromoethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
Dibromomethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
1,2-Dichlorobenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
1,3-Dichlorobenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
1,4-Dichlorobenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
Dichlorodifluoromethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
1,1-Dichloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
1,2-Dichloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
cis-1,2-Dichloroethene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
1,1-Dichloroethene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
trans-1,2-Dichloroethene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
1,2-Dichloropropane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
1,3-Dichloropropane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
2,2-Dichloropropane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj

Report RL - Analyte Reporting Limit
Definitions: QCL - Quality Control Limit
D - Reporting Limit (RL) increased due to sample matrix

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House Ph II
Lab ID: H22100108-002
Client Sample ID: 220512-SB1-2

Report Date: 10/31/22
Collection Date: 10/04/22 11:49
Date Received: 10/05/22
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
1,1-Dichloropropene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
cis-1,3-Dichloropropene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
trans-1,3-Dichloropropene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
Ethylbenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
Methyl tert-butyl ether (MTBE)	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
Methylene chloride	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
Methyl ethyl ketone	ND	mg/kg-dry		4.0		SW8260B	10/12/22 01:47 / tmj
Styrene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
1,1,1,2-Tetrachloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
1,1,2,2-Tetrachloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
Tetrachloroethene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
Toluene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
1,1,1-Trichloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
1,1,2-Trichloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
Trichloroethene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
Trichlorofluoromethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
1,2,3-Trichloropropane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
Vinyl chloride	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
m+p-Xylenes	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
o-Xylene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
Xylenes, Total	ND	mg/kg-dry		0.20		SW8260B	10/12/22 01:47 / tmj
Surr: p-Bromofluorobenzene	100	%REC		60-143		SW8260B	10/12/22 01:47 / tmj
Surr: Dibromofluoromethane	98.0	%REC		71-135		SW8260B	10/12/22 01:47 / tmj
Surr: 1,2-Dichloroethane-d4	97.0	%REC		65-147		SW8260B	10/12/22 01:47 / tmj
Surr: Toluene-d8	95.0	%REC		76-133		SW8260B	10/12/22 01:47 / tmj
PETROLEUM HYDROCARBONS-VOLATILE (VPH)							
Methyl tert-butyl ether (MTBE)	ND	mg/kg-dry		0.12	0.078	MA-VPH	10/12/22 08:22 / GMS
Benzene	ND	mg/kg-dry		0.059	0.07	MA-VPH	10/12/22 08:22 / GMS
Toluene	ND	mg/kg-dry		0.059	21	MA-VPH	10/12/22 08:22 / GMS
Ethylbenzene	ND	mg/kg-dry		0.059	6.4	MA-VPH	10/12/22 08:22 / GMS
m+p-Xylenes	ND	mg/kg-dry		0.059		MA-VPH	10/12/22 08:22 / GMS
o-Xylene	ND	mg/kg-dry		0.059		MA-VPH	10/12/22 08:22 / GMS
Xylenes, Total	ND	mg/kg-dry		0.059	72	MA-VPH	10/12/22 08:22 / GMS
Naphthalene	ND	mg/kg-dry		0.12	2.2	MA-VPH	10/12/22 08:22 / GMS
C9 to C10 Aromatics	ND	mg/kg-dry		2.4	130	MA-VPH	10/12/22 08:22 / GMS
C5 to C8 Aliphatics	ND	mg/kg-dry		2.4	52	MA-VPH	10/12/22 08:22 / GMS
C9 to C12 Aliphatics	ND	mg/kg-dry		2.4	77	MA-VPH	10/12/22 08:22 / GMS
Total Purgeable Hydrocarbons	ND	mg/kg-dry		2.4	100	MA-VPH	10/12/22 08:22 / GMS
Surr: VPH Aromatics Surrogate	95.0	%REC		70-130		MA-VPH	10/12/22 08:22 / GMS
Surr: VPH Aliphatics Surrogate	97.0	%REC		70-130		MA-VPH	10/12/22 08:22 / GMS

- Note 1: The C5 to C8 Aliphatics value is corrected for aromatic constituents Benzene and Toluene.

- Note 2: The C9 to C12 Aliphatics value is corrected for aromatic constituents Ethylbenzene, m+p-Xylenes, o-Xylene and C9 to C10 Aromatics.

Report RL - Analyte Reporting Limit
Definitions: QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House Ph II
Lab ID: H22100108-002
Client Sample ID: 220512-SB1-2

Report Date: 10/31/22
Collection Date: 10/04/22 11:49
Date Received: 10/05/22
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
EXTRACTABLE PETROLEUM HYDROCARBONS-SCREEN ANALYSIS							
Total Extractable Hydrocarbons	9.3	mg/kg-dry	J	20	200	SW8015M	10/06/22 17:23 / jdh
Surr: o-Terphenyl	89.0	%REC		40-140		SW8015M	10/06/22 17:23 / jdh

- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.

Report Definitions:	RL - Analyte Reporting Limit	MCL - Maximum Contaminant Level
	QCL - Quality Control Limit	ND - Not detected at the Reporting Limit (RL)
	J - Estimated value - analyte was present but less than the Reporting Limit (RL)	

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House Ph II
Lab ID: H22100108-003
Client Sample ID: 220512-SB2-1

Report Date: 10/31/22
Collection Date: 10/04/22 10:24
Date Received: 10/05/22
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	3.7	wt%		0.2		D2974	10/06/22 08:50 / jjp
3050 EXTRACTABLE METALS							
Arsenic	5	mg/kg-dry		1		SW6020	10/07/22 12:22 / dck
Barium	103	mg/kg-dry	D	4		SW6020	10/10/22 09:50 / dck
Cadmium	ND	mg/kg-dry		1		SW6020	10/07/22 12:22 / dck
Chromium	12	mg/kg-dry		1		SW6020	10/07/22 12:22 / dck
Lead	7	mg/kg-dry		1		SW6020	10/07/22 12:22 / dck
Selenium	ND	mg/kg-dry		1		SW6020	10/07/22 12:22 / dck
Silver	2	mg/kg-dry		1		SW6020	10/07/22 12:22 / dck
METALS, TOTAL							
Mercury	ND	mg/kg-dry		0.50		SW7471B	10/07/22 12:20 / kjb
VOLATILE ORGANIC COMPOUNDS							
Bromoform	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
Benzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
Bromobenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
Bromochloromethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
Bromodichloromethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
Bromomethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
Carbon tetrachloride	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
Chlorobenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
Chloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
2-Chloroethyl vinyl ether	ND	mg/kg-dry		0.20		SW8260B	10/12/22 20:51 / tmj
Chloroform	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
Chloromethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
2-Chlorotoluene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
4-Chlorotoluene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
Chlorodibromomethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
1,2-Dibromoethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
Dibromomethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
1,2-Dichlorobenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
1,3-Dichlorobenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
1,4-Dichlorobenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
Dichlorodifluoromethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
1,1-Dichloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
1,2-Dichloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
cis-1,2-Dichloroethene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
1,1-Dichloroethene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
trans-1,2-Dichloroethene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
1,2-Dichloropropane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
1,3-Dichloropropane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
2,2-Dichloropropane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj

Report RL - Analyte Reporting Limit
Definitions: QCL - Quality Control Limit
D - Reporting Limit (RL) increased due to sample matrix

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House Ph II
Lab ID: H22100108-003
Client Sample ID: 220512-SB2-1

Report Date: 10/31/22
Collection Date: 10/04/22 10:24
Date Received: 10/05/22
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
1,1-Dichloropropene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
cis-1,3-Dichloropropene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
trans-1,3-Dichloropropene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
Ethylbenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
Methyl tert-butyl ether (MTBE)	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
Methylene chloride	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
Methyl ethyl ketone	ND	mg/kg-dry		4.0		SW8260B	10/12/22 02:19 / tmj
Styrene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
1,1,1,2-Tetrachloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
1,1,2,2-Tetrachloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
Tetrachloroethene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
Toluene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
1,1,1-Trichloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
1,1,2-Trichloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
Trichloroethene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
Trichlorofluoromethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
1,2,3-Trichloropropane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
Vinyl chloride	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
m+p-Xylenes	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
o-Xylene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
Xylenes, Total	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:19 / tmj
Surr: p-Bromofluorobenzene	104	%REC		60-143		SW8260B	10/12/22 02:19 / tmj
Surr: Dibromofluoromethane	77.0	%REC		71-135		SW8260B	10/12/22 02:19 / tmj
Surr: 1,2-Dichloroethane-d4	103	%REC		65-147		SW8260B	10/12/22 02:19 / tmj
Surr: Toluene-d8	105	%REC		76-133		SW8260B	10/12/22 02:19 / tmj
PETROLEUM HYDROCARBONS-VOLATILE (VPH)							
Methyl tert-butyl ether (MTBE)	ND	mg/kg-dry		0.10	0.078	MA-VPH	10/12/22 08:53 / GMS
Benzene	ND	mg/kg-dry		0.052	0.07	MA-VPH	10/12/22 08:53 / GMS
Toluene	ND	mg/kg-dry		0.052	21	MA-VPH	10/12/22 08:53 / GMS
Ethylbenzene	ND	mg/kg-dry		0.052	6.4	MA-VPH	10/12/22 08:53 / GMS
m+p-Xylenes	ND	mg/kg-dry		0.052		MA-VPH	10/12/22 08:53 / GMS
o-Xylene	ND	mg/kg-dry		0.052		MA-VPH	10/12/22 08:53 / GMS
Xylenes, Total	ND	mg/kg-dry		0.052	72	MA-VPH	10/12/22 08:53 / GMS
Naphthalene	ND	mg/kg-dry		0.10	2.2	MA-VPH	10/12/22 08:53 / GMS
C9 to C10 Aromatics	ND	mg/kg-dry		2.1	130	MA-VPH	10/12/22 08:53 / GMS
C5 to C8 Aliphatics	ND	mg/kg-dry		2.1	52	MA-VPH	10/12/22 08:53 / GMS
C9 to C12 Aliphatics	ND	mg/kg-dry		2.1	77	MA-VPH	10/12/22 08:53 / GMS
Total Purgeable Hydrocarbons	ND	mg/kg-dry		2.1	100	MA-VPH	10/12/22 08:53 / GMS
Surr: VPH Aromatics Surrogate	91.0	%REC		70-130		MA-VPH	10/12/22 08:53 / GMS
Surr: VPH Aliphatics Surrogate	92.0	%REC		70-130		MA-VPH	10/12/22 08:53 / GMS

- Note 1: The C5 to C8 Aliphatics value is corrected for aromatic constituents Benzene and Toluene.

- Note 2: The C9 to C12 Aliphatics value is corrected for aromatic constituents Ethylbenzene, m+p-Xylenes, o-Xylene and C9 to C10 Aromatics.

Report RL - Analyte Reporting Limit
Definitions: QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House Ph II
Lab ID: H22100108-003
Client Sample ID: 220512-SB2-1

Report Date: 10/31/22
Collection Date: 10/04/22 10:24
Date Received: 10/05/22
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
EXTRACTABLE PETROLEUM HYDROCARBONS-SCREEN ANALYSIS							
Total Extractable Hydrocarbons	27	mg/kg-dry		20	200	SW8015M	10/06/22 18:09 / jdh
Surr: o-Terphenyl	93.0	%REC		40-140		SW8015M	10/06/22 18:09 / jdh

- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.

Report
Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House Ph II
Lab ID: H22100108-004
Client Sample ID: 220512-SB2-2

Report Date: 10/31/22
Collection Date: 10/04/22 10:29
Date Received: 10/05/22
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	19.5	wt%		0.2		D2974	10/06/22 08:50 / jjp
3050 EXTRACTABLE METALS							
Arsenic	6	mg/kg-dry		1		SW6020	10/07/22 12:24 / dck
Barium	293	mg/kg-dry	D	4		SW6020	10/10/22 09:53 / dck
Cadmium	ND	mg/kg-dry		1		SW6020	10/07/22 12:24 / dck
Chromium	27	mg/kg-dry		2		SW6020	10/07/22 12:24 / dck
Lead	16	mg/kg-dry		1		SW6020	10/07/22 12:24 / dck
Selenium	ND	mg/kg-dry		1		SW6020	10/07/22 12:24 / dck
Silver	ND	mg/kg-dry		1		SW6020	10/07/22 12:24 / dck
METALS, TOTAL							
Mercury	ND	mg/kg-dry		0.50		SW7471B	10/07/22 12:22 / kjb
VOLATILE ORGANIC COMPOUNDS							
Bromoform	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
Benzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
Bromobenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
Bromochloromethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
Bromodichloromethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
Bromomethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
Carbon tetrachloride	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
Chlorobenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
Chloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
2-Chloroethyl vinyl ether	ND	mg/kg-dry		0.20		SW8260B	10/12/22 21:23 / tmj
Chloroform	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
Chloromethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
2-Chlorotoluene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
4-Chlorotoluene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
Chlorodibromomethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
1,2-Dibromoethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
Dibromomethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
1,2-Dichlorobenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
1,3-Dichlorobenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
1,4-Dichlorobenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
Dichlorodifluoromethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
1,1-Dichloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
1,2-Dichloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
cis-1,2-Dichloroethene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
1,1-Dichloroethene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
trans-1,2-Dichloroethene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
1,2-Dichloropropane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
1,3-Dichloropropane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
2,2-Dichloropropane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj

Report RL - Analyte Reporting Limit

Definitions: QCL - Quality Control Limit

D - Reporting Limit (RL) increased due to sample matrix

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House Ph II
Lab ID: H22100108-004
Client Sample ID: 220512-SB2-2

Report Date: 10/31/22
Collection Date: 10/04/22 10:29
Date Received: 10/05/22
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
1,1-Dichloropropene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
cis-1,3-Dichloropropene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
trans-1,3-Dichloropropene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
Ethylbenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
Methyl tert-butyl ether (MTBE)	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
Methylene chloride	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
Methyl ethyl ketone	ND	mg/kg-dry		4.0		SW8260B	10/12/22 02:51 / tmj
Styrene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
1,1,1,2-Tetrachloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
1,1,2,2-Tetrachloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
Tetrachloroethene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
Toluene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
1,1,1-Trichloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
1,1,2-Trichloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
Trichloroethene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
Trichlorofluoromethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
1,2,3-Trichloropropane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
Vinyl chloride	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
m+p-Xylenes	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
o-Xylene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
Xylenes, Total	ND	mg/kg-dry		0.20		SW8260B	10/12/22 02:51 / tmj
Surr: p-Bromofluorobenzene	90.0	%REC		60-143		SW8260B	10/12/22 02:51 / tmj
Surr: Dibromofluoromethane	88.0	%REC		71-135		SW8260B	10/12/22 02:51 / tmj
Surr: 1,2-Dichloroethane-d4	86.0	%REC		65-147		SW8260B	10/12/22 02:51 / tmj
Surr: Toluene-d8	89.0	%REC		76-133		SW8260B	10/12/22 02:51 / tmj
PETROLEUM HYDROCARBONS-VOLATILE (VPH)							
Methyl tert-butyl ether (MTBE)	ND	mg/kg-dry		0.12	0.078	MA-VPH	10/12/22 09:24 / GMS
Benzene	ND	mg/kg-dry		0.062	0.07	MA-VPH	10/12/22 09:24 / GMS
Toluene	ND	mg/kg-dry		0.062	21	MA-VPH	10/12/22 09:24 / GMS
Ethylbenzene	ND	mg/kg-dry		0.062	6.4	MA-VPH	10/12/22 09:24 / GMS
m+p-Xylenes	ND	mg/kg-dry		0.062		MA-VPH	10/12/22 09:24 / GMS
o-Xylene	ND	mg/kg-dry		0.062		MA-VPH	10/12/22 09:24 / GMS
Xylenes, Total	ND	mg/kg-dry		0.062	72	MA-VPH	10/12/22 09:24 / GMS
Naphthalene	ND	mg/kg-dry		0.12	2.2	MA-VPH	10/12/22 09:24 / GMS
C9 to C10 Aromatics	ND	mg/kg-dry		2.5	130	MA-VPH	10/12/22 09:24 / GMS
C5 to C8 Aliphatics	ND	mg/kg-dry		2.5	52	MA-VPH	10/12/22 09:24 / GMS
C9 to C12 Aliphatics	ND	mg/kg-dry		2.5	77	MA-VPH	10/12/22 09:24 / GMS
Total Purgeable Hydrocarbons	ND	mg/kg-dry		2.5	100	MA-VPH	10/12/22 09:24 / GMS
Surr: VPH Aromatics Surrogate	91.0	%REC		70-130		MA-VPH	10/12/22 09:24 / GMS
Surr: VPH Aliphatics Surrogate	93.0	%REC		70-130		MA-VPH	10/12/22 09:24 / GMS

- Note 1: The C5 to C8 Aliphatics value is corrected for aromatic constituents Benzene and Toluene.

- Note 2: The C9 to C12 Aliphatics value is corrected for aromatic constituents Ethylbenzene, m+p-Xylenes, o-Xylene and C9 to C10 Aromatics.

Report RL - Analyte Reporting Limit
Definitions: QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House Ph II
Lab ID: H22100108-004
Client Sample ID: 220512-SB2-2

Report Date: 10/31/22
Collection Date: 10/04/22 10:29
Date Received: 10/05/22
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
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EXTRACTABLE PETROLEUM HYDROCARBONS-SCREEN ANALYSIS

Total Extractable Hydrocarbons	ND	mg/kg-dry		20	200	SW8015M	10/06/22 18:56 / jdh
Surr: o-Terphenyl	89.0	%REC		40-140		SW8015M	10/06/22 18:56 / jdh

- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.

Report
Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House Ph II
Lab ID: H22100108-005
Client Sample ID: 220512-SB3-1

Report Date: 10/31/22
Collection Date: 10/04/22 09:16
Date Received: 10/05/22
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	4.8	wt%		0.2		D2974	10/06/22 08:50 / jjp
3050 EXTRACTABLE METALS							
Arsenic	17	mg/kg-dry		1		SW6020	10/10/22 10:00 / dck
Barium	107	mg/kg-dry		1		SW6020	10/11/22 11:37 / dck
Cadmium	ND	mg/kg-dry		1		SW6020	10/10/22 10:00 / dck
Chromium	12	mg/kg-dry		1		SW6020	10/10/22 10:00 / dck
Lead	41	mg/kg-dry		1		SW6020	10/10/22 10:00 / dck
Selenium	ND	mg/kg-dry		1		SW6020	10/10/22 10:00 / dck
Silver	ND	mg/kg-dry		1		SW6020	10/10/22 10:00 / dck
METALS, TOTAL							
Mercury	ND	mg/kg-dry		0.50		SW7471B	10/07/22 12:24 / kjb
VOLATILE ORGANIC COMPOUNDS							
Bromoform	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
Benzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
Bromobenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
Bromochloromethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
Bromodichloromethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
Bromomethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
Carbon tetrachloride	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
Chlorobenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
Chloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
2-Chloroethyl vinyl ether	ND	mg/kg-dry		0.20		SW8260B	10/12/22 21:54 / tmj
Chloroform	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
Chloromethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
2-Chlorotoluene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
4-Chlorotoluene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
Chlorodibromomethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
1,2-Dibromoethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
Dibromomethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
1,2-Dichlorobenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
1,3-Dichlorobenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
1,4-Dichlorobenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
Dichlorodifluoromethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
1,1-Dichloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
1,2-Dichloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
cis-1,2-Dichloroethene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
1,1-Dichloroethene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
trans-1,2-Dichloroethene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
1,2-Dichloropropane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
1,3-Dichloropropane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
2,2-Dichloropropane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj

Report RL - Analyte Reporting Limit
Definitions: QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House Ph II
Lab ID: H22100108-005
Client Sample ID: 220512-SB3-1

Report Date: 10/31/22
Collection Date: 10/04/22 09:16
Date Received: 10/05/22
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
1,1-Dichloropropene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
cis-1,3-Dichloropropene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
trans-1,3-Dichloropropene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
Ethylbenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
Methyl tert-butyl ether (MTBE)	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
Methylene chloride	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
Methyl ethyl ketone	ND	mg/kg-dry		4.0		SW8260B	10/12/22 03:23 / tmj
Styrene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
1,1,1,2-Tetrachloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
1,1,2,2-Tetrachloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
Tetrachloroethene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
Toluene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
1,1,1-Trichloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
1,1,2-Trichloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
Trichloroethene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
Trichlorofluoromethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
1,2,3-Trichloropropane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
Vinyl chloride	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
m+p-Xylenes	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
o-Xylene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
Xylenes, Total	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:23 / tmj
Surr: p-Bromofluorobenzene	99.0	%REC		60-143		SW8260B	10/12/22 03:23 / tmj
Surr: Dibromofluoromethane	97.0	%REC		71-135		SW8260B	10/12/22 03:23 / tmj
Surr: 1,2-Dichloroethane-d4	97.0	%REC		65-147		SW8260B	10/12/22 03:23 / tmj
Surr: Toluene-d8	98.0	%REC		76-133		SW8260B	10/12/22 03:23 / tmj
PETROLEUM HYDROCARBONS-VOLATILE (VPH)							
Methyl tert-butyl ether (MTBE)	ND	mg/kg-dry		0.10	0.078	MA-VPH	10/14/22 07:18 / GMS
Benzene	ND	mg/kg-dry		0.052	0.07	MA-VPH	10/14/22 07:18 / GMS
Toluene	ND	mg/kg-dry		0.052	21	MA-VPH	10/14/22 07:18 / GMS
Ethylbenzene	ND	mg/kg-dry		0.052	6.4	MA-VPH	10/14/22 07:18 / GMS
m+p-Xylenes	ND	mg/kg-dry		0.052		MA-VPH	10/14/22 07:18 / GMS
o-Xylene	ND	mg/kg-dry		0.052		MA-VPH	10/14/22 07:18 / GMS
Xylenes, Total	ND	mg/kg-dry		0.052	72	MA-VPH	10/14/22 07:18 / GMS
Naphthalene	ND	mg/kg-dry		0.10	2.2	MA-VPH	10/14/22 07:18 / GMS
C9 to C10 Aromatics	ND	mg/kg-dry		2.1	130	MA-VPH	10/14/22 07:18 / GMS
C5 to C8 Aliphatics	ND	mg/kg-dry		2.1	52	MA-VPH	10/14/22 07:18 / GMS
C9 to C12 Aliphatics	ND	mg/kg-dry		2.1	77	MA-VPH	10/14/22 07:18 / GMS
Total Purgeable Hydrocarbons	ND	mg/kg-dry		2.1	100	MA-VPH	10/14/22 07:18 / GMS
Surr: VPH Aromatics Surrogate	92.0	%REC		70-130		MA-VPH	10/14/22 07:18 / GMS
Surr: VPH Aliphatics Surrogate	104	%REC		70-130		MA-VPH	10/14/22 07:18 / GMS

- Note 1: The C5 to C8 Aliphatics value is corrected for aromatic constituents Benzene and Toluene.

- Note 2: The C9 to C12 Aliphatics value is corrected for aromatic constituents Ethylbenzene, m+p-Xylenes, o-Xylene and C9 to C10 Aromatics.

Report RL - Analyte Reporting Limit
Definitions: QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House Ph II
Lab ID: H22100108-005
Client Sample ID: 220512-SB3-1

Report Date: 10/31/22
Collection Date: 10/04/22 09:16
Date Received: 10/05/22
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
EXTRACTABLE PETROLEUM HYDROCARBONS-SCREEN ANALYSIS							
Total Extractable Hydrocarbons	826	mg/kg-dry	*	52	200	SW8015M	10/06/22 22:48 / jdh
Surr: o-Terphenyl	77.0	%REC		40-140		SW8015M	10/06/22 22:48 / jdh
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.							
EXTRACTABLE PETROLEUM HYDROCARBONS (EPH)							
C9 to C18 Aliphatics	ND	mg/kg-dry		10	110	MA-EPH	10/17/22 19:04 / kmm
C19 to C36 Aliphatics	165	mg/kg-dry		10	24000	MA-EPH	10/17/22 19:04 / kmm
Surr: 1-Chloro-octadecane	66.0	%REC		40-140		MA-EPH	10/17/22 19:04 / kmm
C11 to C22 Aromatics	129	mg/kg-dry		10	370	MA-EPH	10/17/22 19:47 / kmm
Total Extractable Hydrocarbons	472	mg/kg-dry		10		MA-EPH	10/17/22 19:47 / kmm
Surr: 2-Bromonaphthalene	70.0	%REC		40-140		MA-EPH	10/17/22 19:47 / kmm
Surr: 2-Fluorobiphenyl	79.0	%REC		40-140		MA-EPH	10/17/22 19:47 / kmm
Surr: o-Terphenyl	68.0	%REC		40-140		MA-EPH	10/17/22 19:47 / kmm

Report Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit
* - The result exceeds the Maximum Contaminant Level (MCL)

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House Ph II
Lab ID: H22100108-006
Client Sample ID: 220512-SB3-2

Report Date: 10/31/22
Collection Date: 10/04/22 09:26
Date Received: 10/05/22
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	21.5	wt%		0.2		D2974	10/06/22 08:50 / jip
3050 EXTRACTABLE METALS							
Arsenic	7	mg/kg-dry		1		SW6020	10/07/22 12:27 / dck
Barium	582	mg/kg-dry	D	4		SW6020	10/10/22 09:55 / dck
Cadmium	ND	mg/kg-dry		1		SW6020	10/07/22 12:27 / dck
Chromium	21	mg/kg-dry		2		SW6020	10/07/22 12:27 / dck
Lead	13	mg/kg-dry		1		SW6020	10/07/22 12:27 / dck
Selenium	ND	mg/kg-dry		1		SW6020	10/07/22 12:27 / dck
Silver	ND	mg/kg-dry		1		SW6020	10/07/22 12:27 / dck
METALS, TOTAL							
Mercury	ND	mg/kg-dry		0.50		SW7471B	10/07/22 12:26 / kjb
VOLATILE ORGANIC COMPOUNDS							
Bromoform	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
Benzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
Bromobenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
Bromochloromethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
Bromodichloromethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
Bromomethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
Carbon tetrachloride	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
Chlorobenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
Chloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
2-Chloroethyl vinyl ether	ND	mg/kg-dry		0.20		SW8260B	10/12/22 22:26 / tmj
Chloroform	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
Chloromethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
2-Chlorotoluene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
4-Chlorotoluene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
Chlorodibromomethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
1,2-Dibromoethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
Dibromomethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
1,2-Dichlorobenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
1,3-Dichlorobenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
1,4-Dichlorobenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
Dichlorodifluoromethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
1,1-Dichloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
1,2-Dichloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
cis-1,2-Dichloroethene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
1,1-Dichloroethene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
trans-1,2-Dichloroethene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
1,2-Dichloropropane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
1,3-Dichloropropane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
2,2-Dichloropropane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj

Report RL - Analyte Reporting Limit

Definitions: QCL - Quality Control Limit

D - Reporting Limit (RL) increased due to sample matrix

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House Ph II
Lab ID: H22100108-006
Client Sample ID: 220512-SB3-2

Report Date: 10/31/22
Collection Date: 10/04/22 09:26
Date Received: 10/05/22
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
1,1-Dichloropropene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
cis-1,3-Dichloropropene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
trans-1,3-Dichloropropene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
Ethylbenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
Methyl tert-butyl ether (MTBE)	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
Methylene chloride	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
Methyl ethyl ketone	ND	mg/kg-dry		4.0		SW8260B	10/12/22 03:55 / tmj
Styrene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
1,1,1,2-Tetrachloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
1,1,2,2-Tetrachloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
Tetrachloroethene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
Toluene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
1,1,1-Trichloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
1,1,2-Trichloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
Trichloroethene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
Trichlorofluoromethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
1,2,3-Trichloropropane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
Vinyl chloride	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
m+p-Xylenes	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
o-Xylene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
Xylenes, Total	ND	mg/kg-dry		0.20		SW8260B	10/12/22 03:55 / tmj
Surr: p-Bromofluorobenzene	88.0	%REC		60-143		SW8260B	10/12/22 03:55 / tmj
Surr: Dibromofluoromethane	83.0	%REC		71-135		SW8260B	10/12/22 03:55 / tmj
Surr: 1,2-Dichloroethane-d4	81.0	%REC		65-147		SW8260B	10/12/22 03:55 / tmj
Surr: Toluene-d8	85.0	%REC		76-133		SW8260B	10/12/22 03:55 / tmj
PETROLEUM HYDROCARBONS-VOLATILE (VPH)							
Methyl tert-butyl ether (MTBE)	ND	mg/kg-dry		0.13	0.078	MA-VPH	10/14/22 03:14 / GMS
Benzene	ND	mg/kg-dry		0.064	0.07	MA-VPH	10/14/22 03:14 / GMS
Toluene	ND	mg/kg-dry		0.064	21	MA-VPH	10/14/22 03:14 / GMS
Ethylbenzene	ND	mg/kg-dry		0.064	6.4	MA-VPH	10/14/22 03:14 / GMS
m+p-Xylenes	ND	mg/kg-dry		0.064		MA-VPH	10/14/22 03:14 / GMS
o-Xylene	ND	mg/kg-dry		0.064		MA-VPH	10/14/22 03:14 / GMS
Xylenes, Total	ND	mg/kg-dry		0.064	72	MA-VPH	10/14/22 03:14 / GMS
Naphthalene	ND	mg/kg-dry		0.13	2.2	MA-VPH	10/14/22 03:14 / GMS
C9 to C10 Aromatics	ND	mg/kg-dry		2.5	130	MA-VPH	10/14/22 03:14 / GMS
C5 to C8 Aliphatics	ND	mg/kg-dry		2.5	52	MA-VPH	10/14/22 03:14 / GMS
C9 to C12 Aliphatics	ND	mg/kg-dry		2.5	77	MA-VPH	10/14/22 03:14 / GMS
Total Purgeable Hydrocarbons	ND	mg/kg-dry		2.5	100	MA-VPH	10/14/22 03:14 / GMS
Surr: VPH Aromatics Surrogate	83.0	%REC		70-130		MA-VPH	10/14/22 03:14 / GMS
Surr: VPH Aliphatics Surrogate	85.0	%REC		70-130		MA-VPH	10/14/22 03:14 / GMS

- Note 1: The C5 to C8 Aliphatics value is corrected for aromatic constituents Benzene and Toluene.

- Note 2: The C9 to C12 Aliphatics value is corrected for aromatic constituents Ethylbenzene, m+p-Xylenes, o-Xylene and C9 to C10 Aromatics.

Report RL - Analyte Reporting Limit
Definitions: QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House Ph II
Lab ID: H22100108-006
Client Sample ID: 220512-SB3-2

Report Date: 10/31/22
Collection Date: 10/04/22 09:26
Date Received: 10/05/22
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
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EXTRACTABLE PETROLEUM HYDROCARBONS-SCREEN ANALYSIS

Total Extractable Hydrocarbons	ND	mg/kg-dry		20	200	SW8015M	10/06/22 19:42 / jdh
Surr: o-Terphenyl	109	%REC		40-140		SW8015M	10/06/22 19:42 / jdh

- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.

Report
Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House Ph II
Lab ID: H22100108-007
Client Sample ID: 220512-SB4-2

Report Date: 10/31/22
Collection Date: 10/04/22 08:10
Date Received: 10/05/22
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	19.9	wt%		0.2		D2974	10/06/22 08:50 / jip
3050 EXTRACTABLE METALS							
Arsenic	6	mg/kg-dry		1		SW6020	10/07/22 12:29 / dck
Barium	353	mg/kg-dry	D	4		SW6020	10/10/22 09:58 / dck
Cadmium	ND	mg/kg-dry		1		SW6020	10/07/22 12:29 / dck
Chromium	24	mg/kg-dry		1		SW6020	10/07/22 12:29 / dck
Lead	16	mg/kg-dry		1		SW6020	10/07/22 12:29 / dck
Selenium	ND	mg/kg-dry		1		SW6020	10/07/22 12:29 / dck
Silver	ND	mg/kg-dry		1		SW6020	10/07/22 12:29 / dck
METALS, TOTAL							
Mercury	ND	mg/kg-dry		0.50		SW7471B	10/07/22 12:29 / kjb
VOLATILE ORGANIC COMPOUNDS							
Bromoform	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
Benzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
Bromobenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
Bromochloromethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
Bromodichloromethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
Bromomethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
Carbon tetrachloride	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
Chlorobenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
Chloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
2-Chloroethyl vinyl ether	ND	mg/kg-dry		0.20		SW8260B	10/12/22 22:57 / tmj
Chloroform	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
Chloromethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
2-Chlorotoluene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
4-Chlorotoluene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
Chlorodibromomethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
1,2-Dibromoethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
Dibromomethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
1,2-Dichlorobenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
1,3-Dichlorobenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
1,4-Dichlorobenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
Dichlorodifluoromethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
1,1-Dichloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
1,2-Dichloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
cis-1,2-Dichloroethene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
1,1-Dichloroethene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
trans-1,2-Dichloroethene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
1,2-Dichloropropane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
1,3-Dichloropropane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
2,2-Dichloropropane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj

Report RL - Analyte Reporting Limit

Definitions: QCL - Quality Control Limit

D - Reporting Limit (RL) increased due to sample matrix

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House Ph II
Lab ID: H22100108-007
Client Sample ID: 220512-SB4-2

Report Date: 10/31/22
Collection Date: 10/04/22 08:10
Date Received: 10/05/22
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
1,1-Dichloropropene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
cis-1,3-Dichloropropene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
trans-1,3-Dichloropropene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
Ethylbenzene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
Methyl tert-butyl ether (MTBE)	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
Methylene chloride	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
Methyl ethyl ketone	ND	mg/kg-dry		4.0		SW8260B	10/12/22 04:27 / tmj
Styrene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
1,1,1,2-Tetrachloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
1,1,2,2-Tetrachloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
Tetrachloroethene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
Toluene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
1,1,1-Trichloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
1,1,2-Trichloroethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
Trichloroethene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
Trichlorofluoromethane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
1,2,3-Trichloropropane	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
Vinyl chloride	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
m+p-Xylenes	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
o-Xylene	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
Xylenes, Total	ND	mg/kg-dry		0.20		SW8260B	10/12/22 04:27 / tmj
Surr: p-Bromofluorobenzene	82.0	%REC		60-143		SW8260B	10/12/22 04:27 / tmj
Surr: Dibromofluoromethane	79.0	%REC		71-135		SW8260B	10/12/22 04:27 / tmj
Surr: 1,2-Dichloroethane-d4	78.0	%REC		65-147		SW8260B	10/12/22 04:27 / tmj
Surr: Toluene-d8	79.0	%REC		76-133		SW8260B	10/12/22 04:27 / tmj
PETROLEUM HYDROCARBONS-VOLATILE (VPH)							
Methyl tert-butyl ether (MTBE)	ND	mg/kg-dry		0.13	0.078	MA-VPH	10/14/22 03:45 / GMS
Benzene	ND	mg/kg-dry		0.063	0.07	MA-VPH	10/14/22 03:45 / GMS
Toluene	ND	mg/kg-dry		0.063	21	MA-VPH	10/14/22 03:45 / GMS
Ethylbenzene	ND	mg/kg-dry		0.063	6.4	MA-VPH	10/14/22 03:45 / GMS
m+p-Xylenes	ND	mg/kg-dry		0.063		MA-VPH	10/14/22 03:45 / GMS
o-Xylene	ND	mg/kg-dry		0.063		MA-VPH	10/14/22 03:45 / GMS
Xylenes, Total	ND	mg/kg-dry		0.063	72	MA-VPH	10/14/22 03:45 / GMS
Naphthalene	ND	mg/kg-dry		0.13	2.2	MA-VPH	10/14/22 03:45 / GMS
C9 to C10 Aromatics	ND	mg/kg-dry		2.5	130	MA-VPH	10/14/22 03:45 / GMS
C5 to C8 Aliphatics	ND	mg/kg-dry		2.5	52	MA-VPH	10/14/22 03:45 / GMS
C9 to C12 Aliphatics	ND	mg/kg-dry		2.5	77	MA-VPH	10/14/22 03:45 / GMS
Total Purgeable Hydrocarbons	ND	mg/kg-dry		2.5	100	MA-VPH	10/14/22 03:45 / GMS
Surr: VPH Aromatics Surrogate	80.0	%REC		70-130		MA-VPH	10/14/22 03:45 / GMS
Surr: VPH Aliphatics Surrogate	81.0	%REC		70-130		MA-VPH	10/14/22 03:45 / GMS

- Note 1: The C5 to C8 Aliphatics value is corrected for aromatic constituents Benzene and Toluene.

- Note 2: The C9 to C12 Aliphatics value is corrected for aromatic constituents Ethylbenzene, m+p-Xylenes, o-Xylene and C9 to C10 Aromatics.

Report RL - Analyte Reporting Limit
Definitions: QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House Ph II
Lab ID: H22100108-007
Client Sample ID: 220512-SB4-2

Report Date: 10/31/22
Collection Date: 10/04/22 08:10
Date Received: 10/05/22
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
EXTRACTABLE PETROLEUM HYDROCARBONS-SCREEN ANALYSIS							
Total Extractable Hydrocarbons	ND	mg/kg-dry		20	200	SW8015M	10/06/22 20:28 / jdh
Surr: o-Terphenyl	90.0	%REC		40-140		SW8015M	10/06/22 20:28 / jdh

- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.

Report
Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House Ph II
Lab ID: H22100108-008
Client Sample ID: 220512-SW1

Report Date: 10/31/22
Collection Date: 10/04/22 11:30
Date Received: 10/05/22
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, TOTAL RECOVERABLE							
Arsenic	ND	mg/L		0.001		SW6020	10/10/22 23:26 / dck
Barium	ND	mg/L		0.05		SW6020	10/10/22 23:26 / dck
Cadmium	ND	mg/L		0.001		SW6020	10/10/22 23:26 / dck
Chromium	ND	mg/L		0.005		SW6020	10/10/22 23:26 / dck
Lead	ND	mg/L		0.001		SW6020	10/10/22 23:26 / dck
Selenium	ND	mg/L		0.001		SW6020	10/10/22 23:26 / dck
Silver	ND	mg/L		0.001		SW6020	10/10/22 23:26 / dck
METALS, TOTAL							
Mercury	ND	mg/L		0.0001		SW7470A	10/06/22 15:54 / cfg
VOLATILE ORGANIC COMPOUNDS							
Benzene	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
Bromobenzene	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
Bromochloromethane	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
Bromodichloromethane	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
Bromoform	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
Bromomethane	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
Chlorobenzene	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
Chlorodibromomethane	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
Chloroethane	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
Chloroform	0.37	ug/L	J	1.0		SW8260B	10/05/22 13:59 / tmj
Chloromethane	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
1,2-Dibromoethane	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
2-Chlorotoluene	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
4-Chlorotoluene	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
Dibromomethane	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
1,2-Dichlorobenzene	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
1,3-Dichlorobenzene	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
1,4-Dichlorobenzene	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
Dichlorodifluoromethane	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
1,1-Dichloroethane	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
1,2-Dichloroethane	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
1,1-Dichloroethene	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
cis-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
trans-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
1,2-Dichloropropane	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
1,3-Dichloropropane	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
2,2-Dichloropropane	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
1,1-Dichloropropene	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
cis-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
trans-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj

Report	RL - Analyte Reporting Limit	MCL - Maximum Contaminant Level
Definitions:	QCL - Quality Control Limit	ND - Not detected at the Reporting Limit (RL)
	J - Estimated value - analyte was present but less than the Reporting Limit (RL)	



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House Ph II
Lab ID: H22100108-008
Client Sample ID: 220512-SW1

Report Date: 10/31/22
Collection Date: 10/04/22 11:30
Date Received: 10/05/22
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Ethylbenzene	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
Methyl ethyl ketone	ND	ug/L		20		SW8260B	10/05/22 13:59 / tmj
Methyl tert-butyl ether (MTBE)	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
Methylene chloride	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
Styrene	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
1,1,1,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
Tetrachloroethene	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
Toluene	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
1,1,1-Trichloroethane	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
1,1,2-Trichloroethane	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
Trichloroethene	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
Trichlorofluoromethane	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
1,2,3-Trichloropropane	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
Vinyl chloride	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
m+p-Xylenes	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
o-Xylene	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
Xylenes, Total	ND	ug/L		1.0		SW8260B	10/05/22 13:59 / tmj
Surr: Dibromofluoromethane	98.0	%REC		70-125		SW8260B	10/05/22 13:59 / tmj
Surr: 1,2-Dichloroethane-d4	105	%REC		69-131		SW8260B	10/05/22 13:59 / tmj
Surr: Toluene-d8	86.0	%REC		80-119		SW8260B	10/05/22 13:59 / tmj
Surr: p-Bromofluorobenzene	109	%REC		76-123		SW8260B	10/05/22 13:59 / tmj
PETROLEUM HYDROCARBONS-VOLATILE (VPH)							
Methyl tert-butyl ether (MTBE)	ND	ug/L		1.0	30	MA-VPH	10/10/22 18:37 / GMS
Benzene	ND	ug/L		0.50	5	MA-VPH	10/10/22 18:37 / GMS
Toluene	ND	ug/L		0.50	1000	MA-VPH	10/10/22 18:37 / GMS
Ethylbenzene	ND	ug/L		0.50	700	MA-VPH	10/10/22 18:37 / GMS
m+p-Xylenes	ND	ug/L		0.50		MA-VPH	10/10/22 18:37 / GMS
o-Xylene	ND	ug/L		0.50		MA-VPH	10/10/22 18:37 / GMS
Xylenes, Total	ND	ug/L		0.50	10000	MA-VPH	10/10/22 18:37 / GMS
Naphthalene	ND	ug/L		1.0	100	MA-VPH	10/10/22 18:37 / GMS
C9 to C10 Aromatics	ND	ug/L		20	1100	MA-VPH	10/10/22 18:37 / GMS
C5 to C8 Aliphatics	ND	ug/L		20	650	MA-VPH	10/10/22 18:37 / GMS
C9 to C12 Aliphatics	ND	ug/L		20	1400	MA-VPH	10/10/22 18:37 / GMS
Total Purgeable Hydrocarbons	ND	ug/L		20		MA-VPH	10/10/22 18:37 / GMS
Surr: VPH Aromatics Surrogate	99.0	%REC		70-130		MA-VPH	10/10/22 18:37 / GMS
Surr: VPH Aliphatics Surrogate	106	%REC		70-130		MA-VPH	10/10/22 18:37 / GMS
- Note 1: The C5 to C8 Aliphatics value is corrected for aromatic constituents Benzene and Toluene. - Note 2: The C9 to C12 Aliphatics value is corrected for aromatic constituents Ethylbenzene, m+p-Xylenes, o-Xylene and C9 to C10 Aromatics.							
EXTRACTABLE PETROLEUM HYDROCARBONS-SCREEN ANALYSIS							
Total Extractable Hydrocarbons	ND	ug/L		322	1000	SW8015M	10/05/22 21:51 / jdH
Surr: o-Terphenyl	88.0	%REC		40-140		SW8015M	10/05/22 21:51 / jdH

Report RL - Analyte Reporting Limit
Definitions: QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House Ph II
Lab ID: H22100108-008
Client Sample ID: 220512-SW1

Report Date: 10/31/22
Collection Date: 10/04/22 11:30
Date Received: 10/05/22
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
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EXTRACTABLE PETROLEUM HYDROCARBONS-SCREEN ANALYSIS

- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.

Report
Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House Ph II
Lab ID: H22100108-009
Client Sample ID: Trip Blank-11245

Report Date: 10/31/22
Collection Date: 10/04/22 11:30
Date Received: 10/05/22
Matrix: Trip Blank

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Benzene	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
Bromobenzene	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
Bromochloromethane	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
Bromodichloromethane	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
Bromoform	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
Bromomethane	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
Carbon tetrachloride	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
Chlorobenzene	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
Chlorodibromomethane	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
Chloroethane	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
Chloroform	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
Chloromethane	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
1,2-Dibromoethane	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
2-Chlorotoluene	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
4-Chlorotoluene	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
Dibromomethane	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
1,2-Dichlorobenzene	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
1,3-Dichlorobenzene	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
1,4-Dichlorobenzene	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
Dichlorodifluoromethane	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
1,1-Dichloroethane	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
1,2-Dichloroethane	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
1,1-Dichloroethene	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
cis-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
trans-1,2-Dichloroethene	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
1,2-Dichloropropane	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
1,3-Dichloropropane	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
2,2-Dichloropropane	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
1,1-Dichloropropene	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
cis-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
trans-1,3-Dichloropropene	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
Ethylbenzene	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
Methyl ethyl ketone	ND	ug/L		20		SW8260B	10/05/22 16:16 / tmj
Methyl tert-butyl ether (MTBE)	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
Methylene chloride	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
Styrene	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
1,1,1,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
Tetrachloroethene	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
Toluene	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
1,1,1-Trichloroethane	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
1,1,2-Trichloroethane	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
Trichloroethene	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj

Report RL - Analyte Reporting Limit
Definitions: QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: WGM Group Inc
Project: Samaritan House Ph II
Lab ID: H22100108-009
Client Sample ID: Trip Blank-11245

Report Date: 10/31/22
Collection Date: 10/04/22 11:30
Date Received: 10/05/22
Matrix: Trip Blank

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Trichlorofluoromethane	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
1,2,3-Trichloropropane	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
Vinyl chloride	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
m+p-Xylenes	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
o-Xylene	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
Xylenes, Total	ND	ug/L		1.0		SW8260B	10/05/22 16:16 / tmj
Surr: Dibromofluoromethane	102	%REC		70-125		SW8260B	10/05/22 16:16 / tmj
Surr: 1,2-Dichloroethane-d4	108	%REC		69-131		SW8260B	10/05/22 16:16 / tmj
Surr: Toluene-d8	84.0	%REC		80-119		SW8260B	10/05/22 16:16 / tmj
Surr: p-Bromofluorobenzene	108	%REC		76-123		SW8260B	10/05/22 16:16 / tmj

Report RL - Analyte Reporting Limit
Definitions: QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: D2974								Batch: PMOIST_221006_A		
Lab ID: H22100108-007A DUP		Sample Duplicate		Run: SOIL DRYING OVEN 2_22100				10/06/22 08:50		
Moisture		20.2	wt%	0.20				1.6	20	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: MA-EPH										Batch: 63895
Lab ID: MB-63895-63743	3	Method Blank				Run: HP3B_221016A				10/17/22 09:04
C9 to C18 Aliphatics		ND	mg/kg	10						
C19 to C36 Aliphatics		ND	mg/kg	10						
Surr: 1-Chloro-octadecane				0.17	40	40	140			
Lab ID: LCS-63895-63743	17	Laboratory Control Sample				Run: HP3B_221016A				10/17/22 10:30
C9 to C18 Aliphatics		28.3	mg/kg	10	71	40	140			
C19 to C36 Aliphatics		47.5	mg/kg	10	89	40	140			
n-Nonane		2.44	mg/kg	0.17	37	30	140			
n-Decane		3.46	mg/kg	0.17	52	40	140			
n-Dodecane		4.18	mg/kg	0.17	63	40	140			
n-Tetradecane		4.63	mg/kg	0.17	70	40	140			
n-Hexadecane		5.07	mg/kg	0.17	76	40	140			
n-Octadecane		5.34	mg/kg	0.17	80	40	140			
n-Nonadecane		5.57	mg/kg	0.17	84	40	140			
n-Eicosane		5.80	mg/kg	0.17	87	40	140			
n-Docosane		5.91	mg/kg	0.17	89	40	140			
n-Tetracosane		6.01	mg/kg	0.17	90	40	140			
n-Hexacosane		6.01	mg/kg	0.17	90	40	140			
n-Octacosane		5.88	mg/kg	0.17	88	40	140			
n-Triacontane		5.75	mg/kg	0.17	86	40	140			
n-Hexatriacontane		6.07	mg/kg	0.17	91	40	140			
Surr: 1-Chloro-octadecane				0.17	79	40	140			
Lab ID: H22100037-002AMS	17	Sample Matrix Spike				Run: HP3B_221016A				10/17/22 20:30
C9 to C18 Aliphatics		37.9	mg/kg-dry	13	72	40	140			
C19 to C36 Aliphatics		94.8	mg/kg-dry	13	109	40	140			
n-Nonane		3.43	mg/kg-dry	0.22	39	30	140			
n-Decane		4.73	mg/kg-dry	0.22	54	40	140			
n-Dodecane		5.61	mg/kg-dry	0.22	64	40	140			
n-Tetradecane		6.14	mg/kg-dry	0.22	70	40	140			
n-Hexadecane		6.57	mg/kg-dry	0.22	75	40	140			
n-Octadecane		6.98	mg/kg-dry	0.22	80	40	140			
n-Nonadecane		7.23	mg/kg-dry	0.22	83	40	140			
n-Eicosane		7.94	mg/kg-dry	0.22	85	40	140			
n-Docosane		7.56	mg/kg-dry	0.22	85	40	140			
n-Tetracosane		7.70	mg/kg-dry	0.22	86	40	140			
n-Hexacosane		7.74	mg/kg-dry	0.22	86	40	140			
n-Octacosane		7.47	mg/kg-dry	0.22	83	40	140			
n-Triacontane		6.45	mg/kg-dry	0.22	74	40	140			
n-Hexatriacontane		7.43	mg/kg-dry	0.22	83	40	140			
Surr: 1-Chloro-octadecane				0.22	71	40	140			
Lab ID: H22100037-002AMSD	17	Sample Matrix Spike Duplicate				Run: HP3B_221016A				10/17/22 21:57
C9 to C18 Aliphatics		39.5	mg/kg-dry	13	76	40	140	4.2	20	
C19 to C36 Aliphatics		87.8	mg/kg-dry	13	99	40	140	7.7	20	
n-Nonane		3.18	mg/kg-dry	0.22	37	30	140	7.3	30	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: MA-EPH										Batch: 63895
Lab ID: H22100037-002AMSD	17	Sample Matrix Spike Duplicate			Run: HP3B_221016A				10/17/22 21:57	
n-Decane		4.76	mg/kg-dry	0.22	55	40	140	0.6	20	
n-Dodecane		5.88	mg/kg-dry	0.22	68	40	140	4.7	20	
n-Tetradecane		6.40	mg/kg-dry	0.22	74	40	140	4.1	20	
n-Hexadecane		6.98	mg/kg-dry	0.22	80	40	140	6.1	20	
n-Octadecane		7.54	mg/kg-dry	0.22	87	40	140	7.7	20	
n-Nonadecane		7.80	mg/kg-dry	0.22	90	40	140	7.6	20	
n-Eicosane		8.60	mg/kg-dry	0.22	93	40	140	8.1	20	
n-Docosane		8.24	mg/kg-dry	0.22	94	40	140	8.6	20	
n-Tetracosane		8.42	mg/kg-dry	0.22	96	40	140	9.0	20	
n-Hexacosane		8.43	mg/kg-dry	0.22	95	40	140	8.5	20	
n-Octacosane		8.14	mg/kg-dry	0.22	92	40	140	8.5	20	
n-Triacontane		7.27	mg/kg-dry	0.22	84	40	140	12	20	
n-Hexatriacontane		8.48	mg/kg-dry	0.22	95	40	140	13	20	
Surr: 1-Chloro-octadecane				0.22	80	40	140			
Lab ID: MB-63895-63743	20	Method Blank			Run: HP3B_221016A				10/17/22 09:47	
C11 to C22 Aromatics		ND	mg/kg	10						
Total Extractable Hydrocarbons		ND	mg/kg	15						
Naphthalene		ND	mg/kg	0.17						
2-Methylnaphthalene		ND	mg/kg	0.17						
Acenaphthylene		ND	mg/kg	0.17						
Acenaphthene		ND	mg/kg	0.17						
Fluorene		ND	mg/kg	0.17						
Phenanthrene		ND	mg/kg	0.17						
Anthracene		ND	mg/kg	0.17						
Fluoranthene		ND	mg/kg	0.17						
Pyrene		ND	mg/kg	0.17						
Benzo(a)Anthracene		ND	mg/kg	0.17						
Chrysene		ND	mg/kg	0.17						
Benzo(b)Fluoranthene/Benzo(k)Fluorant		ND	mg/kg	0.17						
Benzo(a)Pyrene	0.608		mg/kg	0.17						
Dibenz(a,h)anthracene/Indeno(1,2,3-cd)		ND	mg/kg	0.17						
Benzo(g,h,i)perylene		ND	mg/kg	0.17						
Surr: 2-Bromonaphthalene				0.17	87	40	140			
Surr: 2-Fluorobiphenyl				0.17	88	40	140			
Surr: o-Terphenyl				0.17	73	40	140			
Lab ID: LCS-63895-63743	19	Laboratory Control Sample			Run: HP3B_221016A				10/17/22 11:12	
C11 to C22 Aromatics		122	mg/kg	10	102	40	140			
Naphthalene		5.23	mg/kg	0.17	78	40	140			
2-Methylnaphthalene		5.63	mg/kg	0.17	84	40	140			
Acenaphthylene		5.80	mg/kg	0.17	87	40	140			
Acenaphthene		6.08	mg/kg	0.17	91	40	140			
Fluorene		6.09	mg/kg	0.17	91	40	140			
Phenanthrene		6.57	mg/kg	0.17	99	40	140			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: MA-EPH										Batch: 63895
Lab ID: LCS-63895-63743	19	Laboratory Control Sample		Run: HP3B_221016A				10/17/22 11:12		
Anthracene		6.52	mg/kg	0.17	98	40	140			
Fluoranthene		7.15	mg/kg	0.17	107	40	140			
Pyrene		6.89	mg/kg	0.17	103	40	140			
Benzo(a)Anthracene		7.32	mg/kg	0.17	110	40	140			
Chrysene		6.78	mg/kg	0.17	102	40	140			
Benzo(b)Fluoranthene/Benzo(k)Fluorant		14.9	mg/kg	0.17	113	40	140			
Benzo(a)Pyrene		7.68	mg/kg	0.17	115	40	140			
Dibenz(a,h)anthracene/Indeno(1,2,3-cd)		14.4	mg/kg	0.17	109	40	140			
Benzo(g,h,i)perylene		7.16	mg/kg	0.17	107	40	140			
Surr: 2-Bromonaphthalene				0.17	86	40	140			
Surr: 2-Fluorobiphenyl				0.17	91	40	140			
Surr: o-Terphenyl				0.17	82	40	140			
Lab ID: H22100037-002AMS	19	Sample Matrix Spike		Run: HP3B_221016A				10/17/22 21:14		
C11 to C22 Aromatics		156	mg/kg-dry	13	90	40	140			
Naphthalene		6.03	mg/kg-dry	0.22	69	40	140			
2-Methylnaphthalene		6.57	mg/kg-dry	0.22	75	40	140			
Acenaphthylene		6.75	mg/kg-dry	0.22	77	40	140			
Acenaphthene		6.99	mg/kg-dry	0.22	80	40	140			
Fluorene		7.09	mg/kg-dry	0.22	81	40	140			
Phenanthrene		7.44	mg/kg-dry	0.22	85	40	140			
Anthracene		7.78	mg/kg-dry	0.22	89	40	140			
Fluoranthene		8.39	mg/kg-dry	0.22	93	40	140			
Pyrene		8.16	mg/kg-dry	0.22	91	40	140			
Benzo(a)Anthracene		8.05	mg/kg-dry	0.22	90	40	140			
Chrysene		8.53	mg/kg-dry	0.22	94	40	140			
Benzo(b)Fluoranthene/Benzo(k)Fluorant		17.8	mg/kg-dry	0.22	102	40	140			
Benzo(a)Pyrene		10.2	mg/kg-dry	0.22	115	40	140			
Dibenz(a,h)anthracene/Indeno(1,2,3-cd)		16.4	mg/kg-dry	0.22	94	40	140			
Benzo(g,h,i)perylene		8.13	mg/kg-dry	0.22	91	40	140			
Surr: 2-Bromonaphthalene				0.22	68	40	140			
Surr: 2-Fluorobiphenyl				0.22	78	40	140			
Surr: o-Terphenyl				0.22	67	40	140			
Lab ID: H22100037-002AMSD	19	Sample Matrix Spike Duplicate		Run: HP3B_221016A				10/17/22 22:40		
C11 to C22 Aromatics		167	mg/kg-dry	13	98	40	140	6.5	20	
Naphthalene		5.95	mg/kg-dry	0.22	68	40	140	1.4	40	
2-Methylnaphthalene		6.29	mg/kg-dry	0.22	72	40	140	4.3	20	
Acenaphthylene		6.68	mg/kg-dry	0.22	77	40	140	1.1	20	
Acenaphthene		6.89	mg/kg-dry	0.22	79	40	140	1.4	20	
Fluorene		5.85	mg/kg-dry	0.22	67	40	140	19	20	
Phenanthrene		5.42	mg/kg-dry	0.22	62	40	140	31	20	R
Anthracene		4.97	mg/kg-dry	0.22	57	40	140	44	20	R
Fluoranthene		8.17	mg/kg-dry	0.22	91	40	140	2.6	20	
Pyrene		8.05	mg/kg-dry	0.22	90	40	140	1.3	20	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

R - Relative Percent Difference (RPD) exceeds advisory limit



QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: MA-EPH										Batch: 63895
Lab ID: H22100037-002AMSD 19 Sample Matrix Spike Duplicate										Run: HP3B_221016A 10/17/22 22:40
Benzo(a)Anthracene	4.15	mg/kg-dry	0.22	46	40	140	64	20	R	
Chrysene	3.83	mg/kg-dry	0.22	41	40	140	76	20	R	
Benzo(b)Fluoranthene/Benzo(k)Fluorant	16.4	mg/kg-dry	0.22	95	40	140	8.2	20		
Benzo(a)Pyrene	8.28	mg/kg-dry	0.22	93	40	140	21	20	R	
Dibenz(a,h)anthracene/Indeno(1,2,3-cd)	15.9	mg/kg-dry	0.22	92	40	140	3.0	20		
Benzo(g,h,i)perylene	7.83	mg/kg-dry	0.22	88	40	140	3.8	20		
Surr: 2-Bromonaphthalene			0.22	61	40	140				
Surr: 2-Fluorobiphenyl			0.22	77	40	140				
Surr: o-Terphenyl			0.22	65	40	140				

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

R - Relative Percent Difference (RPD) exceeds advisory limit

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: MA-EPH										Analytical Run: R179353
Lab ID: CCV_1016HP3B20r-S 15 Continuing Calibration Verification Standard										10/17/22 16:12
n-Nonane		6.89	mg/kg	0.17	103	75	125			
n-Decane		6.90	mg/kg	0.17	103	75	125			
n-Dodecane		6.82	mg/kg	0.17	102	75	125			
n-Tetradecane		6.88	mg/kg	0.17	103	75	125			
n-Hexadecane		6.76	mg/kg	0.17	101	75	125			
n-Octadecane		6.76	mg/kg	0.17	101	75	125			
n-Nonadecane		6.76	mg/kg	0.17	101	75	125			
n-Eicosane		6.77	mg/kg	0.17	102	75	125			
n-Docosane		6.70	mg/kg	0.17	101	75	125			
n-Tetracosane		6.77	mg/kg	0.17	102	75	125			
n-Hexacosane		6.80	mg/kg	0.17	102	75	125			
n-Octacosane		6.72	mg/kg	0.17	101	75	125			
n-Triacontane		6.54	mg/kg	0.17	98	75	125			
n-Hexatriacontane		6.82	mg/kg	0.17	102	75	125			
Surr: 1-Chloro-octadecane				0.17	99	75	125			
Lab ID: CCV_1016HP3B21r-S 18 Continuing Calibration Verification Standard										10/17/22 16:55
Naphthalene		7.58	mg/kg	0.17	114	75	125			
2-Methylnaphthalene		7.79	mg/kg	0.17	117	75	125			
Acenaphthylene		7.35	mg/kg	0.17	110	75	125			
Acenaphthene		7.30	mg/kg	0.17	110	75	125			
Fluorene		7.33	mg/kg	0.17	110	75	125			
Phenanthrene		7.44	mg/kg	0.17	112	75	125			
Anthracene		7.24	mg/kg	0.17	109	75	125			
Fluoranthene		7.46	mg/kg	0.17	112	75	125			
Pyrene		7.38	mg/kg	0.17	111	75	125			
Benzo(a)Anthracene		7.68	mg/kg	0.17	115	75	125			
Chrysene		7.37	mg/kg	0.17	111	75	125			
Benzo(b)Fluoranthene/Benzo(k)Fluorant		15.1	mg/kg	0.17	114	75	125			
Benzo(a)Pyrene		7.92	mg/kg	0.17	119	75	125			
Dibenz(a,h)anthracene/Indeno(1,2,3-cd)		15.2	mg/kg	0.17	114	75	125			
Benzo(g,h,i)perylene		7.59	mg/kg	0.17	114	75	125			
Surr: 2-Bromonaphthalene				0.17	120	75	125			
Surr: 2-Fluorobiphenyl				0.17	101	75	125			
Surr: o-Terphenyl				0.17	106	75	125			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: MA-VPH										Batch: 63671
Lab ID: LCS-63671	14	Laboratory Control Sample			Run: GC2_221011A			10/12/22 05:17		
2-Methylpentane		1.77	mg/kg	0.10	71	70	130			
n-Butylcyclohexane		2.17	mg/kg	0.10	87	70	130			
n-Decane		2.17	mg/kg	0.10	87	70	130			
n-Pentane		1.68	mg/kg	0.10	67	30	130			
Methyl tert-butyl ether (MTBE)		1.95	mg/kg	0.10	78	70	130			
Benzene		1.93	mg/kg	0.050	77	70	130			
Toluene		2.02	mg/kg	0.050	81	70	130			
Ethylbenzene		2.10	mg/kg	0.050	84	70	130			
m+p-Xylenes		4.28	mg/kg	0.050	86	70	130			
o-Xylene		2.06	mg/kg	0.050	83	70	130			
Naphthalene		2.76	mg/kg	0.10	110	70	130			
Total Purgeable Hydrocarbons		30.8	mg/kg	2.0	82	70	130			
Surr: VPH Aromatics Surrogate				0.050	97	70	130			
Surr: VPH Aliphatics Surrogate				0.050	97	70	130			
Lab ID: MB-63671	14	Method Blank			Run: GC3_221005A			10/05/22 20:47		
Methyl tert-butyl ether (MTBE)		ND	mg/kg	0.10						
Benzene		ND	mg/kg	0.050						
Toluene		ND	mg/kg	0.050						
Ethylbenzene		ND	mg/kg	0.050						
m+p-Xylenes		ND	mg/kg	0.050						
o-Xylene		ND	mg/kg	0.050						
Naphthalene		ND	mg/kg	0.10						
C9 to C10 Aromatics		ND	mg/kg	2.0						
C5 to C8 Aliphatics		ND	mg/kg	2.0						
C9 to C12 Aliphatics		ND	mg/kg	2.0						
Total Purgeable Hydrocarbons		ND	mg/kg	2.0						
Xylenes, Total		ND	mg/kg	0.050						
Surr: VPH Aromatics Surrogate				0.050	101	70	130			
Surr: VPH Aliphatics Surrogate				0.050	104	70	130			
Lab ID: H22090724-001AMS	10	Sample Matrix Spike			Run: GC3_221005A			10/06/22 00:35		
Methyl tert-butyl ether (MTBE)		2.53	mg/kg-dry	0.12	88	70	130			
Benzene		2.64	mg/kg-dry	0.058	91	70	130			
Toluene		2.82	mg/kg-dry	0.058	97	70	130			
Ethylbenzene		3.15	mg/kg-dry	0.058	109	70	130			
m+p-Xylenes		6.35	mg/kg-dry	0.058	110	70	130			
o-Xylene		3.28	mg/kg-dry	0.058	114	70	130			
Naphthalene		3.32	mg/kg-dry	0.12	115	70	130			
Total Purgeable Hydrocarbons		47.7	mg/kg-dry	2.3	110	70	130			
Surr: VPH Aromatics Surrogate				0.058	105	70	130			
Surr: VPH Aliphatics Surrogate				0.058	106	70	130			
Lab ID: H22090724-001AMSD	10	Sample Matrix Spike Duplicate			Run: GC3_221005A			10/06/22 01:07		
Methyl tert-butyl ether (MTBE)		2.58	mg/kg-dry	0.12	89	70	130	1.8	20	
Benzene		2.68	mg/kg-dry	0.058	93	70	130	1.7	20	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: MA-VPH										Batch: 63671
Lab ID: H22090724-001AMSD 10 Sample Matrix Spike Duplicate										Run: GC3_221005A 10/06/22 01:07
Toluene		2.84	mg/kg-dry	0.058	98	70	130	0.7	20	
Ethylbenzene		3.17	mg/kg-dry	0.058	110	70	130	0.6	20	
m+p-Xylenes		6.30	mg/kg-dry	0.058	109	70	130	0.9	20	
o-Xylene		3.24	mg/kg-dry	0.058	112	70	130	1.3	20	
Naphthalene		3.29	mg/kg-dry	0.12	114	70	130	0.9	20	
Total Purgeable Hydrocarbons		47.9	mg/kg-dry	2.3	110	70	130	0.4	20	
Surr: VPH Aromatics Surrogate				0.058	109	70	130			
Surr: VPH Aliphatics Surrogate				0.058	108	70	130			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: MA-VPH										Batch: 63823
Lab ID: MB-63823	14	Method Blank		Run: GC2_221011A			10/12/22 04:46			
Methyl tert-butyl ether (MTBE)		ND	mg/kg	0.10						
Benzene		ND	mg/kg	0.050						
Toluene		ND	mg/kg	0.050						
Ethylbenzene		ND	mg/kg	0.050						
m+p-Xylenes		ND	mg/kg	0.050						
o-Xylene		ND	mg/kg	0.050						
Naphthalene		ND	mg/kg	0.10						
C9 to C10 Aromatics		ND	mg/kg	2.0						
C5 to C8 Aliphatics		ND	mg/kg	2.0						
C9 to C12 Aliphatics		ND	mg/kg	2.0						
Total Purgeable Hydrocarbons		ND	mg/kg	2.0						
Xylenes, Total		ND	mg/kg	0.050						
Surr: VPH Aromatics Surrogate				0.050	103	70	130			
Surr: VPH Aliphatics Surrogate				0.050	105	70	130			
Lab ID: LCS-63823	14	Laboratory Control Sample		Run: GC2_221011A			10/12/22 05:48			
2-Methylpentane		2.09	mg/kg	0.10	84	70	130			
n-Butylcyclohexane		2.52	mg/kg	0.10	101	70	130			
n-Decane		2.50	mg/kg	0.10	100	70	130			
n-Pentane		2.07	mg/kg	0.10	83	30	130			
Methyl tert-butyl ether (MTBE)		2.27	mg/kg	0.10	91	70	130			
Benzene		2.10	mg/kg	0.050	84	70	130			
Toluene		2.15	mg/kg	0.050	86	70	130			
Ethylbenzene		2.26	mg/kg	0.050	90	70	130			
m+p-Xylenes		4.66	mg/kg	0.050	93	70	130			
o-Xylene		2.27	mg/kg	0.050	91	70	130			
Naphthalene		3.08	mg/kg	0.10	123	70	130			
Total Purgeable Hydrocarbons		34.3	mg/kg	2.0	92	70	130			
Surr: VPH Aromatics Surrogate				0.050	92	70	130			
Surr: VPH Aliphatics Surrogate				0.050	91	70	130			
Lab ID: H22100108-005AMS	10	Sample Matrix Spike		Run: GC3_221013A			10/14/22 07:51			
Methyl tert-butyl ether (MTBE)		2.31	mg/kg-dry	0.10	88	70	130			
Benzene		2.31	mg/kg-dry	0.052	88	70	130			
Toluene		2.47	mg/kg-dry	0.052	94	70	130			
Ethylbenzene		2.74	mg/kg-dry	0.052	105	70	130			
m+p-Xylenes		5.43	mg/kg-dry	0.052	104	70	130			
o-Xylene		2.83	mg/kg-dry	0.052	108	70	130			
Naphthalene		2.47	mg/kg-dry	0.10	94	70	130			
Total Purgeable Hydrocarbons		41.6	mg/kg-dry	2.1	106	70	130			
Surr: VPH Aromatics Surrogate				0.052	102	70	130			
Surr: VPH Aliphatics Surrogate				0.052	108	70	130			
Lab ID: H22100108-005AMSD	10	Sample Matrix Spike Duplicate		Run: GC3_221013A			10/14/22 08:23			
Methyl tert-butyl ether (MTBE)		2.42	mg/kg-dry	0.10	92	70	130	4.6	20	
Benzene		2.40	mg/kg-dry	0.052	91	70	130	3.7	20	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: MA-VPH										Batch: 63823
Lab ID: H22100108-005AMSD										10/14/22 08:23
10 Sample Matrix Spike Duplicate										Run: GC3_221013A
Toluene		2.52	mg/kg-dry	0.052	96	70	130	1.8	20	
Ethylbenzene		2.79	mg/kg-dry	0.052	106	70	130	1.6	20	
m+p-Xylenes		5.43	mg/kg-dry	0.052	104	70	130	0	20	
o-Xylene		2.83	mg/kg-dry	0.052	108	70	130	0	20	
Naphthalene		2.52	mg/kg-dry	0.10	96	70	130	2.0	20	
Total Purgeable Hydrocarbons		42.2	mg/kg-dry	2.1	107	70	130	1.3	20	
Surr: VPH Aromatics Surrogate				0.052	106	70	130			
Surr: VPH Aliphatics Surrogate				0.052	106	70	130			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: MA-VPH										Analytical Run: R179035
Lab ID: CCV_1010GC302r-W	15	Continuing Calibration Verification Standard								10/10/22 11:52
1,2,4-Trimethylbenzene		30.5	ug/L	1.0	122	75	125			
2,2,4-Trimethylpentane		27.8	ug/L	1.0	111	75	125			
2-Methylpentane		27.4	ug/L	1.0	110	75	125			
n-Butylcyclohexane		28.6	ug/L	1.0	114	75	125			
n-Decane		30.3	ug/L	1.0	121	75	125			
n-Pentane		25.7	ug/L	1.0	103	75	125			
Methyl tert-butyl ether (MTBE)		25.5	ug/L	1.0	102	75	125			
Benzene		25.7	ug/L	0.50	103	75	125			
Toluene		26.6	ug/L	0.50	106	75	125			
Ethylbenzene		28.3	ug/L	0.50	113	75	125			
m+p-Xylenes		55.5	ug/L	0.50	111	75	125			
o-Xylene		27.8	ug/L	0.50	111	75	125			
Naphthalene		22.3	ug/L	1.0	89	75	125			
Surr: VPH Aromatics Surrogate				1.0	110	70	130			
Surr: VPH Aliphatics Surrogate				1.0	110	70	130			

Method: MA-VPH										Batch: R179035
Lab ID: LCS_1010GC303r	16	Laboratory Control Sample								10/10/22 12:51
					Run: GC3_221010A					
1,2,4-Trimethylbenzene		28.4	ug/L	1.0	114	70	130			
2,2,4-Trimethylpentane		25.7	ug/L	1.0	103	70	130			
2-Methylpentane		26.1	ug/L	1.0	104	70	130			
n-Butylcyclohexane		27.5	ug/L	1.0	110	70	130			
n-Decane		28.4	ug/L	1.0	114	70	130			
n-Pentane		26.6	ug/L	1.0	106	70	130			
Methyl tert-butyl ether (MTBE)		24.3	ug/L	1.0	97	70	130			
Benzene		24.1	ug/L	0.50	96	70	130			
Toluene		24.1	ug/L	0.50	97	70	130			
Ethylbenzene		25.9	ug/L	0.50	104	70	130			
m+p-Xylenes		50.7	ug/L	0.50	101	70	130			
o-Xylene		25.7	ug/L	0.50	103	70	130			
Naphthalene		22.1	ug/L	1.0	88	70	130			
Total Purgeable Hydrocarbons		386	ug/L	20	103	70	130			
Surr: VPH Aromatics Surrogate				1.0	103	70	130			
Surr: VPH Aliphatics Surrogate				1.0	99	70	130			

Lab ID: MBLK_1010GC305r	14	Method Blank								10/10/22 13:56
					Run: GC3_221010A					
Methyl tert-butyl ether (MTBE)		ND	ug/L	1.0						
Benzene		ND	ug/L	0.50						
Toluene		ND	ug/L	0.50						
Ethylbenzene		ND	ug/L	0.50						
m+p-Xylenes		ND	ug/L	0.50						
o-Xylene		ND	ug/L	0.50						
Naphthalene		ND	ug/L	1.0						
C9 to C10 Aromatics		ND	ug/L	20						
C5 to C8 Aliphatics		ND	ug/L	20						

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: MA-VPH										Batch: R179035
Lab ID: MBLK_1010GC305r	14	Method Blank				Run: GC3_221010A				10/10/22 13:56
C9 to C12 Aliphatics		ND	ug/L	20						
Total Purgeable Hydrocarbons		ND	ug/L	20						
Xylenes, Total		ND	ug/L	0.50						
Surr: VPH Aromatics Surrogate				1.0	95	70	130			
Surr: VPH Aliphatics Surrogate				1.0	95	70	130			
Lab ID: H22100108-008CMS										10/10/22 19:09
	10	Sample Matrix Spike				Run: GC3_221010A				
Methyl tert-butyl ether (MTBE)		13.9	ug/L	1.0	56	70	130			S
Benzene		14.1	ug/L	0.50	57	70	130			S
Toluene		14.3	ug/L	0.50	57	70	130			S
Ethylbenzene		14.7	ug/L	0.50	59	70	130			S
m+p-Xylenes		28.7	ug/L	0.50	57	70	130			S
o-Xylene		15.0	ug/L	0.50	60	70	130			S
Naphthalene		12.5	ug/L	1.0	50	70	130			S
Total Purgeable Hydrocarbons		211	ug/L	20	56	70	130			S
Surr: VPH Aromatics Surrogate				1.0	64	70	130			S
Surr: VPH Aliphatics Surrogate				1.0	64	70	130			S
Lab ID: H22100108-008CMSD										10/10/22 19:42
	10	Sample Matrix Spike Duplicate				Run: GC3_221010A				
Methyl tert-butyl ether (MTBE)		23.0	ug/L	1.0	92	70	130	49	20	R
Benzene		23.2	ug/L	0.50	93	70	130	49	20	R
Toluene		23.5	ug/L	0.50	94	70	130	49	20	R
Ethylbenzene		25.0	ug/L	0.50	100	70	130	52	20	R
m+p-Xylenes		48.1	ug/L	0.50	96	70	130	51	20	R
o-Xylene		24.8	ug/L	0.50	99	70	130	49	20	R
Naphthalene		21.7	ug/L	1.0	87	70	130	54	20	R
Total Purgeable Hydrocarbons		353	ug/L	20	94	70	130	50	20	R
Surr: VPH Aromatics Surrogate				1.0	98	70	130			
Surr: VPH Aliphatics Surrogate				1.0	98	70	130			

Qualifiers:

RL - Analyte Reporting Limit

R - Relative Percent Difference (RPD) exceeds advisory limit

ND - Not detected at the Reporting Limit (RL)

S - Spike recovery outside of advisory limits

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: MA-VPH										Analytical Run: R179105
Lab ID: CCV_1011GC202r-S 15 Continuing Calibration Verification Standard										10/11/22 11:39
1,2,4-Trimethylbenzene		2.20	mg/kg	0.10	88	75	125			
2,2,4-Trimethylpentane		2.19	mg/kg	0.10	88	75	125			
2-Methylpentane		2.22	mg/kg	0.10	89	75	125			
n-Butylcyclohexane		2.06	mg/kg	0.10	82	75	125			
n-Decane		2.05	mg/kg	0.10	82	75	125			
n-Pentane		2.23	mg/kg	0.10	89	75	125			
Methyl tert-butyl ether (MTBE)		2.26	mg/kg	0.10	90	75	125			
Benzene		2.17	mg/kg	0.050	87	75	125			
Toluene		2.21	mg/kg	0.050	88	75	125			
Ethylbenzene		2.16	mg/kg	0.050	86	75	125			
m+p-Xylenes		4.39	mg/kg	0.050	88	75	125			
o-Xylene		2.08	mg/kg	0.050	83	75	125			
Naphthalene		2.21	mg/kg	0.10	89	75	125			
Surr: VPH Aromatics Surrogate				0.050	92	70	130			
Surr: VPH Aliphatics Surrogate				0.050	89	70	130			

Method: MA-VPH										Analytical Run: R179199
Lab ID: CCV_1013GC202r-S 15 Continuing Calibration Verification Standard										10/13/22 10:10
1,2,4-Trimethylbenzene		2.24	mg/kg	0.10	90	75	125			
2,2,4-Trimethylpentane		2.18	mg/kg	0.10	87	75	125			
2-Methylpentane		2.13	mg/kg	0.10	85	75	125			
n-Butylcyclohexane		2.13	mg/kg	0.10	85	75	125			
n-Decane		2.08	mg/kg	0.10	83	75	125			
n-Pentane		2.15	mg/kg	0.10	86	75	125			
Methyl tert-butyl ether (MTBE)		2.20	mg/kg	0.10	88	75	125			
Benzene		2.12	mg/kg	0.050	85	75	125			
Toluene		2.16	mg/kg	0.050	86	75	125			
Ethylbenzene		2.14	mg/kg	0.050	86	75	125			
m+p-Xylenes		4.33	mg/kg	0.050	87	75	125			
o-Xylene		2.07	mg/kg	0.050	83	75	125			
Naphthalene		2.18	mg/kg	0.10	87	75	125			
Surr: VPH Aromatics Surrogate				0.050	90	70	130			
Surr: VPH Aliphatics Surrogate				0.050	88	70	130			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: MA-VPH										Analytical Run: R179206
Lab ID: CCV_1013GC302r-S										10/13/22 10:14
15 Continuing Calibration Verification Standard										
1,2,4-Trimethylbenzene		2.89	mg/kg	0.10	116	75	125			
2,2,4-Trimethylpentane		2.54	mg/kg	0.10	101	75	125			
2-Methylpentane		2.52	mg/kg	0.10	101	75	125			
n-Butylcyclohexane		2.70	mg/kg	0.10	108	75	125			
n-Decane		2.97	mg/kg	0.10	119	75	125			
n-Pentane		2.35	mg/kg	0.10	94	75	125			
Methyl tert-butyl ether (MTBE)		2.31	mg/kg	0.10	92	75	125			
Benzene		2.38	mg/kg	0.050	95	75	125			
Toluene		2.50	mg/kg	0.050	100	75	125			
Ethylbenzene		2.65	mg/kg	0.050	106	75	125			
m+p-Xylenes		5.26	mg/kg	0.050	105	75	125			
o-Xylene		2.64	mg/kg	0.050	106	75	125			
Naphthalene		1.96	mg/kg	0.10	79	75	125			
Surr: VPH Aromatics Surrogate				0.050	107	70	130			
Surr: VPH Aliphatics Surrogate				0.050	107	70	130			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020		Analytical Run: ICPMS205-H_221007B								
Lab ID: ICV	7	Initial Calibration Verification Standard								10/07/22 11:30
Arsenic		0.0614	mg/L	0.0010	102	90	110			
Barium		0.0590	mg/L	0.0010	98	90	110			
Cadmium		0.0305	mg/L	0.0010	102	90	110			
Chromium		0.0597	mg/L	0.0010	100	90	110			
Lead		0.0594	mg/L	0.0010	99	90	110			
Selenium		0.0614	mg/L	0.0010	102	90	110			
Silver		0.0302	mg/L	0.0010	101	90	110			
Lab ID: ICSA	7	Interference Check Sample A								10/07/22 11:37
Arsenic		0.0000207	mg/L	0.0010						
Barium		0.000195	mg/L	0.0010						
Cadmium		0.000106	mg/L	0.0010						
Chromium		0.00190	mg/L	0.0010						
Lead		-0.000142	mg/L	0.0010						
Selenium		0.000181	mg/L	0.0010						
Silver		0.0000117	mg/L	0.0010						
Lab ID: ICSAB	7	Interference Check Sample AB								10/07/22 11:42
Arsenic		0.0102	mg/L	0.0010	102	70	130			
Barium		0.000216	mg/L	0.0010		0	0			
Cadmium		0.0101	mg/L	0.0010	101	70	130			
Chromium		0.0215	mg/L	0.0010	108	70	130			
Lead		-0.000145	mg/L	0.0010		0	0			
Selenium		0.00948	mg/L	0.0010	95	70	130			
Silver		0.0198	mg/L	0.0010	99	70	130			
Lab ID: CCV	7	Continuing Calibration Verification Standard								10/07/22 11:51
Arsenic		0.0488	mg/L	0.0010	98	90	110			
Barium		0.0490	mg/L	0.0010	98	90	110			
Cadmium		0.0493	mg/L	0.0010	99	90	110			
Chromium		0.0480	mg/L	0.0010	96	90	110			
Lead		0.0487	mg/L	0.0010	97	90	110			
Selenium		0.0496	mg/L	0.0010	99	90	110			
Silver		0.0197	mg/L	0.0010	99	90	110			
Method: SW6020		Batch: 63789								
Lab ID: MB-63789	7	Method Blank								Run: ICPMS205-H_221007B 10/07/22 11:55
Arsenic		ND	mg/kg	0.2						
Barium		ND	mg/kg	0.3						
Cadmium		ND	mg/kg	0.04						
Chromium		ND	mg/kg	1						
Lead		ND	mg/kg	0.5						
Selenium		ND	mg/kg	0.1						
Silver		ND	mg/kg	0.7						

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020										Batch: 63789
Lab ID: LCS-63789	7	Laboratory Control Sample				Run: ICPMS205-H_221007B				10/07/22 11:58
Arsenic		160	mg/kg	1.0	82	66.4	104			
Barium		179	mg/kg	1.0	96	71.8	124			
Cadmium		99.0	mg/kg	1.0	100	79.2	121			
Chromium		107	mg/kg	3.1	92	72.5	115			
Lead		104	mg/kg	1.3	99	71.6	128			
Selenium		179	mg/kg	1.0	87	72.3	111			
Silver		42.8	mg/kg	1.8	102	70.8	133			
Lab ID: LFB-63789	7	Laboratory Fortified Blank				Run: ICPMS205-H_221007B				10/07/22 12:00
Arsenic		49.2	mg/kg	1.0	100	80	120			
Barium		52.5	mg/kg	1.0	107	80	120			
Cadmium		25.8	mg/kg	1.0	105	80	120			
Chromium		52.1	mg/kg	1.2	106	80	120			
Lead		51.7	mg/kg	1.0	105	80	120			
Selenium		41.6	mg/kg	1.0	85	80	120			
Silver		27.1	mg/kg	1.0	110	80	120			
Lab ID: H22100108-001ADIL	7	Serial Dilution				Run: ICPMS205-H_221007B				10/07/22 12:07
Arsenic		6.35	mg/kg-dry	1.0		0	0			10 N
Barium		71.1	mg/kg-dry	1.5		0	0	2.9		10
Cadmium		ND	mg/kg-dry	1.0		0	0			10
Chromium		10.2	mg/kg-dry	6.7		0	0			10 N
Lead		5.85	mg/kg-dry	2.8		0	0			10 N
Selenium		ND	mg/kg-dry	1.0		0	0			10
Silver		ND	mg/kg-dry	3.9		0	0			10
Lab ID: H22100108-001APDS1	7	Post Digestion/Distillation Spike				Run: ICPMS205-H_221007B				10/07/22 12:10
Arsenic		10.5	mg/kg-dry	1.0	86	75	125			
Barium		77.4	mg/kg-dry	1.0		75	125			A
Cadmium		5.45	mg/kg-dry	1.0	100	75	125			
Chromium		14.9	mg/kg-dry	1.3	94	75	125			
Lead		11.6	mg/kg-dry	1.0	100	75	125			
Selenium		4.52	mg/kg-dry	1.0	84	75	125			
Silver		2.35	mg/kg-dry	1.0	109	75	125			
Lab ID: H22100108-001AMS	7	Sample Matrix Spike				Run: ICPMS205-H_221007B				10/07/22 12:12
Arsenic		55.7	mg/kg-dry	1.0	92	75	125			
Barium		154	mg/kg-dry	1.0	149	75	125			SE
Cadmium		27.4	mg/kg-dry	1.0	101	75	125			
Chromium		65.3	mg/kg-dry	1.3	102	75	125			
Lead		63.8	mg/kg-dry	1.0	106	75	125			
Selenium		42.8	mg/kg-dry	1.0	79	75	125			
Silver		28.4	mg/kg-dry	1.0	105	75	125			
Lab ID: H22100108-001AMSD	7	Sample Matrix Spike Duplicate				Run: ICPMS205-H_221007B				10/07/22 12:15
Arsenic		54.4	mg/kg-dry	1.0	90	75	125	2.4	20	
Barium		145	mg/kg-dry	1.0	133	75	125	5.9	20	SE

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

A - Analyte level was greater than four times the spike level - in accordance with the method, percent recovery is not calculated
E - Estimated value - result exceeds the instrument upper quantitation limit



QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020										Batch: 63789
Lab ID: H22100108-001AMSD 7 Sample Matrix Spike Duplicate										Run: ICPMS205-H_221007B 10/07/22 12:15
Cadmium		27.2	mg/kg-dry	1.0	100	75	125	0.5	20	
Chromium		64.7	mg/kg-dry	1.3	101	75	125	0.9	20	
Lead		65.9	mg/kg-dry	1.0	110	75	125	3.3	20	
Selenium		43.1	mg/kg-dry	1.0	80	75	125	0.7	20	
Silver		28.5	mg/kg-dry	1.0	105	75	125	0.3	20	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020		Analytical Run: ICPMS205-H_221010A								
Lab ID: ICV	7	Initial Calibration Verification Standard								10/10/22 08:52
Arsenic		0.0640	mg/L	0.0010	107	90	110			
Barium		0.0621	mg/L	0.0010	104	90	110			
Cadmium		0.0319	mg/L	0.0010	106	90	110			
Chromium		0.0620	mg/L	0.0010	103	90	110			
Lead		0.0618	mg/L	0.0010	103	90	110			
Selenium		0.0621	mg/L	0.0010	104	90	110			
Silver		0.0318	mg/L	0.0010	106	90	110			
Lab ID: ICSA	7	Interference Check Sample A								10/10/22 08:59
Arsenic		0.0000397	mg/L	0.0010						
Barium		0.000179	mg/L	0.0010						
Cadmium		0.0000902	mg/L	0.0010						
Chromium		0.00198	mg/L	0.0010						
Lead		-0.0000990	mg/L	0.0010						
Selenium		0.000212	mg/L	0.0010						
Silver		0.0000105	mg/L	0.0010						
Lab ID: ICSAB	7	Interference Check Sample AB								10/10/22 09:04
Arsenic		0.00996	mg/L	0.0010	100	70	130			
Barium		0.000180	mg/L	0.0010		0	0			
Cadmium		0.0101	mg/L	0.0010	101	70	130			
Chromium		0.0219	mg/L	0.0010	110	70	130			
Lead		-0.0000964	mg/L	0.0010		0	0			
Selenium		0.00957	mg/L	0.0010	96	70	130			
Silver		0.0200	mg/L	0.0010	100	70	130			
Lab ID: CCV	7	Continuing Calibration Verification Standard								10/10/22 09:11
Arsenic		0.0515	mg/L	0.0010	103	90	110			
Barium		0.0516	mg/L	0.0010	103	90	110			
Cadmium		0.0517	mg/L	0.0010	103	90	110			
Chromium		0.0513	mg/L	0.0010	103	90	110			
Lead		0.0509	mg/L	0.0010	102	90	110			
Selenium		0.0514	mg/L	0.0010	103	90	110			
Silver		0.0207	mg/L	0.0010	103	90	110			
Lab ID: CCV	7	Continuing Calibration Verification Standard								10/10/22 10:02
Arsenic		0.0524	mg/L	0.0010	105	90	110			
Barium		0.0531	mg/L	0.0010	106	90	110			
Cadmium		0.0536	mg/L	0.0010	107	90	110			
Chromium		0.0520	mg/L	0.0010	104	90	110			
Lead		0.0519	mg/L	0.0010	104	90	110			
Selenium		0.0519	mg/L	0.0010	104	90	110			
Silver		0.0216	mg/L	0.0010	108	90	110			
Lab ID: ICV	7	Initial Calibration Verification Standard								10/10/22 20:24
Arsenic		0.0614	mg/L	0.0010	102	90	110			
Barium		0.0586	mg/L	0.0010	98	90	110			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020		Analytical Run: ICPMS205-H_221010A								
Lab ID: ICV	7	Initial Calibration Verification Standard								10/10/22 20:24
Cadmium		0.0301	mg/L	0.0010	100	90	110			
Chromium		0.0586	mg/L	0.0010	98	90	110			
Lead		0.0590	mg/L	0.0010	98	90	110			
Selenium		0.0614	mg/L	0.0010	102	90	110			
Silver		0.0301	mg/L	0.0010	100	90	110			
Lab ID: ICSA	7	Interference Check Sample A								10/10/22 20:31
Arsenic		0.0000286	mg/L	0.0010						
Barium		0.000170	mg/L	0.0010						
Cadmium		0.0000850	mg/L	0.0010						
Chromium		0.00185	mg/L	0.0010						
Lead		0.0000491	mg/L	0.0010						
Selenium		0.000281	mg/L	0.0010						
Silver		0.0000126	mg/L	0.0010						
Lab ID: ICSAB	7	Interference Check Sample AB								10/10/22 20:36
Arsenic		0.00978	mg/L	0.0010	98	70	130			
Barium		0.000181	mg/L	0.0010		0	0			
Cadmium		0.00970	mg/L	0.0010	97	70	130			
Chromium		0.0210	mg/L	0.0010	105	70	130			
Lead		0.0000541	mg/L	0.0010		0	0			
Selenium		0.00939	mg/L	0.0010	94	70	130			
Silver		0.0193	mg/L	0.0010	96	70	130			
Lab ID: CCV	7	Continuing Calibration Verification Standard								10/10/22 20:43
Arsenic		0.0506	mg/L	0.0010	101	90	110			
Barium		0.0499	mg/L	0.0010	100	90	110			
Cadmium		0.0508	mg/L	0.0010	102	90	110			
Chromium		0.0502	mg/L	0.0010	100	90	110			
Lead		0.0501	mg/L	0.0010	100	90	110			
Selenium		0.0503	mg/L	0.0010	101	90	110			
Silver		0.0204	mg/L	0.0010	102	90	110			
Lab ID: CCV	7	Continuing Calibration Verification Standard								10/10/22 23:09
Arsenic		0.0508	mg/L	0.0010	101	90	110			
Barium		0.0488	mg/L	0.0010	98	90	110			
Cadmium		0.0510	mg/L	0.0010	102	90	110			
Chromium		0.0514	mg/L	0.0010	103	90	110			
Lead		0.0505	mg/L	0.0010	101	90	110			
Selenium		0.0514	mg/L	0.0010	103	90	110			
Silver		0.0206	mg/L	0.0010	103	90	110			
Method: SW6020		Batch: 63789								
Lab ID: MB-63789	7	Method Blank								Run: ICPMS205-H_221010A 10/10/22 09:19
Arsenic		ND	mg/kg	0.4						
Barium		ND	mg/kg	0.7						

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020										Batch: 63789
Lab ID: MB-63789	7	Method Blank				Run: ICPMS205-H_221010A				10/10/22 09:19
Cadmium		ND	mg/kg	0.09						
Chromium		ND	mg/kg	3						
Lead		ND	mg/kg	1						
Selenium		ND	mg/kg	0.3						
Silver		ND	mg/kg	2						
Method: SW6020										Batch: 63802
Lab ID: MB-63802	7	Method Blank				Run: ICPMS205-H_221010A				10/10/22 09:21
Arsenic		ND	mg/kg	0.2						
Barium		ND	mg/kg	0.3						
Cadmium		ND	mg/kg	0.04						
Chromium		ND	mg/kg	1						
Lead		ND	mg/kg	0.5						
Selenium		ND	mg/kg	0.1						
Silver		ND	mg/kg	0.7						
Lab ID: LCS-63802	7	Laboratory Control Sample				Run: ICPMS205-H_221010A				10/10/22 09:24
Arsenic		163	mg/kg	1.0	83	66.4	104			
Barium		188	mg/kg	1.0	101	71.8	124			
Cadmium		99.3	mg/kg	1.0	100	79.2	121			
Chromium		110	mg/kg	3.0	94	72.5	115			
Lead		104	mg/kg	1.3	99	71.6	128			
Selenium		180	mg/kg	1.0	88	72.3	111			
Silver		44.6	mg/kg	1.8	106	70.8	133			
Lab ID: LFB-63802	7	Laboratory Fortified Blank				Run: ICPMS205-H_221010A				10/10/22 09:26
Arsenic		51.4	mg/kg	1.0	103	80	120			
Barium		55.9	mg/kg	1.0	112	80	120			
Cadmium		28.0	mg/kg	1.0	112	80	120			
Chromium		54.6	mg/kg	1.2	109	80	120			
Lead		57.1	mg/kg	1.0	114	80	120			
Selenium		42.3	mg/kg	1.0	85	80	120			
Silver		29.6	mg/kg	1.0	118	80	120			
Lab ID: H22100165-001ADIL	7	Serial Dilution				Run: ICPMS205-H_221010A				10/10/22 09:33
Arsenic		ND	mg/kg-dry	180		0	0		10	
Barium		486	mg/kg-dry	310		0	0		10	N
Cadmium		ND	mg/kg-dry	42		0	0		10	
Chromium		ND	mg/kg-dry	1400		0	0		10	
Lead		ND	mg/kg-dry	590		0	0		10	
Selenium		ND	mg/kg-dry	160		0	0		10	
Silver		ND	mg/kg-dry	830		0	0		10	
Lab ID: H22100165-001APDS1	7	Post Digestion/Distillation Spike				Run: ICPMS205-H_221010A				10/10/22 09:36
Arsenic		1200	mg/kg-dry	36	105	75	125			
Barium		1660	mg/kg-dry	63	104	75	125			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

N - Analyte concentration was not sufficiently high to calculate a Relative Percent Difference (RPD) for the serial dilution test

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020										Batch: 63802
Lab ID: H22100165-001APDS1	7	Post Digestion/Distillation Spike			Run: ICPMS205-H_221010A			10/10/22 09:36		
Cadmium		1250	mg/kg-dry	8.3	110	75	125			
Chromium		1270	mg/kg-dry	280	111	75	125			
Lead		1200	mg/kg-dry	120	105	75	125			
Selenium		1180	mg/kg-dry	31	104	75	125			
Silver		517	mg/kg-dry	170	113	75	125			
Lab ID: H22100165-001AMS	7	Sample Matrix Spike			Run: ICPMS205-H_221010A			10/10/22 09:38		
Arsenic		2500	mg/kg-dry	36	109	75	125			
Barium		3020	mg/kg-dry	63	111	75	125			
Cadmium		1280	mg/kg-dry	8.4	112	75	125			
Chromium		2530	mg/kg-dry	280	110	75	125			
Lead		2430	mg/kg-dry	120	106	75	125			
Selenium		2310	mg/kg-dry	32	101	75	125			
Silver		1300	mg/kg-dry	170	114	75	125			
Lab ID: H22100165-001AMSD	7	Sample Matrix Spike Duplicate			Run: ICPMS205-H_221010A			10/10/22 09:41		
Arsenic		2490	mg/kg-dry	36	108	75	125	0.3	20	
Barium		2980	mg/kg-dry	63	109	75	125	1.5	20	
Cadmium		1270	mg/kg-dry	8.4	111	75	125	1.0	20	
Chromium		2530	mg/kg-dry	280	110	75	125	0.1	20	
Lead		2450	mg/kg-dry	120	107	75	125	0.7	20	
Selenium		2300	mg/kg-dry	32	100	75	125	0.5	20	
Silver		1290	mg/kg-dry	170	112	75	125	1.0	20	
Method: SW6020										Batch: 63807
Lab ID: MB-63807	7	Method Blank			Run: ICPMS205-H_221010A			10/10/22 23:14		
Arsenic		ND	mg/L	0.001						
Barium		ND	mg/L	0.0006						
Cadmium		ND	mg/L	0.0001						
Chromium		ND	mg/L	0.001						
Lead		ND	mg/L	0.0005						
Selenium		ND	mg/L	0.0008						
Silver		ND	mg/L	0.0004						
Lab ID: LCS-63807	7	Laboratory Control Sample			Run: ICPMS205-H_221010A			10/10/22 23:17		
Arsenic		0.491	mg/L	0.0010	98	80	120			
Barium		0.495	mg/L	0.050	99	80	120			
Cadmium		0.256	mg/L	0.0010	103	80	120			
Chromium		0.516	mg/L	0.0050	103	80	120			
Lead		0.514	mg/L	0.0010	103	80	120			
Selenium		0.466	mg/L	0.0010	93	80	120			
Silver		0.0494	mg/L	0.0010	99	80	120			
Lab ID: H22100108-008AMS3	7	Sample Matrix Spike			Run: ICPMS205-H_221010A			10/10/22 23:31		
Arsenic		0.495	mg/L	0.0010	99	75	125			
Barium		0.494	mg/L	0.050	99	75	125			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020										Batch: 63807
Lab ID: H22100108-008AMS3	7	Sample Matrix Spike		Run: ICPMS205-H_221010A				10/10/22 23:31		
Cadmium		0.256	mg/L	0.0010	102	75	125			
Chromium		0.510	mg/L	0.0050	102	75	125			
Lead		0.512	mg/L	0.0010	102	75	125			
Selenium		0.464	mg/L	0.0010	93	75	125			
Silver		0.0495	mg/L	0.0010	99	75	125			
Lab ID: H22100108-008AMSD	7	Sample Matrix Spike Duplicate		Run: ICPMS205-H_221010A				10/10/22 23:33		
Arsenic		0.497	mg/L	0.0010	99	75	125	0.3	20	
Barium		0.500	mg/L	0.050	100	75	125	1.2	20	
Cadmium		0.259	mg/L	0.0010	104	75	125	1.2	20	
Chromium		0.518	mg/L	0.0050	104	75	125	1.7	20	
Lead		0.519	mg/L	0.0010	104	75	125	1.3	20	
Selenium		0.462	mg/L	0.0010	92	75	125	0.4	20	
Silver		0.0502	mg/L	0.0010	100	75	125	1.4	20	
Method: SW6020										Analytical Run: ICPMS205-H_221011A
Lab ID: ICV		Initial Calibration Verification Standard							10/11/22 10:44	
Barium		0.0631	mg/L	0.0010	105	90	110			
Lab ID: ICSA		Interference Check Sample A							10/11/22 10:51	
Barium		0.000212	mg/L	0.0010						
Lab ID: ICSAB		Interference Check Sample AB							10/11/22 10:56	
Barium		0.000170	mg/L	0.0010		0	0			
Lab ID: CCV		Continuing Calibration Verification Standard							10/11/22 11:03	
Barium		0.0511	mg/L	0.0010	102	90	110			
Lab ID: CCV		Continuing Calibration Verification Standard							10/11/22 11:30	
Barium		0.0523	mg/L	0.0010	105	90	110			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW7470A								Analytical Run: HGCV203-H_221006B		
Lab ID: ICV		Initial Calibration Verification Standard								10/06/22 15:06
Mercury		0.000919	mg/L	0.00010	92	90	110			
Lab ID: CCV1		Continuing Calibration Verification Standard								10/06/22 15:08
Mercury		0.00250	mg/L	0.00010	100	90	110			
Lab ID: CCV		Continuing Calibration Verification Standard								10/06/22 15:37
Mercury		0.00255	mg/L	0.00010	102	90	110			
Method: SW7470A								Batch: 63799		
Lab ID: MB-63799		Method Blank								10/06/22 15:41
Mercury		ND	mg/L	0.00002						
Lab ID: LCS-63799		Laboratory Control Sample								10/06/22 15:43
Mercury		0.000455	mg/L	0.00010	91	80	120			
Lab ID: H22100078-001EDIL		Serial Dilution								10/06/22 15:47
Mercury		ND	mg/L	0.00025		0	0			10
Lab ID: H22100078-001EMS		Sample Matrix Spike								10/06/22 15:50
Mercury		0.000443	mg/L	0.00010	89	75	125			
Lab ID: H22100078-001EMSD		Sample Matrix Spike Duplicate								10/06/22 15:52
Mercury		0.000445	mg/L	0.00010	89	75	125	0.5		20

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	SW7471B							Analytical Run: HGCV203-H_221007A		
Lab ID:	ICV	Initial Calibration Verification Standard							10/07/22 11:57	
Mercury		0.00097	mg/kg	0.50	97	90	110			
Lab ID:	CCV	Continuing Calibration Verification Standard							10/07/22 11:59	
Mercury		0.0025	mg/kg	0.50	101	90	110			
Method:	SW7471B							Batch: 63801		
Lab ID:	MB-63801	Method Blank			Run: HGCV203-H_221007A			10/07/22 12:04		
Mercury		ND	mg/kg	0.004						
Lab ID:	LCS-63801	Laboratory Control Sample			Run: HGCV203-H_221007A			10/07/22 12:06		
Mercury		5.3	mg/kg	0.50	106	71	126.4			
Lab ID:	LFB-63801	Laboratory Fortified Blank			Run: HGCV203-H_221007A			10/07/22 12:08		
Mercury		0.20	mg/kg	0.50	104	80	120			
Lab ID:	H22100108-001AMS	Sample Matrix Spike			Run: HGCV203-H_221007A			10/07/22 12:14		
Mercury		0.23	mg/kg-dry	0.50	100	80	120			
Lab ID:	H22100108-001AMSD	Sample Matrix Spike Duplicate			Run: HGCV203-H_221007A			10/07/22 12:16		
Mercury		0.23	mg/kg-dry	0.050	100	80	120	0.3	20	
Lab ID:	H22100165-001BMS	Sample Matrix Spike			Run: HGCV203-H_221007A			10/07/22 12:35		
Mercury		0.20	mg/kg	0.50	98	80	120			
Lab ID:	H22100165-001BMSD	Sample Matrix Spike Duplicate			Run: HGCV203-H_221007A			10/07/22 12:37		
Mercury		0.20	mg/kg	0.050	98	80	120	2.5	20	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8015M										Batch: 63711
Lab ID: MB-63711	2	Method Blank					Run: HHP2_221003A			10/03/22 18:01
Total Extractable Hydrocarbons		ND	ug/L	300						
Surr: o-Terphenyl					65	40	140			
Lab ID: LCS-63711	2	Laboratory Control Sample					Run: HHP2_221003A			10/03/22 18:47
Total Extractable Hydrocarbons		6090	ug/L	310	93	60	140			
Surr: o-Terphenyl					83	40	140			
Lab ID: H22090920-001AMS	2	Sample Matrix Spike					Run: HHP2_221004A			10/04/22 17:14
Total Extractable Hydrocarbons		14400	ug/L	600	113	60	140			
Surr: o-Terphenyl					97	40	140			
Lab ID: H22090920-001AMSD	2	Sample Matrix Spike Duplicate					Run: HHP2_221004A			10/04/22 18:00
Total Extractable Hydrocarbons		15400	ug/L	640	113	60	140	6.6	20	
Surr: o-Terphenyl					103	40	140			
Method: SW8015M										Batch: 63743
Lab ID: MB-63743	2	Method Blank					Run: HHP2_221005A			10/05/22 17:12
Total Extractable Hydrocarbons		ND	mg/kg	20						
Surr: o-Terphenyl				0.17	98	40	140			
Lab ID: LCS-63743	2	Laboratory Control Sample					Run: HHP2_221005A			10/05/22 17:58
Total Extractable Hydrocarbons		192.4	mg/kg	20	98	60	140			
Surr: o-Terphenyl				0.17	88	40	140			
Lab ID: H22100037-002AMS	2	Sample Matrix Spike					Run: HHP2_221005A			10/05/22 20:18
Total Extractable Hydrocarbons		492.5	mg/kg-dry	20	85	60	140			
Surr: o-Terphenyl				0.22	71	40	140			
Lab ID: H22100037-002AMSD	2	Sample Matrix Spike Duplicate					Run: HHP2_221005A			10/05/22 21:05
Total Extractable Hydrocarbons		519.4	mg/kg-dry	20	95	60	140	5.3	20	
Surr: o-Terphenyl				0.22	76	40	140			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8015M										Analytical Run: R178928
Lab ID: CCV_1005GC401r-W 15 Continuing Calibration Verification Standard										10/05/22 15:40
n-Nonane		210	ug/L		105	75	125			
n-Decane		216	ug/L		108	75	125			
n-Dodecane		202	ug/L		101	75	125			
n-Tetradecane		216	ug/L		108	75	125			
n-Hexadecane		183	ug/L		92	75	125			
n-Octadecane		196	ug/L		98	75	125			
n-Nonadecane		199	ug/L		99	75	125			
n-Eicosane		200	ug/L		100	75	125			
n-Docosane		198	ug/L		99	75	125			
n-Tetracosane		197	ug/L		98	75	125			
n-Hexacosane		197	ug/L		99	75	125			
n-Octacosane		199	ug/L		99	75	125			
n-Triacontane		189	ug/L		95	75	125			
n-Hexatriacontane		195	ug/L		97	75	125			
Surr: o-Terphenyl					96	75	125			

Method: SW8015M										Analytical Run: R178960
Lab ID: CCV_1006GC401r-S 15 Continuing Calibration Verification Standard										10/06/22 15:32
n-Nonane		7.088	mg/kg		106	75	125			
n-Decane		7.180	mg/kg		108	75	125			
n-Dodecane		6.746	mg/kg		101	75	125			
n-Tetradecane		7.095	mg/kg		106	75	125			
n-Hexadecane		6.147	mg/kg		92	75	125			
n-Octadecane		6.563	mg/kg		98	75	125			
n-Nonadecane		6.655	mg/kg		100	75	125			
n-Eicosane		6.687	mg/kg		100	75	125			
n-Docosane		6.587	mg/kg		99	75	125			
n-Tetracosane		6.569	mg/kg		99	75	125			
n-Hexacosane		6.592	mg/kg		99	75	125			
n-Octacosane		6.625	mg/kg		99	75	125			
n-Triacontane		6.372	mg/kg		96	75	125			
n-Hexatriacontane		6.561	mg/kg		98	75	125			
Surr: o-Terphenyl				0.17	96	75	125			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B										Batch: 63691
Lab ID: MB-63691	53 Method Blank				Run: 5973MSD_220930C				09/30/22 19:12	
Benzene		ND	mg/kg	0.20						
Bromobenzene		ND	mg/kg	0.20						
Bromochloromethane		ND	mg/kg	0.20						
Bromodichloromethane		ND	mg/kg	0.20						
Bromoform		ND	mg/kg	0.20						
Bromomethane		ND	mg/kg	0.20						
Carbon tetrachloride		ND	mg/kg	0.20						
Chlorobenzene		ND	mg/kg	0.20						
Chlorodibromomethane		ND	mg/kg	0.20						
Chloroethane		ND	mg/kg	0.20						
2-Chloroethyl vinyl ether		ND	mg/kg	0.20						
Chloroform		ND	mg/kg	0.20						
Chloromethane		ND	mg/kg	0.20						
2-Chlorotoluene		ND	mg/kg	0.20						
4-Chlorotoluene		ND	mg/kg	0.20						
1,2-Dibromoethane		ND	mg/kg	0.20						
Dibromomethane		ND	mg/kg	0.20						
1,2-Dichlorobenzene		ND	mg/kg	0.20						
1,3-Dichlorobenzene		ND	mg/kg	0.20						
1,4-Dichlorobenzene		ND	mg/kg	0.20						
Dichlorodifluoromethane		ND	mg/kg	0.20						
1,1-Dichloroethane		ND	mg/kg	0.20						
1,2-Dichloroethane		ND	mg/kg	0.20						
1,1-Dichloroethene		ND	mg/kg	0.20						
cis-1,2-Dichloroethene		ND	mg/kg	0.20						
trans-1,2-Dichloroethene		ND	mg/kg	0.20						
1,2-Dichloropropane		ND	mg/kg	0.20						
1,3-Dichloropropane		ND	mg/kg	0.20						
2,2-Dichloropropane		ND	mg/kg	0.20						
1,1-Dichloropropene		ND	mg/kg	0.20						
cis-1,3-Dichloropropene		ND	mg/kg	0.20						
trans-1,3-Dichloropropene		ND	mg/kg	0.20						
Ethylbenzene		ND	mg/kg	0.20						
Methyl tert-butyl ether (MTBE)		ND	mg/kg	0.20						
Methyl ethyl ketone		ND	mg/kg	4.0						
Methylene chloride		ND	mg/kg	0.20						
Styrene		ND	mg/kg	0.20						
1,1,1,2-Tetrachloroethane		ND	mg/kg	0.20						
1,1,2,2-Tetrachloroethane		ND	mg/kg	0.20						
Tetrachloroethene		ND	mg/kg	0.20						
Toluene		ND	mg/kg	0.20						
1,1,1-Trichloroethane		ND	mg/kg	0.20						
1,1,2-Trichloroethane		ND	mg/kg	0.20						
Trichloroethene		ND	mg/kg	0.20						
Trichlorofluoromethane		ND	mg/kg	0.20						

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B										Batch: 63691
Lab ID: MB-63691	53	Method Blank				Run: 5973MSD_220930C				09/30/22 19:12
1,2,3-Trichloropropane		ND	mg/kg	0.20						
Vinyl chloride		ND	mg/kg	0.20						
m+p-Xylenes		ND	mg/kg	0.20						
o-Xylene		ND	mg/kg	0.20						
Surr: 1,2-Dichloroethane-d4				0.20	151	65	147			S
Surr: Dibromofluoromethane				0.20	141	71	135			S
Surr: p-Bromofluorobenzene				0.20	147	60	143			S
Surr: Toluene-d8				0.20	123	76	133			
Lab ID: LCS-63691		Laboratory Control Sample				Run: 5973MSD_220930C				09/30/22 19:44
Vinyl chloride		1.01	mg/kg	0.20	101	81	139			
Lab ID: H22090748-002AMS	53	Sample Matrix Spike				Run: 5973MSD_220930C				09/30/22 20:47
Benzene		1.23	mg/kg-dry	0.20	97	77	128			
Bromobenzene		1.19	mg/kg-dry	0.20	94	81	131			
Bromochloromethane		1.24	mg/kg-dry	0.20	97	71	135			
Bromodichloromethane		1.16	mg/kg-dry	0.20	91	62	141			
Bromoform		1.13	mg/kg-dry	0.20	89	75	117			
Bromomethane		1.22	mg/kg-dry	0.20	96	40	121			
Carbon tetrachloride		1.03	mg/kg-dry	0.20	81	71	142			
Chlorobenzene		1.12	mg/kg-dry	0.20	88	82	130			
Chlorodibromomethane		1.14	mg/kg-dry	0.20	90	66	123			
Chloroethane		1.15	mg/kg-dry	0.20	91	53	140			
2-Chloroethyl vinyl ether		1.27	mg/kg-dry	0.20	100	39	155			
Chloroform		1.25	mg/kg-dry	0.20	99	69	134			
Chloromethane		1.35	mg/kg-dry	0.20	107	78	131			
2-Chlorotoluene		1.06	mg/kg-dry	0.20	84	84	131			
4-Chlorotoluene		1.16	mg/kg-dry	0.20	91	82	133			
1,2-Dibromoethane		1.25	mg/kg-dry	0.20	99	63	121			
Dibromomethane		1.19	mg/kg-dry	0.20	94	53	149			
1,2-Dichlorobenzene		1.23	mg/kg-dry	0.20	96	84	121			
1,3-Dichlorobenzene		1.14	mg/kg-dry	0.20	90	82	125			
1,4-Dichlorobenzene		1.17	mg/kg-dry	0.20	92	83	128			
Dichlorodifluoromethane		1.02	mg/kg-dry	0.20	80	38	132			
1,1-Dichloroethane		1.05	mg/kg-dry	0.20	83	66	124			
1,2-Dichloroethane		1.21	mg/kg-dry	0.20	95	65	131			
1,1-Dichloroethene		1.09	mg/kg-dry	0.20	85	82	136			
cis-1,2-Dichloroethene		1.14	mg/kg-dry	0.20	90	82	126			
trans-1,2-Dichloroethene		1.07	mg/kg-dry	0.20	84	80	130			
1,2-Dichloropropane		1.06	mg/kg-dry	0.20	84	70	148			
1,3-Dichloropropane		1.34	mg/kg-dry	0.20	106	73	125			
2,2-Dichloropropane		1.16	mg/kg-dry	0.20	92	74	138			
1,1-Dichloropropene		1.14	mg/kg-dry	0.20	90	63	154			
cis-1,3-Dichloropropene		1.28	mg/kg-dry	0.20	101	66	152			
trans-1,3-Dichloropropene		1.22	mg/kg-dry	0.20	96	64	133			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

S - Spike recovery outside of advisory limits

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B										Batch: 63691
Lab ID: H22090748-002AMS	53	Sample Matrix Spike		Run: 5973MSD_220930C				09/30/22 20:47		
Ethylbenzene		1.09	mg/kg-dry	0.20	86	79	134			
Methyl tert-butyl ether (MTBE)		1.45	mg/kg-dry	0.20	114	60	126			
Methyl ethyl ketone		13.2	mg/kg-dry	4.0	104	50	150			
Methylene chloride		1.11	mg/kg-dry	0.20	87	80	127			
Styrene		1.19	mg/kg-dry	0.20	94	82	127			
1,1,1,2-Tetrachloroethane		1.08	mg/kg-dry	0.20	85	75	128			
1,1,2,2-Tetrachloroethane		1.35	mg/kg-dry	0.20	106	74	120			
Tetrachloroethene		0.999	mg/kg-dry	0.20	79	72	144			
Toluene		1.08	mg/kg-dry	0.20	85	70	146			
1,1,1-Trichloroethane		1.10	mg/kg-dry	0.20	86	75	145			
1,1,2-Trichloroethane		1.30	mg/kg-dry	0.20	102	67	125			
Trichloroethene		1.05	mg/kg-dry	0.20	83	70	144			
Trichlorofluoromethane		1.34	mg/kg-dry	0.20	105	79	140			
1,2,3-Trichloropropane		1.36	mg/kg-dry	0.20	107	76	117			
Vinyl chloride		1.16	mg/kg-dry	0.20	91	81	139			
m+p-Xylenes		2.18	mg/kg-dry	0.20	86	79	133			
o-Xylene		1.09	mg/kg-dry	0.20	86	84	132			
Surr: 1,2-Dichloroethane-d4				0.20	122	65	147			
Surr: Dibromofluoromethane				0.20	110	71	135			
Surr: p-Bromofluorobenzene				0.20	114	60	143			
Surr: Toluene-d8				0.20	99	76	133			
Lab ID: H22090748-002AMSD	53	Sample Matrix Spike Duplicate		Run: 5973MSD_220930C				09/30/22 21:19		
Benzene		1.27	mg/kg-dry	0.20	100	77	128	3.1	20	
Bromobenzene		1.26	mg/kg-dry	0.20	99	81	131	5.6	20	
Bromochloromethane		1.28	mg/kg-dry	0.20	101	71	135	3.7	20	
Bromodichloromethane		1.18	mg/kg-dry	0.20	93	62	141	1.6	20	
Bromoform		1.23	mg/kg-dry	0.20	97	75	117	8.7	20	
Bromomethane		1.32	mg/kg-dry	0.20	104	40	121	7.9	20	
Carbon tetrachloride		1.06	mg/kg-dry	0.20	84	71	142	2.9	20	
Chlorobenzene		1.17	mg/kg-dry	0.20	92	82	130	4.5	20	
Chlorodibromomethane		1.16	mg/kg-dry	0.20	91	66	123	1.3	20	
Chloroethane		1.08	mg/kg-dry	0.20	85	53	140	6.5	20	
2-Chloroethyl vinyl ether		1.35	mg/kg-dry	0.20	106	39	155	6.2	20	
Chloroform		1.29	mg/kg-dry	0.20	101	69	134	2.5	20	
Chloromethane		1.29	mg/kg-dry	0.20	101	78	131	4.9	20	
2-Chlorotoluene		1.10	mg/kg-dry	0.20	86	84	131	3.1	20	
4-Chlorotoluene		1.18	mg/kg-dry	0.20	92	82	133	1.3	20	
1,2-Dibromoethane		1.26	mg/kg-dry	0.20	99	63	121	0.3	20	
Dibromomethane		1.23	mg/kg-dry	0.20	96	53	149	2.6	20	
1,2-Dichlorobenzene		1.27	mg/kg-dry	0.20	100	84	121	3.2	20	
1,3-Dichlorobenzene		1.19	mg/kg-dry	0.20	94	82	125	4.3	20	
1,4-Dichlorobenzene		1.20	mg/kg-dry	0.20	95	83	128	2.7	20	
Dichlorodifluoromethane		0.973	mg/kg-dry	0.20	77	38	132	4.8	20	
1,1-Dichloroethane		1.06	mg/kg-dry	0.20	83	66	124	0.6	20	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B										Batch: 63691
Lab ID: H22090748-002AMSD 53 Sample Matrix Spike Duplicate										Run: 5973MSD_220930C 09/30/22 21:19
1,2-Dichloroethane		1.25	mg/kg-dry	0.20	99	65	131	3.6	20	
1,1-Dichloroethene		1.12	mg/kg-dry	0.20	88	82	136	2.7	20	
cis-1,2-Dichloroethene		1.24	mg/kg-dry	0.20	97	82	126	8.0	20	
trans-1,2-Dichloroethene		1.12	mg/kg-dry	0.20	88	80	130	4.7	20	
1,2-Dichloropropane		1.08	mg/kg-dry	0.20	85	70	148	1.3	20	
1,3-Dichloropropane		1.36	mg/kg-dry	0.20	107	73	125	1.0	20	
2,2-Dichloropropane		1.18	mg/kg-dry	0.20	92	74	138	1.1	20	
1,1-Dichloropropene		1.18	mg/kg-dry	0.20	93	63	154	3.1	20	
cis-1,3-Dichloropropene		1.35	mg/kg-dry	0.20	106	66	152	5.0	20	
trans-1,3-Dichloropropene		1.24	mg/kg-dry	0.20	98	64	133	1.5	20	
Ethylbenzene		1.11	mg/kg-dry	0.20	88	79	134	2.2	20	
Methyl tert-butyl ether (MTBE)		1.54	mg/kg-dry	0.20	121	60	126	6.1	20	
Methyl ethyl ketone		13.8	mg/kg-dry	4.0	108	50	150	4.5	20	
Methylene chloride		1.13	mg/kg-dry	0.20	89	80	127	1.7	20	
Styrene		1.24	mg/kg-dry	0.20	97	82	127	4.0	20	
1,1,1,2-Tetrachloroethane		1.14	mg/kg-dry	0.20	90	75	128	5.3	20	
1,1,2,2-Tetrachloroethane		1.38	mg/kg-dry	0.20	108	74	120	1.9	20	
Tetrachloroethene		1.04	mg/kg-dry	0.20	82	72	144	4.3	20	
Toluene		1.11	mg/kg-dry	0.20	87	70	146	2.9	20	
1,1,1-Trichloroethane		1.11	mg/kg-dry	0.20	88	75	145	1.7	20	
1,1,2-Trichloroethane		1.32	mg/kg-dry	0.20	104	67	125	1.7	20	
Trichloroethene		1.08	mg/kg-dry	0.20	85	70	144	2.9	20	
Trichlorofluoromethane		1.29	mg/kg-dry	0.20	102	79	140	3.6	20	
1,2,3-Trichloropropane		1.35	mg/kg-dry	0.20	106	76	117	0.4	20	
Vinyl chloride		1.08	mg/kg-dry	0.20	85	81	139	6.5	20	
m+p-Xylenes		2.27	mg/kg-dry	0.20	89	79	133	4.4	20	
o-Xylene		1.15	mg/kg-dry	0.20	90	84	132	5.5	20	
Surr: 1,2-Dichloroethane-d4				0.20	124	65	147			
Surr: Dibromofluoromethane				0.20	111	71	135			
Surr: p-Bromofluorobenzene				0.20	112	60	143			
Surr: Toluene-d8				0.20	99	76	133			
Lab ID: LCS-63691 52 Laboratory Control Sample										Run: 5973MSD_221003A 10/03/22 13:53
Benzene		1.00	mg/kg	0.20	100	77	128			
Bromobenzene		0.959	mg/kg	0.20	96	81	131			
Bromochloromethane		0.999	mg/kg	0.20	100	71	135			
Bromodichloromethane		0.922	mg/kg	0.20	92	62	141			
Bromoform		0.909	mg/kg	0.20	91	75	117			
Bromomethane		1.19	mg/kg	0.20	119	40	121			
Carbon tetrachloride		0.856	mg/kg	0.20	86	71	142			
Chlorobenzene		0.892	mg/kg	0.20	89	82	130			
Chlorodibromomethane		0.899	mg/kg	0.20	90	66	123			
Chloroethane		0.853	mg/kg	0.20	85	53	140			
2-Chloroethyl vinyl ether		0.986	mg/kg	0.20	99	39	155			
Chloroform		1.00	mg/kg	0.20	100	69	134			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B										Batch: 63691
Lab ID: LCS-63691	52 Laboratory Control Sample					Run: 5973MSD_221003A			10/03/22 13:53	
Chloromethane		0.914	mg/kg	0.20	91	78	131			
2-Chlorotoluene		0.850	mg/kg	0.20	85	84	131			
4-Chlorotoluene		0.943	mg/kg	0.20	94	82	133			
1,2-Dibromoethane		0.992	mg/kg	0.20	99	63	121			
Dibromomethane		0.913	mg/kg	0.20	91	53	149			
1,2-Dichlorobenzene		0.982	mg/kg	0.20	98	84	121			
1,3-Dichlorobenzene		0.925	mg/kg	0.20	93	82	125			
1,4-Dichlorobenzene		0.933	mg/kg	0.20	93	83	128			
Dichlorodifluoromethane		0.571	mg/kg	0.20	57	38	132			
1,1-Dichloroethane		0.856	mg/kg	0.20	86	66	124			
1,2-Dichloroethane		0.941	mg/kg	0.20	94	65	131			
1,1-Dichloroethene		0.869	mg/kg	0.20	87	82	136			
cis-1,2-Dichloroethene		0.970	mg/kg	0.20	97	82	126			
trans-1,2-Dichloroethene		0.886	mg/kg	0.20	89	80	130			
1,2-Dichloropropane		0.851	mg/kg	0.20	85	70	148			
1,3-Dichloropropane		1.04	mg/kg	0.20	104	73	125			
2,2-Dichloropropane		1.02	mg/kg	0.20	102	74	138			
1,1-Dichloropropene		0.952	mg/kg	0.20	95	63	154			
cis-1,3-Dichloropropene		1.02	mg/kg	0.20	102	66	152			
trans-1,3-Dichloropropene		0.960	mg/kg	0.20	96	64	133			
Ethylbenzene		0.874	mg/kg	0.20	87	79	134			
Methyl tert-butyl ether (MTBE)		1.18	mg/kg	0.20	118	60	126			
Methyl ethyl ketone		9.58	mg/kg	4.0	96	50	150			
Methylene chloride		0.838	mg/kg	0.20	84	80	127			
Styrene		0.951	mg/kg	0.20	95	82	127			
1,1,1,2-Tetrachloroethane		0.895	mg/kg	0.20	90	75	128			
1,1,1,2-Tetrachloroethane		1.01	mg/kg	0.20	101	74	120			
Tetrachloroethene		0.787	mg/kg	0.20	79	72	144			
Toluene		0.850	mg/kg	0.20	85	70	146			
1,1,1-Trichloroethane		0.904	mg/kg	0.20	90	75	145			
1,1,2-Trichloroethane		1.02	mg/kg	0.20	102	67	125			
Trichloroethene		0.817	mg/kg	0.20	82	70	144			
Trichlorofluoromethane		0.990	mg/kg	0.20	99	79	140			
1,2,3-Trichloropropane		1.10	mg/kg	0.20	110	76	117			
m+p-Xylenes		1.79	mg/kg	0.20	89	79	133			
o-Xylene		0.907	mg/kg	0.20	91	84	132			
Surr: 1,2-Dichloroethane-d4				0.20	98	65	147			
Surr: Dibromofluoromethane				0.20	90	71	135			
Surr: p-Bromofluorobenzene				0.20	91	60	143			
Surr: Toluene-d8				0.20	81	76	133			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B										Analytical Run: R178933
Lab ID: 04-Oct-22_CCV_4	53 Continuing Calibration Verification Standard									10/05/22 11:36
Benzene		4.87	ug/L	0.50	97	70	130			
Bromobenzene		4.59	ug/L	0.50	92	70	130			
Bromochloromethane		5.46	ug/L	0.50	109	70	130			
Bromodichloromethane		4.97	ug/L	0.50	99	70	130			
Bromoform		5.47	ug/L	0.50	109	70	130			
Bromomethane		6.46	ug/L	0.50	129	70	130			
Carbon tetrachloride		4.26	ug/L	0.50	85	70	130			
Chlorobenzene		4.36	ug/L	0.50	87	70	130			
Chlorodibromomethane		4.89	ug/L	0.50	98	70	130			
Chloroethane		4.80	ug/L	0.50	96	70	130			
Chloroform		5.11	ug/L	0.50	102	80	120			
Chloromethane		6.16	ug/L	0.50	123	70	130			
2-Chlorotoluene		4.19	ug/L	0.50	84	70	130			
4-Chlorotoluene		4.62	ug/L	0.50	92	70	130			
1,2-Dibromoethane		5.34	ug/L	0.30	107	70	130			
Dibromomethane		5.05	ug/L	0.50	101	70	130			
1,2-Dichlorobenzene		5.13	ug/L	0.50	103	70	130			
1,3-Dichlorobenzene		4.66	ug/L	0.50	93	70	130			
1,4-Dichlorobenzene		4.68	ug/L	0.50	94	70	130			
Dichlorodifluoromethane		5.13	ug/L	0.50	103	70	130			
1,1-Dichloroethane		4.50	ug/L	0.50	90	70	130			
1,2-Dichloroethane		5.40	ug/L	0.50	108	70	130			
1,1-Dichloroethene		4.39	ug/L	0.50	88	80	120			
cis-1,2-Dichloroethene		4.92	ug/L	0.50	98	70	130			
trans-1,2-Dichloroethene		4.32	ug/L	0.50	86	70	130			
1,2-Dichloropropane		4.53	ug/L	0.50	91	80	120			
1,3-Dichloropropane		5.51	ug/L	0.50	110	70	130			
2,2-Dichloropropane		4.71	ug/L	0.50	94	70	130			
1,1-Dichloropropene		4.48	ug/L	0.50	90	70	130			
cis-1,3-Dichloropropene		5.12	ug/L	0.50	102	70	130			
trans-1,3-Dichloropropene		5.38	ug/L	0.30	108	70	130			
Ethylbenzene		4.14	ug/L	0.50	83	80	120			
Methyl tert-butyl ether (MTBE)		6.31	ug/L	0.50	126	70	130			
Methyl ethyl ketone		64.9	ug/L	10	130	70	130			
Methylene chloride		4.86	ug/L	0.50	97	70	130			
Styrene		4.66	ug/L	0.50	93	70	130			
1,1,1,2-Tetrachloroethane		4.49	ug/L	0.50	90	70	130			
1,1,2,2-Tetrachloroethane		6.02	ug/L	0.50	120	70	130			
Tetrachloroethene		3.89	ug/L	0.50	78	70	130			
Toluene		4.10	ug/L	0.50	82	80	120			
1,1,1-Trichloroethane		4.37	ug/L	0.50	87	70	130			
1,1,2-Trichloroethane		5.28	ug/L	0.50	106	70	130			
Trichloroethene		3.98	ug/L	0.50	80	70	130			
Trichlorofluoromethane		5.30	ug/L	0.50	106	70	130			
1,2,3-Trichloropropane		6.37	ug/L	0.50	127	70	130			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B										Analytical Run: R178933
Lab ID: 04-Oct-22_CCV_4	53	Continuing Calibration Verification Standard								10/05/22 11:36
Vinyl chloride		4.68	ug/L	0.40	94	80	120			
m+p-Xylenes		8.30	ug/L	0.50	83	70	130			
o-Xylene		4.31	ug/L	0.50	86	70	130			
Xylenes, Total		12.6	ug/L	0.50	84	70	130			
Surr: 1,2-Dichloroethane-d4				1.0	115	69	131			
Surr: Dibromofluoromethane				1.0	104	70	125			
Surr: p-Bromofluorobenzene				1.0	105	76	123			
Surr: Toluene-d8				1.0	86	80	119			
Method: SW8260B										Batch: R178933
Lab ID: 04-Oct-22_LCS_5	53	Laboratory Control Sample								Run: 5973MSD_221005A 10/05/22 12:15
Benzene		5.42	ug/L	0.50	108	75	120			
Bromobenzene		5.46	ug/L	0.50	109	80	125			
Bromochloromethane		5.52	ug/L	0.50	110	65	130			
Bromodichloromethane		5.20	ug/L	0.50	104	79	118			
Bromoform		5.75	ug/L	0.50	115	67	128			
Bromomethane		7.23	ug/L	0.50	145	51	136			S
Carbon tetrachloride		4.72	ug/L	0.50	94	75	129			
Chlorobenzene		4.91	ug/L	0.50	98	77	127			
Chlorodibromomethane		5.16	ug/L	0.50	103	70	126			
Chloroethane		4.81	ug/L	0.50	96	70	139			
Chloroform		5.29	ug/L	0.50	106	74	125			
Chloromethane		5.95	ug/L	0.50	119	64	152			
2-Chlorotoluene		4.99	ug/L	0.50	100	78	130			
4-Chlorotoluene		5.36	ug/L	0.50	107	82	129			
1,2-Dibromoethane		5.54	ug/L	0.30	111	72	122			
Dibromomethane		5.26	ug/L	0.50	105	75	120			
1,2-Dichlorobenzene		5.43	ug/L	0.50	109	74	122			
1,3-Dichlorobenzene		5.15	ug/L	0.50	103	78	120			
1,4-Dichlorobenzene		5.39	ug/L	0.50	108	70	121			
Dichlorodifluoromethane		4.84	ug/L	0.50	97	48	152			
1,1-Dichloroethane		4.97	ug/L	0.50	99	77	123			
1,2-Dichloroethane		5.21	ug/L	0.50	104	64	127			
1,1-Dichloroethene		4.91	ug/L	0.50	98	76	130			
cis-1,2-Dichloroethene		5.29	ug/L	0.50	106	74	124			
trans-1,2-Dichloroethene		4.84	ug/L	0.50	97	79	124			
1,2-Dichloropropane		5.04	ug/L	0.50	101	81	121			
1,3-Dichloropropane		5.76	ug/L	0.50	115	72	122			
2,2-Dichloropropane		5.45	ug/L	0.50	109	75	139			
1,1-Dichloropropene		5.14	ug/L	0.50	103	73	130			
cis-1,3-Dichloropropene		5.80	ug/L	0.50	116	74	128			
trans-1,3-Dichloropropene		5.41	ug/L	0.30	108	69	122			
Ethylbenzene		4.75	ug/L	0.50	95	74	125			
Methyl tert-butyl ether (MTBE)		6.15	ug/L	0.50	123	66	129			
Methyl ethyl ketone		56.6	ug/L	10	113	63	136			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

S - Spike recovery outside of advisory limits

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B										Batch: R178933
Lab ID: 04-Oct-22_LCS_5	53	Laboratory Control Sample			Run: 5973MSD_221005A			10/05/22 12:15		
Methylene chloride		5.11	ug/L	0.50	102	69	128			
Styrene		5.20	ug/L	0.50	104	75	123			
1,1,1,2-Tetrachloroethane		4.85	ug/L	0.50	97	76	124			
1,1,2,2-Tetrachloroethane		6.18	ug/L	0.50	124	67	124			
Tetrachloroethene		4.31	ug/L	0.50	86	77	136			
Toluene		4.73	ug/L	0.50	95	82	125			
1,1,1-Trichloroethane		4.99	ug/L	0.50	100	73	134			
1,1,2-Trichloroethane		5.70	ug/L	0.50	114	72	119			
Trichloroethene		4.63	ug/L	0.50	93	72	132			
Trichlorofluoromethane		5.09	ug/L	0.50	102	73	137			
1,2,3-Trichloropropane		5.64	ug/L	0.50	113	71	126			
Vinyl chloride		4.51	ug/L	0.40	90	68	140			
m+p-Xylenes		9.60	ug/L	0.50	96	84	128			
o-Xylene		4.89	ug/L	0.50	98	79	126			
Xylenes, Total		14.5	ug/L	0.50	97	81	127			
Surr: 1,2-Dichloroethane-d4				1.0	104	69	131			
Surr: Dibromofluoromethane				1.0	97	70	125			
Surr: p-Bromofluorobenzene				1.0	106	76	123			
Surr: Toluene-d8				1.0	88	80	119			
Lab ID: 05-Oct-22_MBLK_7	53	Method Blank			Run: 5973MSD_221005A			10/05/22 13:23		
Benzene		ND	ug/L	0.50						
Bromobenzene		ND	ug/L	0.50						
Bromochloromethane		ND	ug/L	0.50						
Bromodichloromethane		ND	ug/L	0.50						
Bromoform		ND	ug/L	0.50						
Bromomethane		ND	ug/L	0.50						
Carbon tetrachloride		ND	ug/L	0.50						
Chlorobenzene		ND	ug/L	0.50						
Chlorodibromomethane		ND	ug/L	0.50						
Chloroethane		ND	ug/L	0.50						
Chloroform		ND	ug/L	0.50						
Chloromethane		ND	ug/L	0.50						
2-Chlorotoluene		ND	ug/L	0.50						
4-Chlorotoluene		ND	ug/L	0.50						
1,2-Dibromoethane		ND	ug/L	0.30						
Dibromomethane		ND	ug/L	0.50						
1,2-Dichlorobenzene		ND	ug/L	0.50						
1,3-Dichlorobenzene		ND	ug/L	0.50						
1,4-Dichlorobenzene		ND	ug/L	0.50						
Dichlorodifluoromethane		ND	ug/L	0.50						
1,1-Dichloroethane		ND	ug/L	0.50						
1,2-Dichloroethane		ND	ug/L	0.50						
1,1-Dichloroethene		ND	ug/L	0.50						
cis-1,2-Dichloroethene		ND	ug/L	0.50						

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B										Batch: R178933
Lab ID: 05-Oct-22_MBLK_7	53	Method Blank		Run: 5973MSD_221005A				10/05/22 13:23		
trans-1,2-Dichloroethene		ND	ug/L	0.50						
1,2-Dichloropropane		ND	ug/L	0.50						
1,3-Dichloropropane		ND	ug/L	0.50						
2,2-Dichloropropane		ND	ug/L	0.50						
1,1-Dichloropropene		ND	ug/L	0.50						
cis-1,3-Dichloropropene		ND	ug/L	0.50						
trans-1,3-Dichloropropene		ND	ug/L	0.30						
Ethylbenzene		ND	ug/L	0.50						
Methyl tert-butyl ether (MTBE)		ND	ug/L	0.50						
Methyl ethyl ketone		ND	ug/L	10						
Methylene chloride		ND	ug/L	0.50						
Styrene		ND	ug/L	0.50						
1,1,1,2-Tetrachloroethane		ND	ug/L	0.50						
1,1,2,2-Tetrachloroethane		ND	ug/L	0.50						
Tetrachloroethene		ND	ug/L	0.50						
Toluene		ND	ug/L	0.50						
1,1,1-Trichloroethane		ND	ug/L	0.50						
1,1,2-Trichloroethane		ND	ug/L	0.50						
Trichloroethene		ND	ug/L	0.50						
Trichlorofluoromethane		ND	ug/L	0.50						
1,2,3-Trichloropropane		ND	ug/L	0.50						
Vinyl chloride		ND	ug/L	0.40						
m+p-Xylenes		ND	ug/L	0.50						
o-Xylene		ND	ug/L	0.50						
Xylenes, Total		ND	ug/L	0.50						
Surr: 1,2-Dichloroethane-d4				1.0	107	69	131			
Surr: Dibromofluoromethane				1.0	99	70	125			
Surr: p-Bromofluorobenzene				1.0	107	76	123			
Surr: Toluene-d8				1.0	87	80	119			
Lab ID: H22100108-008DMS	53	Sample Matrix Spike		Run: 5973MSD_221005A				10/05/22 14:30		
Benzene		5.73	ug/L	0.50	115	75	120			
Bromobenzene		5.69	ug/L	0.50	114	80	125			
Bromochloromethane		6.10	ug/L	0.50	122	65	130			
Bromodichloromethane		5.76	ug/L	0.50	115	79	118			
Bromoform		6.26	ug/L	0.50	125	67	128			
Bromomethane		6.79	ug/L	0.50	136	51	136			
Carbon tetrachloride		5.16	ug/L	0.50	103	75	129			
Chlorobenzene		5.32	ug/L	0.50	106	77	127			
Chlorodibromomethane		5.49	ug/L	0.50	110	70	126			
Chloroethane		4.34	ug/L	0.50	87	70	139			
Chloroform		6.20	ug/L	0.50	117	74	125			
Chloromethane		5.35	ug/L	0.50	107	64	152			
2-Chlorotoluene		5.18	ug/L	0.50	104	78	130			
4-Chlorotoluene		5.69	ug/L	0.50	114	82	129			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B										Batch: R178933
Lab ID: H22100108-008DMS	53	Sample Matrix Spike		Run: 5973MSD_221005A				10/05/22 14:30		
1,2-Dibromoethane		6.03	ug/L	0.30	121	72	122			
Dibromomethane		5.91	ug/L	0.50	118	75	120			
1,2-Dichlorobenzene		5.82	ug/L	0.50	116	74	122			
1,3-Dichlorobenzene		5.63	ug/L	0.50	113	78	120			
1,4-Dichlorobenzene		5.59	ug/L	0.50	112	70	121			
Dichlorodifluoromethane		4.54	ug/L	0.50	91	48	152			
1,1-Dichloroethane		5.28	ug/L	0.50	106	77	123			
1,2-Dichloroethane		5.82	ug/L	0.50	116	64	127			
1,1-Dichloroethene		5.35	ug/L	0.50	107	76	130			
cis-1,2-Dichloroethene		5.71	ug/L	0.50	114	74	124			
trans-1,2-Dichloroethene		5.23	ug/L	0.50	105	79	124			
1,2-Dichloropropane		5.40	ug/L	0.50	108	81	121			
1,3-Dichloropropane		5.95	ug/L	0.50	119	72	122			
2,2-Dichloropropane		5.65	ug/L	0.50	113	75	139			
1,1-Dichloropropene		5.52	ug/L	0.50	110	73	130			
cis-1,3-Dichloropropene		5.90	ug/L	0.50	118	74	128			
trans-1,3-Dichloropropene		6.26	ug/L	0.30	125	69	122			S
Ethylbenzene		5.11	ug/L	0.50	102	74	125			
Methyl tert-butyl ether (MTBE)		6.72	ug/L	0.50	134	66	129			S
Methyl ethyl ketone		55.7	ug/L	10	111	63	136			
Methylene chloride		5.54	ug/L	0.50	111	69	128			
Styrene		5.58	ug/L	0.50	112	75	123			
1,1,1,2-Tetrachloroethane		5.38	ug/L	0.50	108	76	124			
1,1,1,2,2-Tetrachloroethane		6.42	ug/L	0.50	128	67	124			S
Tetrachloroethene		4.70	ug/L	0.50	94	77	136			
Toluene		5.10	ug/L	0.50	102	82	125			
1,1,1-Trichloroethane		5.32	ug/L	0.50	106	73	134			
1,1,2-Trichloroethane		6.02	ug/L	0.50	120	72	119			S
Trichloroethene		4.90	ug/L	0.50	98	72	132			
Trichlorofluoromethane		4.76	ug/L	0.50	95	73	137			
1,2,3-Trichloropropane		6.45	ug/L	0.50	129	71	126			S
Vinyl chloride		4.12	ug/L	0.40	82	68	140			
m+p-Xylenes		10.2	ug/L	0.50	102	84	128			
o-Xylene		5.21	ug/L	0.50	104	79	126			
Xylenes, Total		15.4	ug/L	0.50	103	81	127			
Surr: 1,2-Dichloroethane-d4				1.0	105	69	131			
Surr: Dibromofluoromethane				1.0	101	70	125			
Surr: p-Bromofluorobenzene				1.0	104	76	123			
Surr: Toluene-d8				1.0	88	80	119			
Lab ID: H22100108-008DMSD	53	Sample Matrix Spike Duplicate		Run: 5973MSD_221005A				10/05/22 15:02		
Benzene		5.55	ug/L	0.50	111	75	120	3.4	20	
Bromobenzene		5.24	ug/L	0.50	105	80	125	8.2	20	
Bromochloromethane		5.54	ug/L	0.50	111	65	130	9.6	20	
Bromodichloromethane		5.57	ug/L	0.50	111	79	118	3.3	20	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

S - Spike recovery outside of advisory limits

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B										Batch: R178933
Lab ID: H22100108-008DMSD 53 Sample Matrix Spike Duplicate										Run: 5973MSD_221005A 10/05/22 15:02
Bromoform		5.66	ug/L	0.50	113	67	128	10	20	
Bromomethane		7.18	ug/L	0.50	144	51	136	5.6	20	S
Carbon tetrachloride		4.67	ug/L	0.50	93	75	129	9.9	20	
Chlorobenzene		4.72	ug/L	0.50	94	77	127	12	20	
Chlorodibromomethane		5.24	ug/L	0.50	105	70	126	4.7	20	
Chloroethane		4.60	ug/L	0.50	92	70	139	5.9	20	
Chloroform		5.99	ug/L	0.50	112	74	125	3.4	20	
Chloromethane		6.11	ug/L	0.50	122	64	152	13	20	
2-Chlorotoluene		4.73	ug/L	0.50	95	78	130	9.1	20	
4-Chlorotoluene		5.62	ug/L	0.50	112	82	129	1.3	20	
1,2-Dibromoethane		5.59	ug/L	0.30	112	72	122	7.6	20	
Dibromomethane		5.67	ug/L	0.50	113	75	120	4.1	20	
1,2-Dichlorobenzene		5.35	ug/L	0.50	107	74	122	8.3	20	
1,3-Dichlorobenzene		5.25	ug/L	0.50	105	78	120	6.9	20	
1,4-Dichlorobenzene		5.16	ug/L	0.50	103	70	121	8.0	20	
Dichlorodifluoromethane		4.68	ug/L	0.50	94	48	152	3.0	20	
1,1-Dichloroethane		5.37	ug/L	0.50	107	77	123	1.7	20	
1,2-Dichloroethane		6.02	ug/L	0.50	120	64	127	3.3	20	
1,1-Dichloroethene		5.04	ug/L	0.50	101	76	130	6.0	20	
cis-1,2-Dichloroethene		5.41	ug/L	0.50	108	74	124	5.5	20	
trans-1,2-Dichloroethene		4.94	ug/L	0.50	99	79	124	5.7	20	
1,2-Dichloropropane		5.19	ug/L	0.50	104	81	121	3.9	20	
1,3-Dichloropropane		5.52	ug/L	0.50	110	72	122	7.4	20	
2,2-Dichloropropane		5.58	ug/L	0.50	112	75	139	1.3	20	
1,1-Dichloropropene		5.29	ug/L	0.50	106	73	130	4.3	20	
cis-1,3-Dichloropropene		5.69	ug/L	0.50	114	74	128	3.6	20	
trans-1,3-Dichloropropene		5.88	ug/L	0.30	118	69	122	6.2	20	
Ethylbenzene		4.65	ug/L	0.50	93	74	125	9.5	20	
Methyl tert-butyl ether (MTBE)		6.43	ug/L	0.50	129	66	129	4.4	20	
Methyl ethyl ketone		62.7	ug/L	10	125	63	136	12	20	
Methylene chloride		5.99	ug/L	0.50	120	69	128	7.8	20	
Styrene		5.07	ug/L	0.50	101	75	123	9.7	20	
1,1,1,2-Tetrachloroethane		4.74	ug/L	0.50	95	76	124	13	20	
1,1,2,2-Tetrachloroethane		6.52	ug/L	0.50	130	67	124	1.5	20	S
Tetrachloroethene		4.10	ug/L	0.50	82	77	136	14	20	
Toluene		4.60	ug/L	0.50	92	82	125	10	20	
1,1,1-Trichloroethane		5.03	ug/L	0.50	101	73	134	5.7	20	
1,1,2-Trichloroethane		5.85	ug/L	0.50	117	72	119	2.8	20	
Trichloroethene		4.67	ug/L	0.50	93	72	132	4.8	20	
Trichlorofluoromethane		4.86	ug/L	0.50	97	73	137	1.9	20	
1,2,3-Trichloropropane		6.23	ug/L	0.50	125	71	126	3.5	20	
Vinyl chloride		4.50	ug/L	0.40	90	68	140	8.7	20	
m+p-Xylenes		9.19	ug/L	0.50	92	84	128	11	20	
o-Xylene		4.67	ug/L	0.50	93	79	126	11	20	
Xylenes, Total		13.9	ug/L	0.50	92	81	127	11	20	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

S - Spike recovery outside of advisory limits



QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B										Batch: R178933
Lab ID: H22100108-008DMSD 53 Sample Matrix Spike Duplicate										Run: 5973MSD_221005A 10/05/22 15:02
Surr: 1,2-Dichloroethane-d4				1.0	115	69	131			
Surr: Dibromofluoromethane				1.0	102	70	125			
Surr: p-Bromofluorobenzene				1.0	111	76	123			
Surr: Toluene-d8				1.0	85	80	119			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B								Analytical Run: R179093		
Lab ID:	11-Oct-22_CCV_24	52 Continuing Calibration Verification Standard						10/12/22 12:11		
Benzene		1.13	mg/kg	0.20	113	70	130			
Bromobenzene		1.08	mg/kg	0.20	108	70	130			
Bromochloromethane		1.12	mg/kg	0.20	112	70	130			
Bromodichloromethane		1.12	mg/kg	0.20	112	70	130			
Bromoform		1.10	mg/kg	0.20	110	70	130			
Bromomethane		1.03	mg/kg	0.20	103	70	130			
Carbon tetrachloride		1.12	mg/kg	0.20	112	70	130			
Chlorobenzene		1.11	mg/kg	0.20	111	70	130			
Chlorodibromomethane		1.12	mg/kg	0.20	112	70	130			
Chloroethane		0.951	mg/kg	0.20	95	70	130			
Chloroform		1.10	mg/kg	0.20	110	80	120			
Chloromethane		0.837	mg/kg	0.20	84	70	130			
2-Chlorotoluene		1.08	mg/kg	0.20	108	70	130			
4-Chlorotoluene		1.09	mg/kg	0.20	109	70	130			
1,2-Dibromoethane		1.11	mg/kg	0.20	111	70	130			
Dibromomethane		1.13	mg/kg	0.20	113	70	130			
1,2-Dichlorobenzene		1.12	mg/kg	0.20	112	70	130			
1,3-Dichlorobenzene		1.10	mg/kg	0.20	110	70	130			
1,4-Dichlorobenzene		1.10	mg/kg	0.20	110	70	130			
Dichlorodifluoromethane		0.970	mg/kg	0.20	97	70	130			
1,1-Dichloroethane		1.12	mg/kg	0.20	112	70	130			
1,2-Dichloroethane		1.09	mg/kg	0.20	109	70	130			
1,1-Dichloroethene		1.09	mg/kg	0.20	109	80	120			
cis-1,2-Dichloroethene		1.10	mg/kg	0.20	110	70	130			
trans-1,2-Dichloroethene		1.11	mg/kg	0.20	111	70	130			
1,2-Dichloropropane		1.14	mg/kg	0.20	114	80	120			
1,3-Dichloropropane		1.14	mg/kg	0.20	114	70	130			
2,2-Dichloropropane		1.13	mg/kg	0.20	113	70	130			
1,1-Dichloropropene		1.11	mg/kg	0.20	111	70	130			
cis-1,3-Dichloropropene		1.07	mg/kg	0.20	107	70	130			
trans-1,3-Dichloropropene		1.05	mg/kg	0.20	105	70	130			
Ethylbenzene		1.10	mg/kg	0.20	110	80	120			
Methyl tert-butyl ether (MTBE)		1.11	mg/kg	0.20	111	70	130			
Methyl ethyl ketone		13.7	mg/kg	4.0	137	70	130			S
Methylene chloride		1.05	mg/kg	0.20	105	70	130			
Styrene		1.10	mg/kg	0.20	110	70	130			
1,1,1,2-Tetrachloroethane		1.13	mg/kg	0.20	113	70	130			
1,1,2,2-Tetrachloroethane		1.15	mg/kg	0.20	115	70	130			
Tetrachloroethene		1.09	mg/kg	0.20	109	70	130			
Toluene		1.12	mg/kg	0.20	112	80	120			
1,1,1-Trichloroethane		1.10	mg/kg	0.20	110	70	130			
1,1,2-Trichloroethane		1.14	mg/kg	0.20	114	70	130			
Trichloroethene		1.11	mg/kg	0.20	111	70	130			
Trichlorofluoromethane		0.925	mg/kg	0.20	92	70	130			
1,2,3-Trichloropropane		1.13	mg/kg	0.20	113	70	130			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

S - Spike recovery outside of advisory limits



QA/QC Summary Report

Prepared by Helena, MT Branch

Client: WGM Group Inc

Work Order: H22100108

Report Date: 11/01/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B										Analytical Run: R179093
Lab ID: 11-Oct-22_CCV_24										10/12/22 12:11
52 Continuing Calibration Verification Standard										
Vinyl chloride		0.925	mg/kg	0.20	93	80	120			
m+p-Xylenes		2.20	mg/kg	0.20	110	70	130			
o-Xylene		1.10	mg/kg	0.20	110	70	130			
Surr: 1,2-Dichloroethane-d4				0.20	103	70	130			
Surr: Dibromofluoromethane				0.20	104	70	130			
Surr: p-Bromofluorobenzene				0.20	103	70	130			
Surr: Toluene-d8				0.20	104	70	130			
Method: SW8260B										Analytical Run: R179128
Lab ID: 12-Oct-22_CCV_21										10/12/22 16:53
Continuing Calibration Verification Standard										
2-Chloroethyl vinyl ether		0.830	mg/kg	0.20	83	70	130			

Qualifiers:

RL - Analyte Reporting Limit

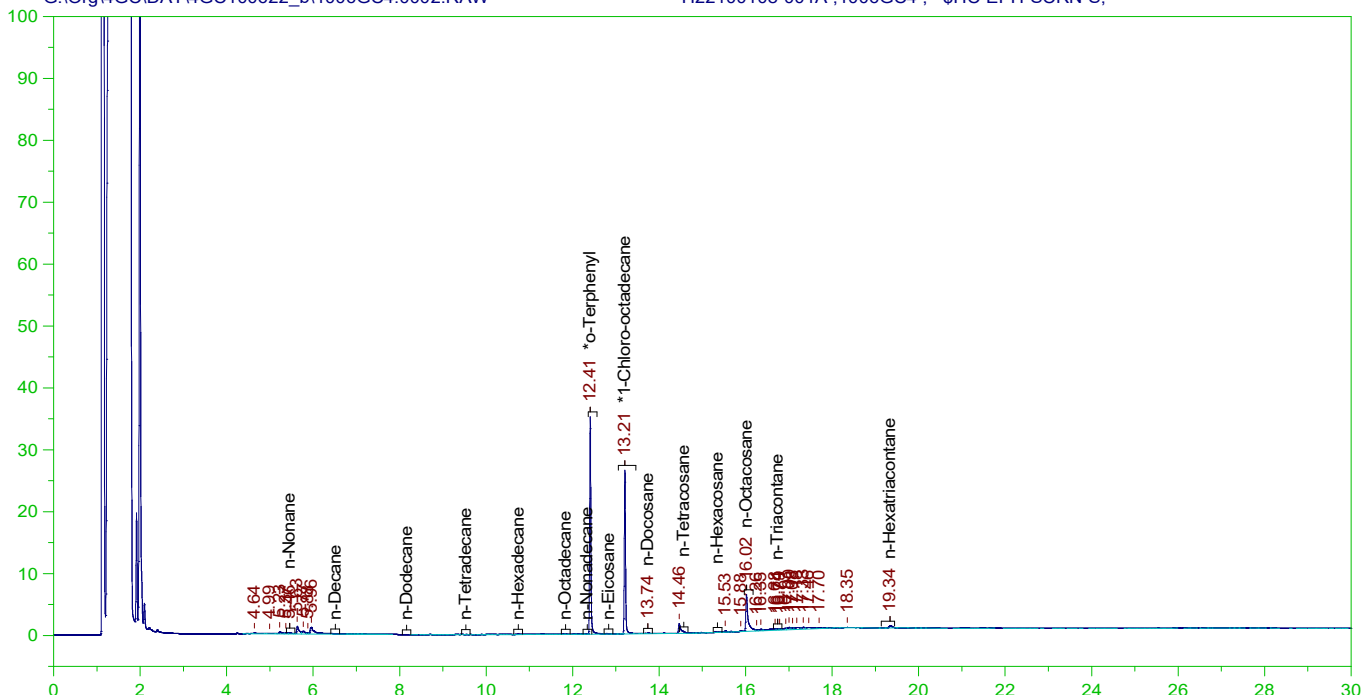
ND - Not detected at the Reporting Limit (RL)

220512-SB1-1

Batch ID: 63743

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H22100108-001A ;1006GC4 , \$HC-EPH-SCRN-S,



EXTRACTABLE PETROLEUM HYDROCARBONS (EPH) SCREENING ANALYSIS CHROMATOGRAM

Sample Name: H22100108-001A ;1006GC4 , \$HC-EPH-SCRN-S,
Raw File: G:\Org\4GC\DAT\4GC100622_b\1006GC4.0002.RAW
Date & Time Acquired: 10/6/2022 4:37:16 PM
Method File: G:\Org\4GC\Methods\SR011022S.MET
Calibration File: G:\Org\4GC\Cals\SR011022S.CAL
Sample Weight: 30.77 Dilution: 2 S.A.: 1

Mean RF for C9 to C18 Hydrocarbons: 757.0734
Mean RF for C19 to C36 Hydrocarbons: 780.0031
Mean RF for Total Extractable Hydrocarbons: 768.5382
Rt range for Diesel Range Organics: 6.41 to 16.84
Rt range for C9 to C18 Hydrocarbons: 5.38 to 12.36
Rt range for C19 to C36 Hydrocarbons: 12.41 to 19.44

SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.405	69628	6.5	4.739	72.9	-
*1-Chloro-octadecane	13.208	53744	6.5	4.427	68.11	-

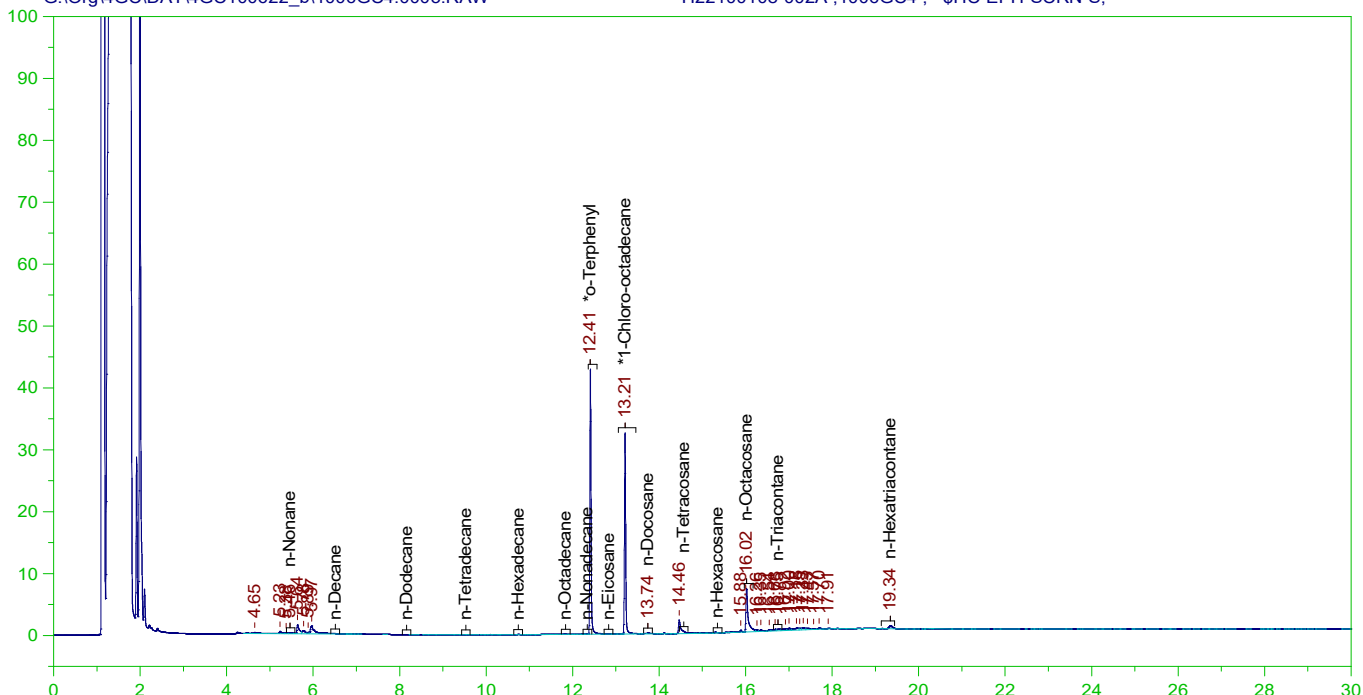
DRO Area:43099.28 DRO Amount: 3.64508
TEH Area:85789.55 TEH Amount: 7.255569
C9-C18 Area:22539.8 C9-C18 Amount: 1.93515
C19-C36 Area:-12763.94 C19-C36 Amount:-1.063631

220512-SB1-2

Batch ID: 63743

G:\Org\4GC\DAT\4GC100622_b\1006GC4.0003.RAW

H22100108-002A ;1006GC4 , \$HC-EPH-SCRN-S,



EXTRACTABLE PETROLEUM HYDROCARBONS (EPH) SCREENING ANALYSIS CHROMATOGRAM

Sample Name: H22100108-002A ;1006GC4 , \$HC-EPH-SCRN-S,
Raw File: G:\Org\4GC\DAT\4GC100622_b\1006GC4.0003.RAW
Date & Time Acquired: 10/6/2022 5:23:28 PM
Method File: G:\Org\4GC\Methods\SR011022S.MET
Calibration File: G:\Org\4GC\Cals\SR011022S.CAL
Sample Weight: 30.66 Dilution: 2 S.A.: 1

Mean RF for C9 to C18 Hydrocarbons: 757.0734
Mean RF for C19 to C36 Hydrocarbons: 780.0031
Mean RF for Total Extractable Hydrocarbons: 768.5382
Rt range for Diesel Range Organics: 6.41 to 16.84
Rt range for C9 to C18 Hydrocarbons: 5.38 to 12.36
Rt range for C19 to C36 Hydrocarbons: 12.41 to 19.44

SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.409	85387	6.523	5.832	89.4	-
*1-Chloro-octadecane	13.211	65687	6.523	5.43	83.25	-

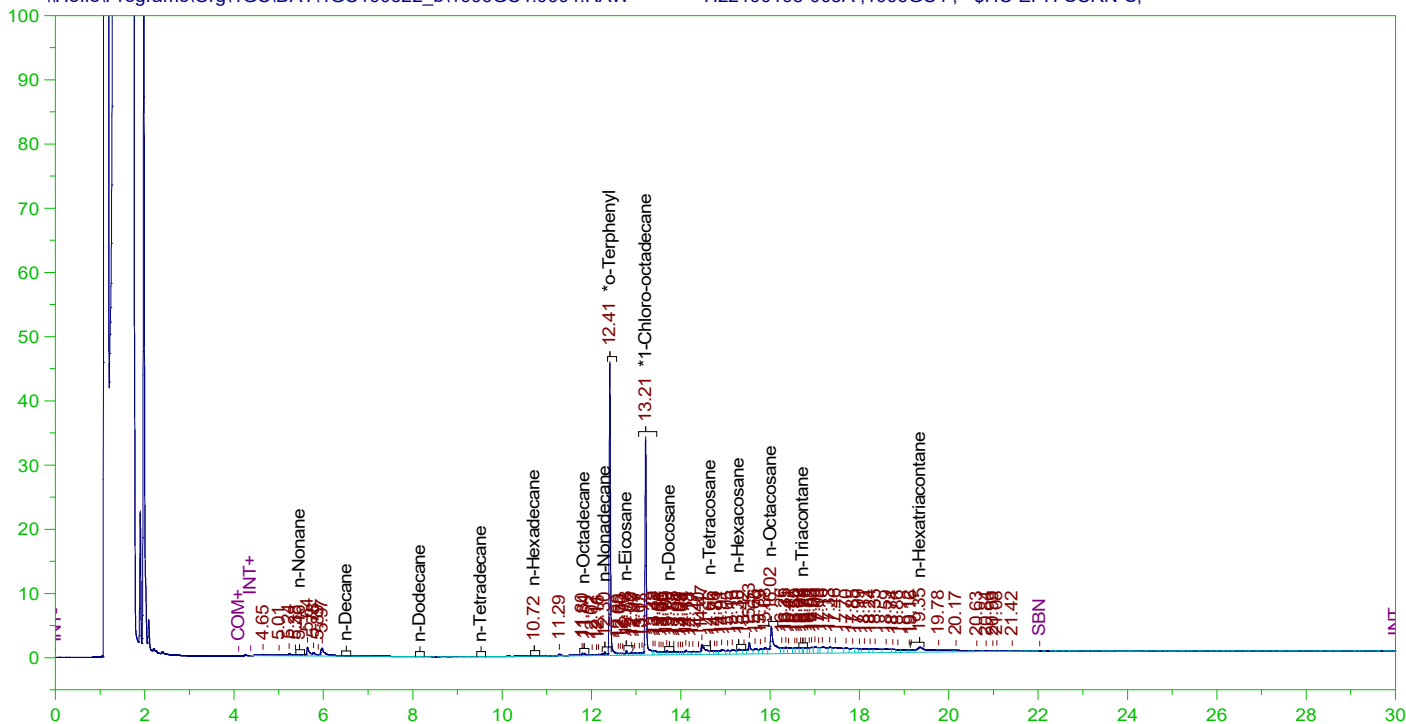
DRO Area:49027.73 DRO Amount: 4.16135
TEH Area:92720.21 TEH Amount: 7.869856
C9-C18 Area:22779.91 C9-C18 Amount: 1.962781
C19-C36 Area:-21012.69 C19-C36 Amount:-1.757289

220512-SB2-1

Batch ID: 63743

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H22100108-003A ; 1006GC4 , \$HC-EPH-SCRN-S,



EXTRACTABLE PETROLEUM HYDROCARBONS (EPH) SCREENING ANALYSIS CHROMATOGRAM

Sample Name: H22100108-003A ; 1006GC4 , \$HC-EPH-SCRN-S,

Raw File: \\Hefle\Programs\Org\4GC\DAT\4GC100622_b\1006GC4.0004.RAW

Date & Time Acquired: 10/6/2022 6:09:44 PM

Method File: G:\Org\4GC\Methods\100622_04.MET

Calibration File: G:\Org\4GC\Cals\SR011022S.CAL

Sample Weight: 30.7 Dilution: 2 S.A.: 1

Mean RF for C9 to C18 Hydrocarbons: 757.0734

Mean RF for C19 to C36 Hydrocarbons: 780.0031

Mean RF for Total Extractable Hydrocarbons: 768.5382

Rt range for Diesel Range Organics: 6.41 to 16.84

Rt range for C9 to C18 Hydrocarbons: 5.38 to 12.36

Rt range for C19 to C36 Hydrocarbons: 12.41 to 19.44

SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.41	91601	6.515	6.248	95.91	-
*1-Chloro-octadecane	13.212	73002	6.515	6.027	92.52	-

DRO Area:171518.9 DRO Amount: 14.53912

TEH Area:311515.9 TEH Amount: 26.40623

C9-C18 Area:31374.25 C9-C18 Amount: 2.699772

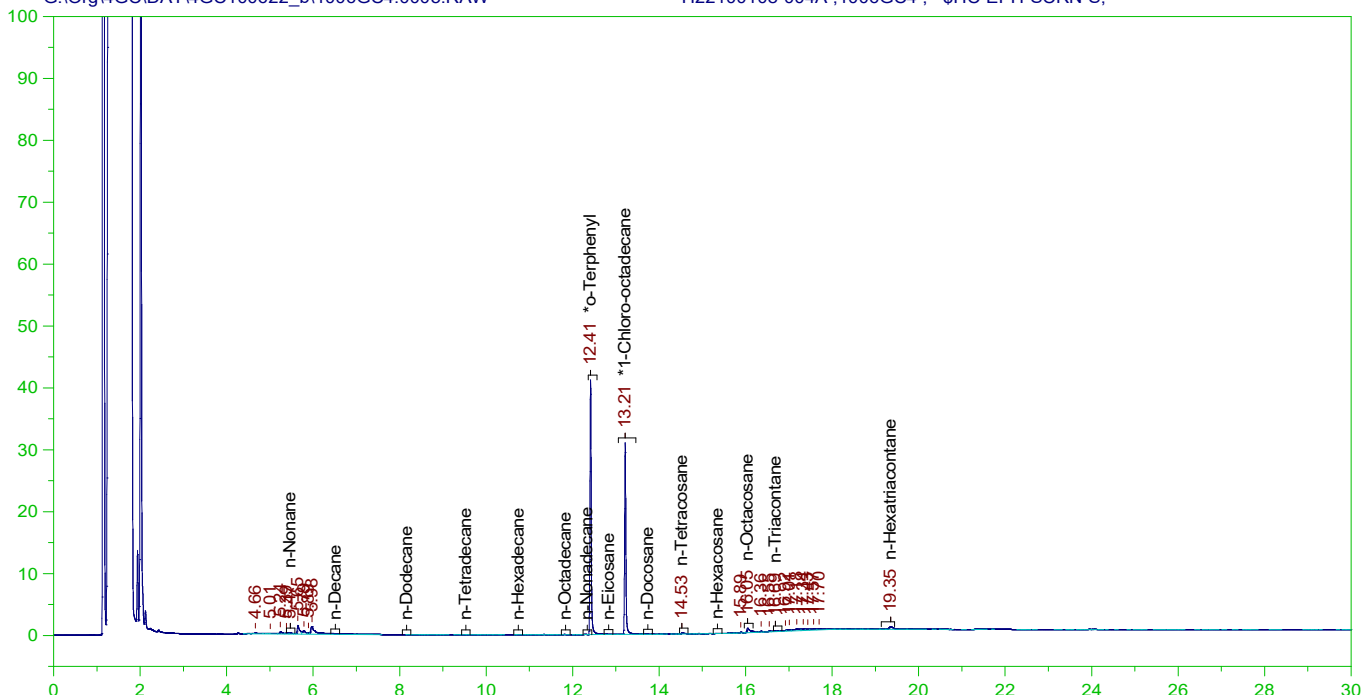
C19-C36 Area:256161.7 C19-C36 Amount: 21.39486

220512-SB2-2

Batch ID: 63743

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H22100108-004A ;1006GC4 , \$HC-EPH-SCRN-S,



EXTRACTABLE PETROLEUM HYDROCARBONS (EPH) SCREENING ANALYSIS CHROMATOGRAM

Sample Name: H22100108-004A ;1006GC4 , \$HC-EPH-SCRN-S,
Raw File: G:\Org\4GC\DAT\4GC100622_b\1006GC4.0005.RAW
Date & Time Acquired: 10/6/2022 6:56:05 PM
Method File: G:\Org\4GC\Methods\SR011022S.MET
Calibration File: G:\Org\4GC\Cals\SR011022S.CAL
Sample Weight: 30.26 Dilution: 2 S.A.: 1

Mean RF for C9 to C18 Hydrocarbons: 757.0734
Mean RF for C19 to C36 Hydrocarbons: 780.0031
Mean RF for Total Extractable Hydrocarbons: 768.5382
Rt range for Diesel Range Organics: 6.41 to 16.84
Rt range for C9 to C18 Hydrocarbons: 5.38 to 12.36
Rt range for C19 to C36 Hydrocarbons: 12.41 to 19.44

SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.413	84514	6.609	5.849	88.49	-
*1-Chloro-octadecane	13.214	65594	6.609	5.494	83.13	-

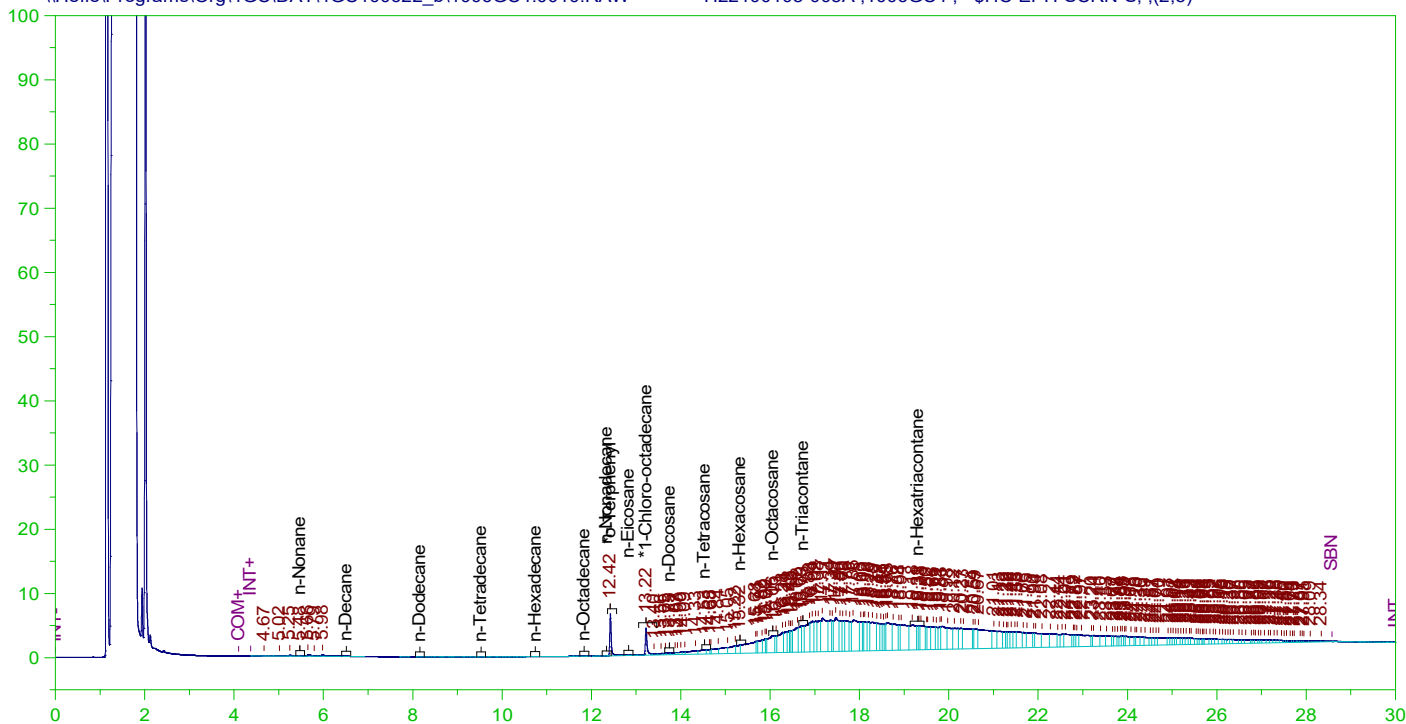
DRO Area:13514.93 DRO Amount: 1.162276
TEH Area:54992.88 TEH Amount: 4.729357
C9-C18 Area:23737.46 C9-C18 Amount: 2.072322
C19-C36 Area:26630.09 C19-C36 Amount: 2.25651

220512-SB3-1

Batch ID: 63743

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H22100108-005A ;1006GC4 , \$HC-EPH-SCRN-S, (2,5)



EXTRACTABLE PETROLEUM HYDROCARBONS (EPH) SCREENING ANALYSIS CHROMATOGRAM

Sample Name: H22100108-005A ;1006GC4 , \$HC-EPH-SCRN-S, (2,5)

Raw File: \\Hefle\Programs\Org\4GC\DAT\4GC100622_b\1006GC4.0010.RAW

Date & Time Acquired: 10/6/2022 10:48:01 PM

Method File: G:\Org\4GC\Methods\100622_08.MET

Calibration File: G:\Org\4GC\Cals\SR011022S.CAL

Sample Weight: 30.19 Dilution: 10 S.A.: 1

Mean RF for C9 to C18 Hydrocarbons: 757.0734

Mean RF for C19 to C36 Hydrocarbons: 780.0031

Mean RF for Total Extractable Hydrocarbons: 768.5382

Rt range for Diesel Range Organics: 6.41 to 16.84

Rt range for C9 to C18 Hydrocarbons: 5.38 to 12.36

Rt range for C19 to C36 Hydrocarbons: 12.41 to 19.44

SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.422	14973	6.625	5.193	78.39	-
*1-Chloro-octadecane	13.221	12255	6.625	5.145	77.66	-

DRO Area:285826.3 DRO Amount: 123.1895

TEH Area:1824386 TEH Amount: 786.2996

C9-C18 Area:7094.333 C9-C18 Amount: 3.10392

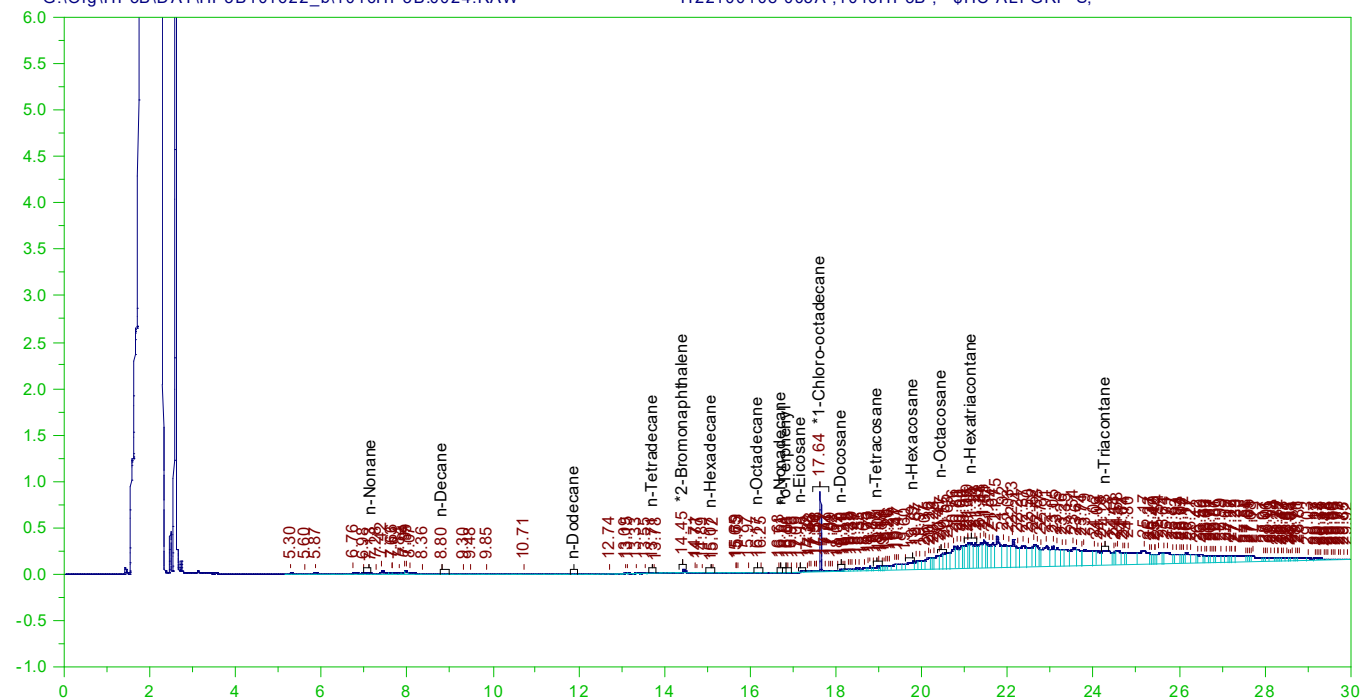
C19-C36 Area:990883.3 C19-C36 Amount: 420.7877

220512-SB3-1

Batch ID: 63895

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H22100108-005A ;1016HP3B , \$HC-ALI-GRP-S,



EPH ALIPHATICS (FID) ANALYSIS REPORT

Sample Name: H22100108-005A ;1016HP3B , \$HC-ALI-GRP-S,
Raw File: G:\Org\HP3B\DAT\HP3B101622_b\1016HP3B.0024.RAW
Date & Time Acquired: 10/17/2022 7:04:55 PM
Method File: G:\Org\HP3B\Methods\10162224.met
Calibration File: G:\Org\HP3B\CALS\ALB030722P.CAL
Sample Weight: 30.19 Dilution: 2 S.A.: 1

Mean RF for C9 to C18 Aliphatic Hydrocarbons: 23436.61
Mean RF for C19 to C36 Aliphatic Hydrocarbons: 24113.98
Mean RF for Total Extractable Hydrocarbons: 23823.68
Rt range for Diesel Range Organics: 8.77 to 20.57
Rt range for C9 to C18 Aliphatic Hydrocarbons: 6.97 to 16.62
Rt range for C19 to C36 Aliphatic Hydrocarbons: 16.67 to 24.37

SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC
*1-Chloro-octadecane	17.642	1510792	6.625	4.505	68.

DRO Area:9794586 DRO Amount: 27.23605
TEH Area:8.014107E+07 TEH Amount: 222.8503

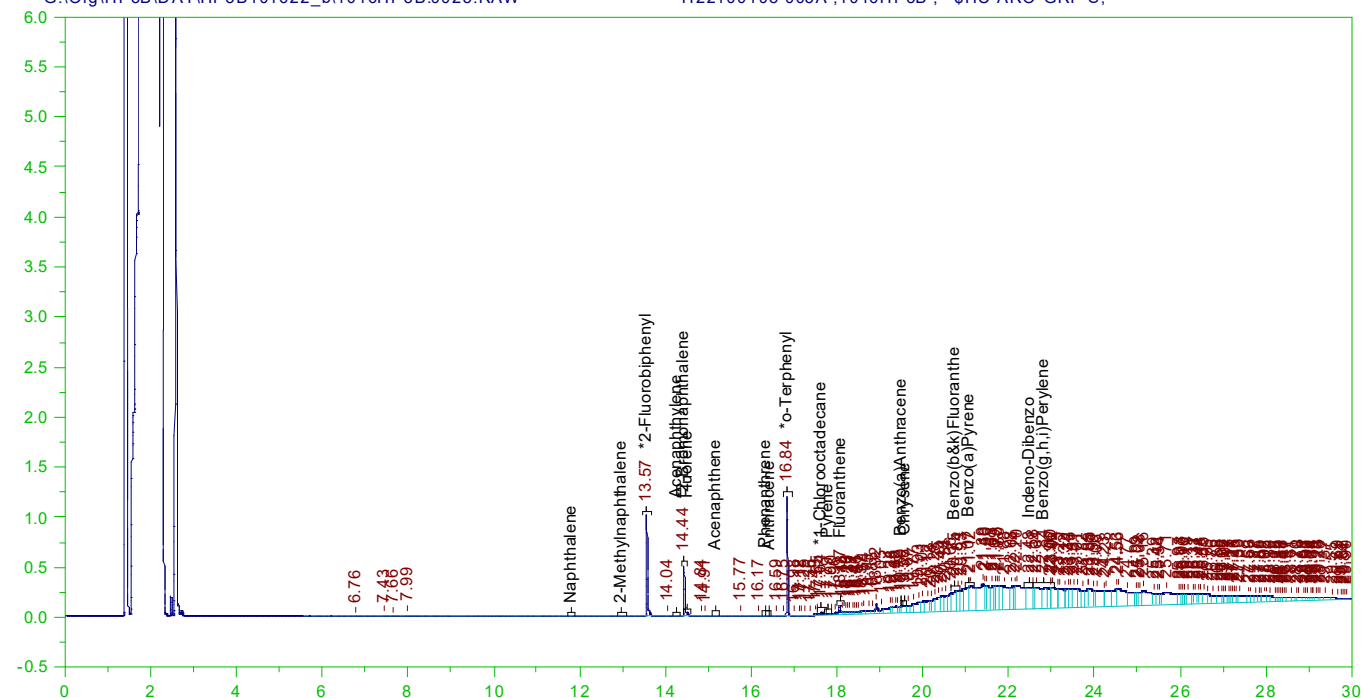
Aliphatic Hydrocarbon Areas and Amounts:
C9-C18 Area:729907.3 C9-C18 Amount: 2.063193
C19-C36 Area:5.710939E+07C19-C36 Amount: 156.8937

220512-SB3-1

Batch ID: 63895

G:\Org\HP3B\DAT\HP3B101622_b\1016HP3B.0025.RAW

H22100108-005A ; 1016HP3B , \$HC-ARO-GRP-S,



EPH AROMATICS RANGE VALUES (FID) ANALYSIS REPORT

Sample Name: H22100108-005A ; 1016HP3B , \$HC-ARO-GRP-S,
Raw File: G:\Org\HP3B\DAT\HP3B101622_b\1016HP3B.0025.RAW
Date & Time Acquired: 10/17/2022 7:47:59 PM
Method File: G:\Org\HP3B\Methods\10162225.met
Calibration File: G:\Org\HP3B\CALS\ARB020322U.CAL
Sample Weight: 30.19 Dilution: 2 S.A.: 1

Mean RF EPH Aromatics: 22944.14

Rt range for EPH C11 to C22 Aromatics: 11.71 to 23.08

SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC	
*2-Fluorobiphenyl	13.565	1992118	6.625	5.302	80.04	-
*2-Bromonaphthalene	14.439	1147012	6.625	4.716	71.19	-
*o-Terphenyl	16.841	2039511	6.625	4.508	68.05	-
*1-Chlorooctadecane	17.642	81864	6.625	.242	3.65	-

C11-C22 Aromatics Area: 4.249446E+07

C11-C22 Aromatics Amount: 122.6951

EPH Aromatics total Area: 7.83698E+07

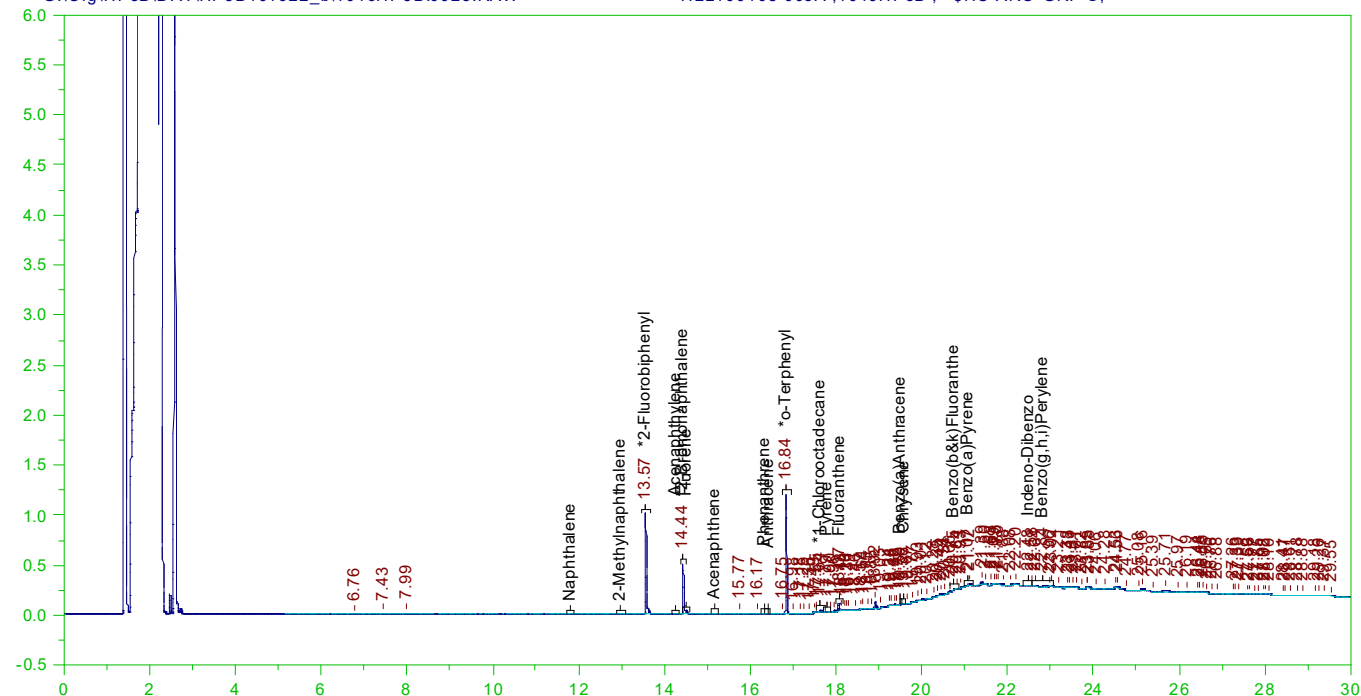
EPH Aromatics Total Amount: 226.2787

220512-SB3-1

Batch ID: 63895

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H22100108-005A ; 1016HP3B , \$HC-ARO-GRP-S,



EPH AROMATICS TARGET VALUES (FID) ANALYSIS REPORT

Sample Name: H22100108-005A ; 1016HP3B , \$HC-ARO-GRP-S,
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Date & Time Acquired: 10/17/2022 7:47:59 PM
Method File: G:\Org\HP3B\Methods\ARBQC020322U.met
Calibration File: G:\Org\HP3B\CALS\ARB020322U.CAL
Sample Weight: 30.19 Dilution: 2 S.A.: 1

TARGET ANALYTES	RT	CAL RRT	RRT	AREA	AMOUNT	FLAG
Naphthalene	.	.	.	.	.066	U
2-Methylnaphthalene	.	.	.	.	.066	U
Acenaphthylene	.	.	.	.	.066	U
Fluorene	.	.	.	.	.066	U
Acenaphthene	.	.	.	.	.066	U
Phenanthrene	.	.	.	.	.066	U
Anthracene	.	.	.	.	.066	U
Pyrene	17.795	17.795	17.795	10755	.066	U
Fluoranthene	18.066	-3.63	-3.627	141547	.399	
Benzo (a) Anthracene	19.499	19.499	19.499	3834	.066	U
Chrysene	19.561	-5.13	-5.122	20532	.057	J
Benzo (b&k) Fluoranthene	20.755	-6.34	-6.316	30470	.087	J
Benzo (a) Pyrene	21.07	21.07	21.07	11586	.066	U
Indeno-Dibenzo	22.481	-8.03	-8.042	66717	.194	
Benzo (g, h, i) Perylene	22.841	-8.39	-8.402	42068	.123	

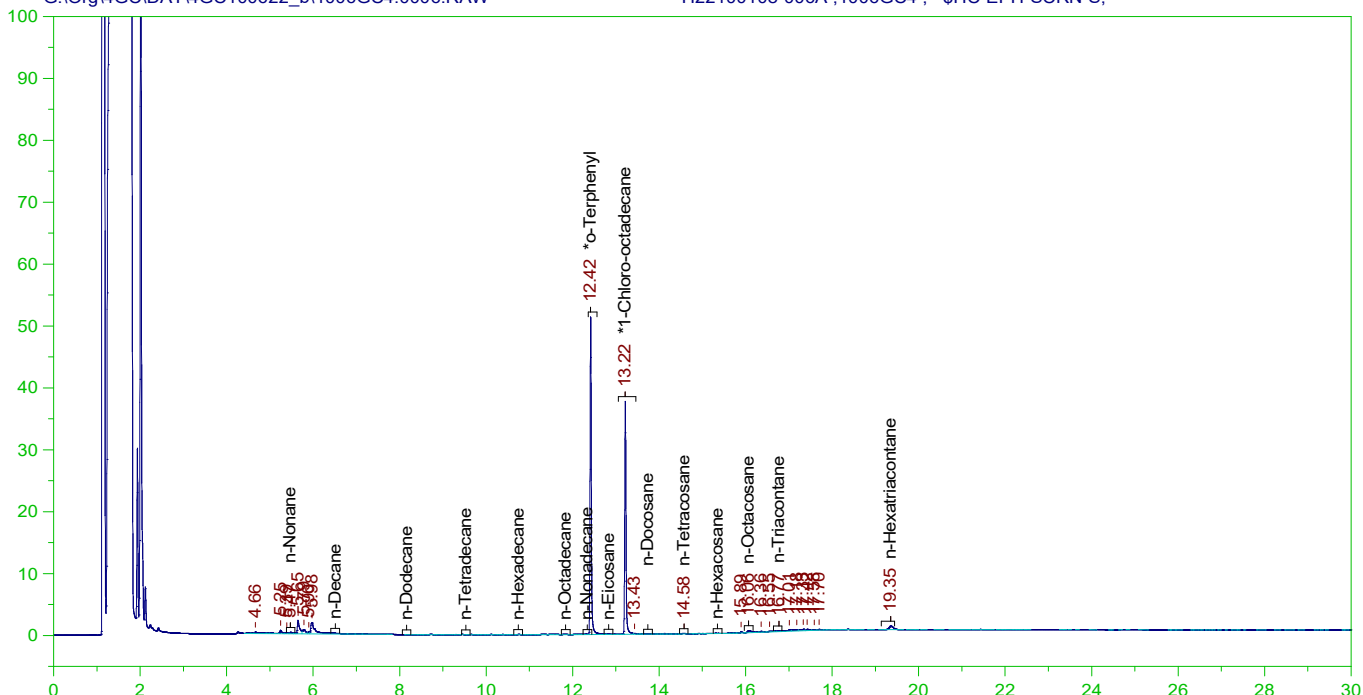
SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC	QC LIMITS
*2-Fluorobiphenyl	13.565	1973350	6.625	5.253	79.29	40-140
*2-Bromonaphthalene	14.439	1129753	6.625	4.645	70.11	40-140
*o-Terphenyl	16.841	2033326	6.625	4.494	67.84	40-140
*1-Chlorooctadecane	17.642	49996	6.625	.148	2.23	40-140

220512-SB3-2

Batch ID: 63743

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H22100108-006A ;1006GC4 , \$HC-EPH-SCRN-S,



EXTRACTABLE PETROLEUM HYDROCARBONS (EPH) SCREENING ANALYSIS CHROMATOGRAM

Sample Name: H22100108-006A ;1006GC4 , \$HC-EPH-SCRN-S,
Raw File: G:\Org\4GC\DAT\4GC100622_b\1006GC4.0006.RAW
Date & Time Acquired: 10/6/2022 7:42:23 PM
Method File: G:\Org\4GC\Methods\SR011022S.MET
Calibration File: G:\Org\4GC\Cals\SR011022S.CAL
Sample Weight: 30.46 Dilution: 2 S.A.: 1

Mean RF for C9 to C18 Hydrocarbons: 757.0734
Mean RF for C19 to C36 Hydrocarbons: 780.0031
Mean RF for Total Extractable Hydrocarbons: 768.5382
Rt range for Diesel Range Organics: 6.41 to 16.84
Rt range for C9 to C18 Hydrocarbons: 5.38 to 12.36
Rt range for C19 to C36 Hydrocarbons: 12.41 to 19.44

SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.415	104237	6.566	7.166	109.14	-
*1-Chloro-octadecane	13.217	80024	6.566	6.659	101.42	-

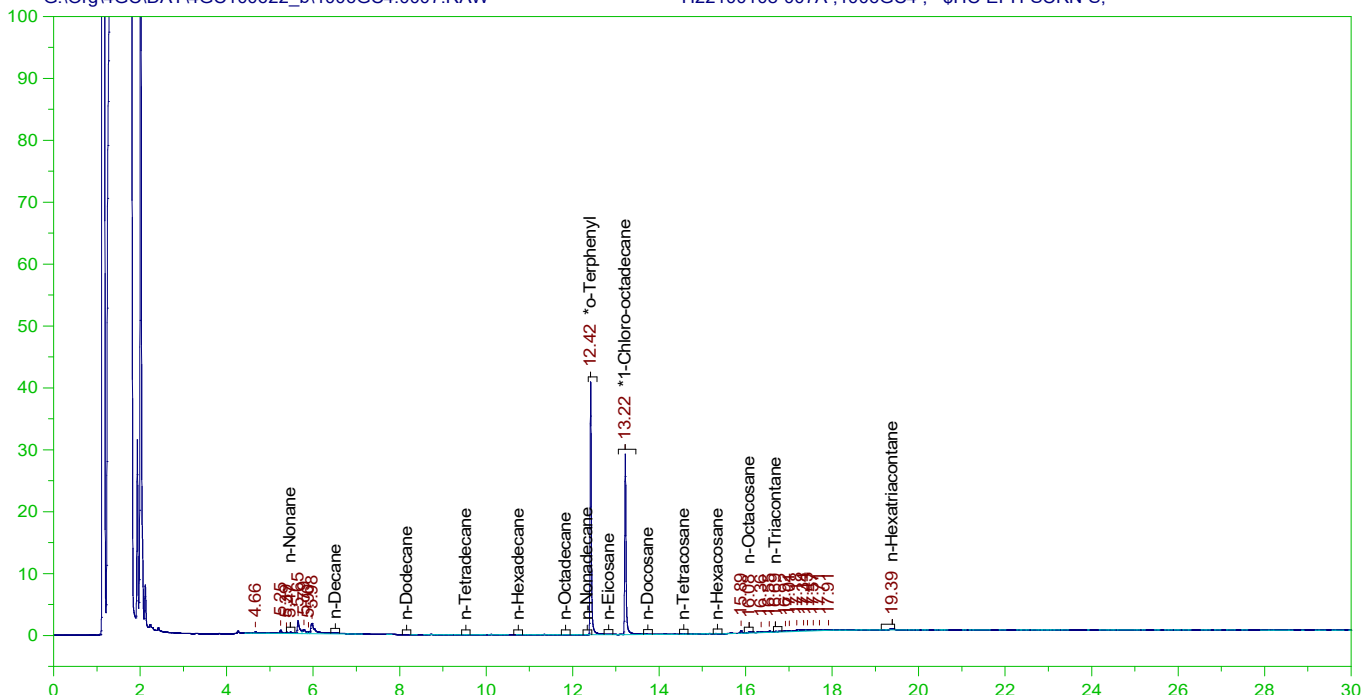
DRO Area:13506.51 DRO Amount: 1.153925
TEH Area:61956.61 TEH Amount: 5.293249
C9-C18 Area:33686.97 C9-C18 Amount: 2.921623
C19-C36 Area:23450.35 C19-C36 Amount: 1.974027

220512-SB4-2

Batch ID: 63743

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H22100108-007A ;1006GC4 , \$HC-EPH-SCRN-S,



EXTRACTABLE PETROLEUM HYDROCARBONS (EPH) SCREENING ANALYSIS CHROMATOGRAM

Sample Name: H22100108-007A ;1006GC4 , \$HC-EPH-SCRN-S,
Raw File: G:\Org\4GC\DAT\4GC100622_b\1006GC4.0007.RAW
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Method File: G:\Org\4GC\Methods\SR011022S.MET
Calibration File: G:\Org\4GC\Cals\SR011022S.CAL
Sample Weight: 30.32 Dilution: 2 S.A.: 1

Mean RF for C9 to C18 Hydrocarbons: 757.0734
Mean RF for C19 to C36 Hydrocarbons: 780.0031
Mean RF for Total Extractable Hydrocarbons: 768.5382
Rt range for Diesel Range Organics: 6.41 to 16.84
Rt range for C9 to C18 Hydrocarbons: 5.38 to 12.36
Rt range for C19 to C36 Hydrocarbons: 12.41 to 19.44

SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.415	86003	6.596	5.94	90.05	-
*1-Chloro-octadecane	13.217	65792	6.596	5.5	83.38	-

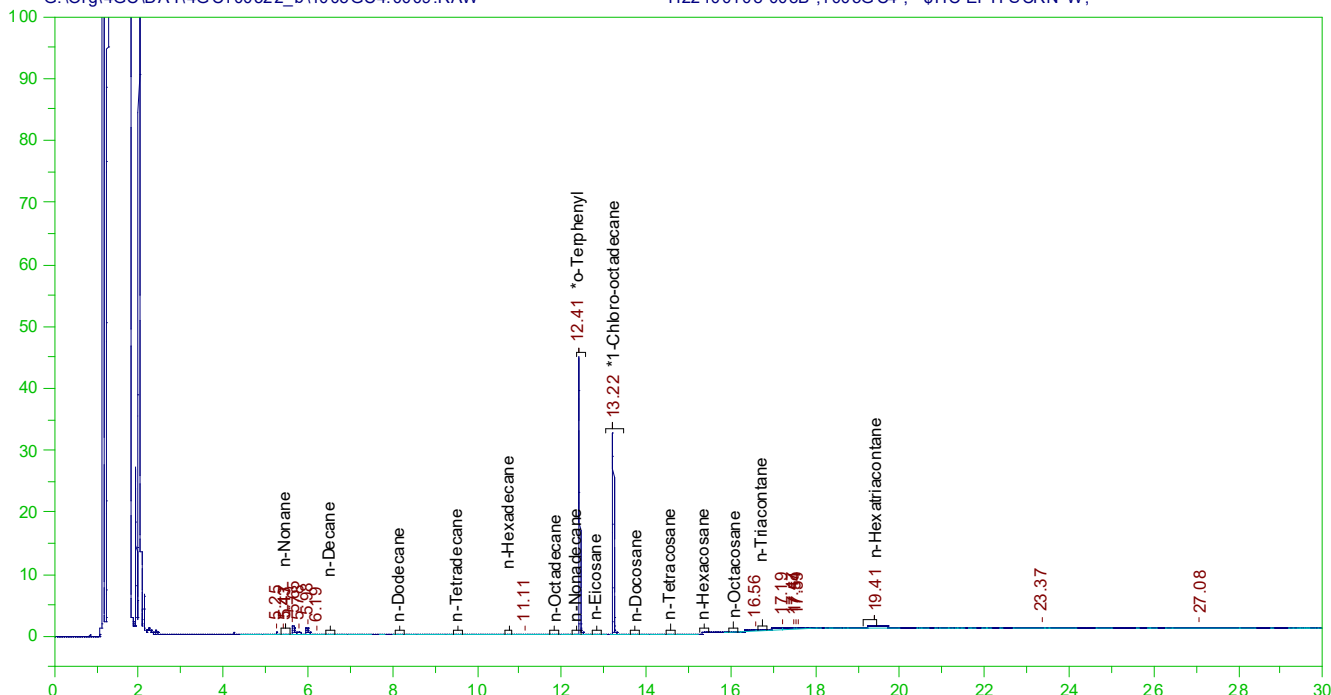
DRO Area:9230.68 DRO Amount: 0.7922624
TEH Area:52342.4 TEH Amount: 4.492509
C9-C18 Area:30108.65 C9-C18 Amount: 2.623337
C19-C36 Area:18039.04 C19-C36 Amount: 1.52552

220512-SW1

Batch ID: 63711

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H22100108-008B ;1005GC4 , \$HC-EPH-SCRN-W,



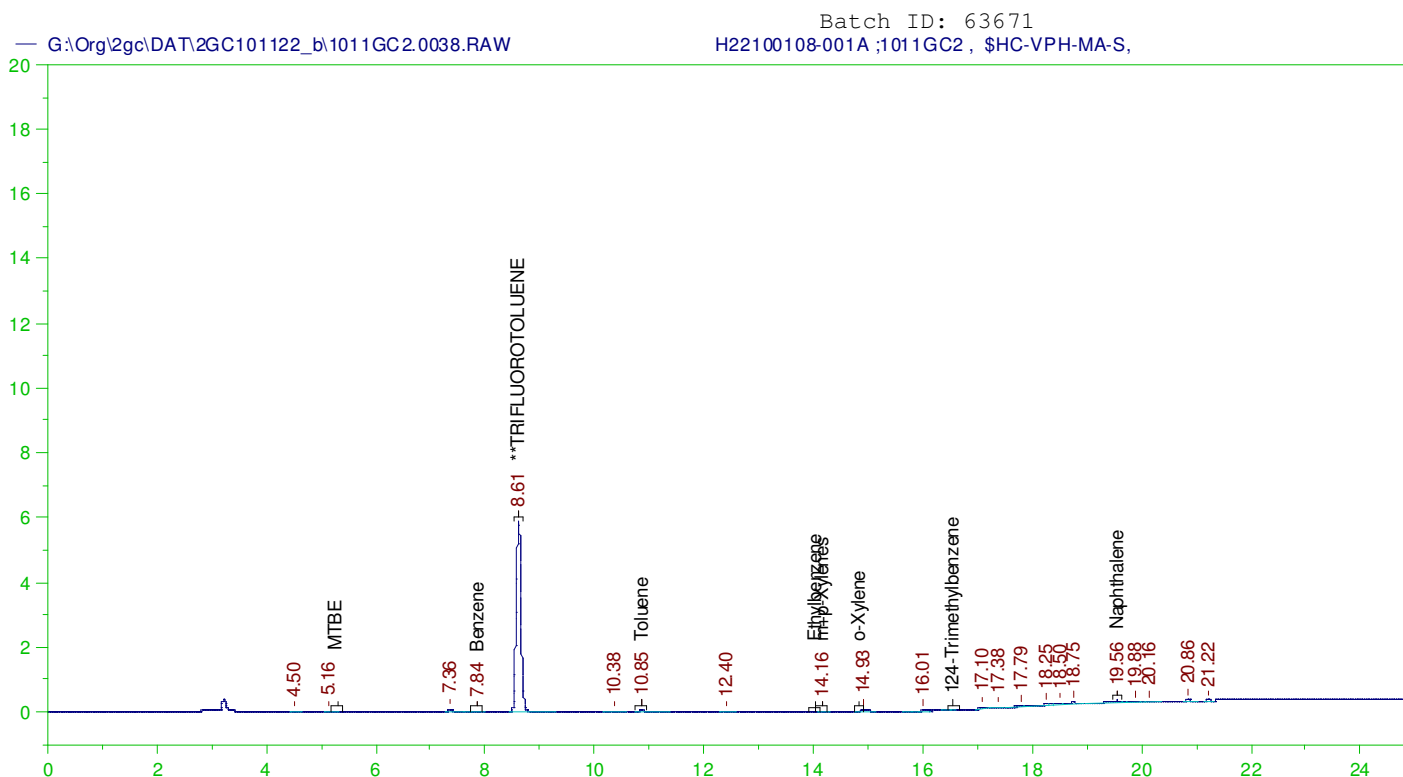
EXTRACTABLE PETROLEUM HYDROCARBONS (EPH) SCREENING ANALYSIS CHROMATOGRAM

Sample Name: H22100108-008B ;1005GC4 , \$HC-EPH-SCRN-W,
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Method File: G:\Org\4GC\Methods\SR011022S.MET
Calibration File: G:\Org\4GC\Cals\SR011022S.CAL
Sample Weight: 0.9322 Dilution: 2 S.A.: 1

Mean RF for C9 to C18 Hydrocarbons: 757.0734
Mean RF for C19 to C36 Hydrocarbons: 780.0031
Mean RF for Total Extractable Hydrocarbons: 768.5382
Rt range for Diesel Range Organics: 6.41 to 16.84
Rt range for C9 to C18 Hydrocarbons: 5.38 to 12.36
Rt range for C19 to C36 Hydrocarbons: 12.41 to 19.44

SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.415	84533	214.546	189.895	88.51	-
*1-Chloro-octadecane	13.217	65454	214.546	177.967	82.95	-

DRO Area:3686.125 DRO Amount: 10.29024
TEH Area:52564.25 TEH Amount: 146.7391
C9-C18 Area:16273.12 C9-C18 Amount: 46.11622
C19-C36 Area:22937.94 C19-C36 Amount: 63.09267



VPH AROMATICS PHOTOIONIZATION DETECTOR CHROMATOGRAM REPORT

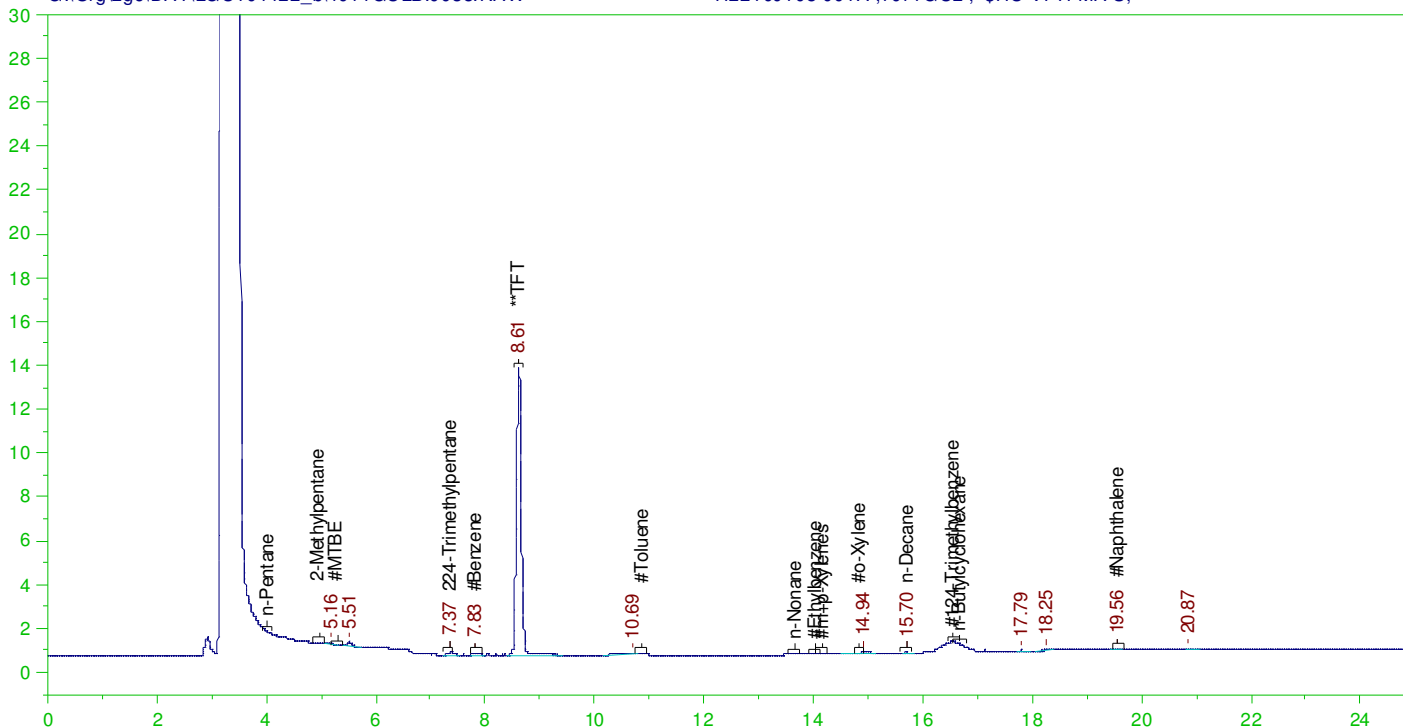
Sample Name: H22100108-001A ;1011GC2 , \$HC-VPH-MA-S,
Raw File: G:\Org\2gc\DAT\2GC101122_b\1011GC2.0038.RAW
Date & Time Acquired: 10/12/2022 7:51:29 AM
Method File: G:\Org\2GC\Methods\10112236.MET
Calibration File: G:\Org\2GC\Cals\GC2100722.cal
Sample Weight: 50 Dilution: 1 S.A.: 1

Mean RF for C9 to C10 Aromatic Hydrocarbons: 721.0174
Rt range for C9 to C10 Aromatics: 14.931 to 19.454
Aromatic Hydrocarbon Range Area and Quantitation:
C9-C10 Aromatics Area:2498.541 C9-C10 Aromatics Amount: 6.930597E-02

TARGET ANALYTES	RT	CAL RRT	RRT	AREA	AMOUNT	FLAG
MTBE	.	.	.	.	.1	U
Benzene	7.836	7.836	7.836	145	.05	U
Toluene	10.849	10.849	10.849	234	.05	U
Ethylbenzene	.	.	.	.	.05	U
m+p-Xylenes	14.155	14.155	14.155	73	.05	U
o-Xylene	.	.	.	.	.05	U
124-Trimethylbenzene	.	.	.	.	.05	U
Naphthalene	19.561	19.561	19.561	537	.1	U

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	QC LIMITS
**TRIFLUOROTOLUENE	8.608	2.5	2.077	83.1	70-130

Batch ID: 63671
G:\Org\2gc\DAT\2GC101122_b\1011GC2B.0038.RAW H22100108-001A ;1011GC2 , \$HC-VPH-MA-S,



VPH ALIPHATICS FLAME IONIZATION DETECTOR CHROMATOGRAM REPORT

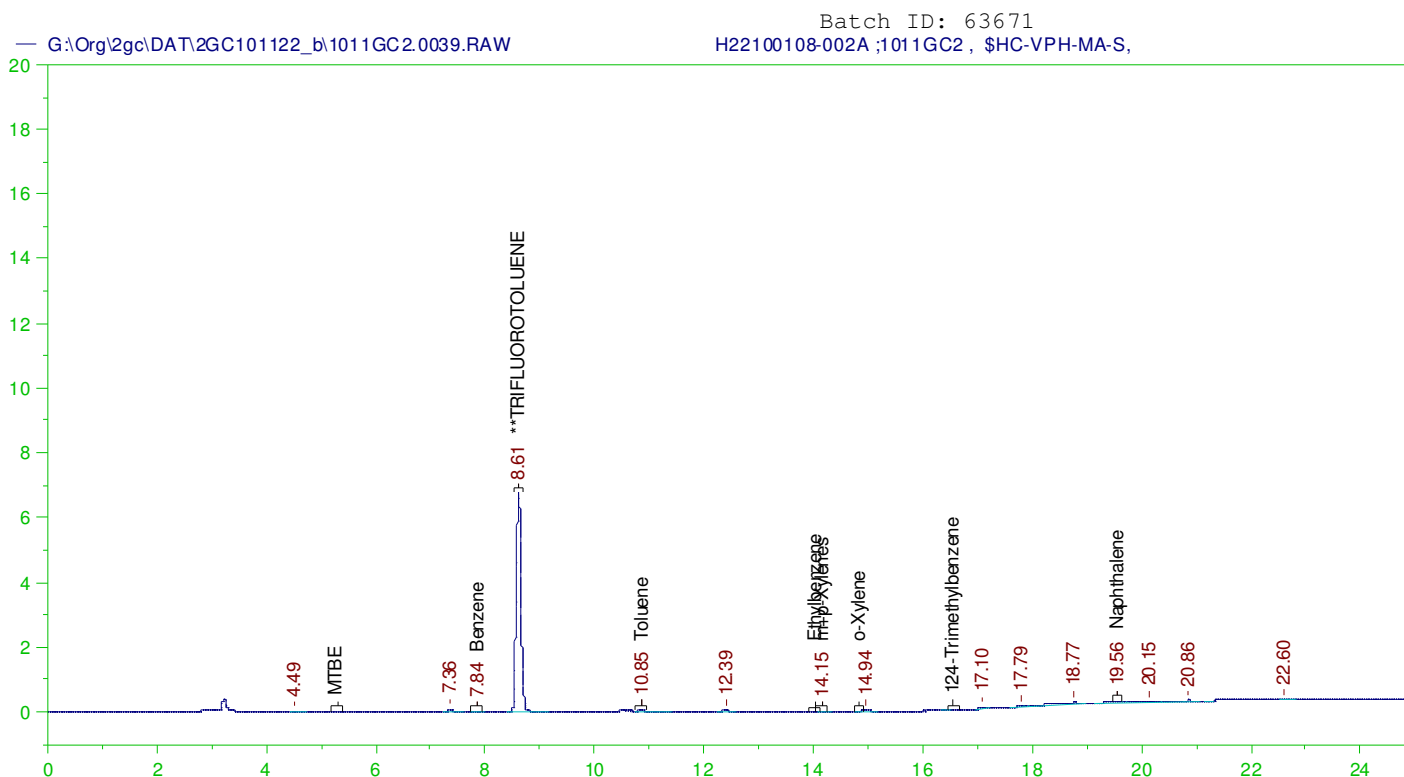
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Date & Time Acquired: 10/12/2022 7:51:29 AM
Method File: G:\Org\2GC\Methods\10112237B.MET
Calibration File: G:\Org\2GC\Cals\GC2100722B.cal
Sample Weight: 50 Dilution: 1 S.A.: 1

Mean RF for C5 to C8 Aliphatic Hydrocarbons: 926.2681
Mean RF for C9 to C12 Aliphatic Hydrocarbons: 807.8274
Mean RF for all calibrated compounds: 947.1428
Rt range for Gasoline Range Organics: 4.851 to 15.799
Rt range for C5 to C8 Aliphatic Hydrocarbons: 3.907 to 13.558
Rt range for C9 to C12 Aliphatic Hydrocarbons: 13.608 to 19.459

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
**TFT	8.614	2.5	2.12	84.79

GRO Area:3685.398 GRO Amount: 0.0778214
TPH Area:4559.773 TPH Amount: 9.628482E-02

Aliphatic Hydrocarbon Areas and Quantitations uncorrected for Aromatics:
C5-C8 Area:2679.586 C5-C8 Amount: 5.785768E-02
C9-C12 Area:1491.626 C9-C12 Amount: 3.692933E-02



VPH AROMATICS PHOTOIONIZATION DETECTOR CHROMATOGRAM REPORT

Sample Name: H22100108-002A ;1011GC2 , \$HC-VPH-MA-S,
Raw File: G:\Org\2gc\DAT\2GC101122_b\1011GC2.0039.RAW
Date & Time Acquired: 10/12/2022 8:22:36 AM
Method File: G:\Org\2GC\Methods\10112236.MET
Calibration File: G:\Org\2GC\Cals\GC2100722.cal
Sample Weight: 50 Dilution: 1 S.A.: 1

Mean RF for C9 to C10 Aromatic Hydrocarbons: 721.0174
Rt range for C9 to C10 Aromatics: 14.931 to 19.454
Aromatic Hydrocarbon Range Area and Quantitation:
C9-C10 Aromatics Area:2163.397 C9-C10 Aromatics Amount: 6.000957E-02

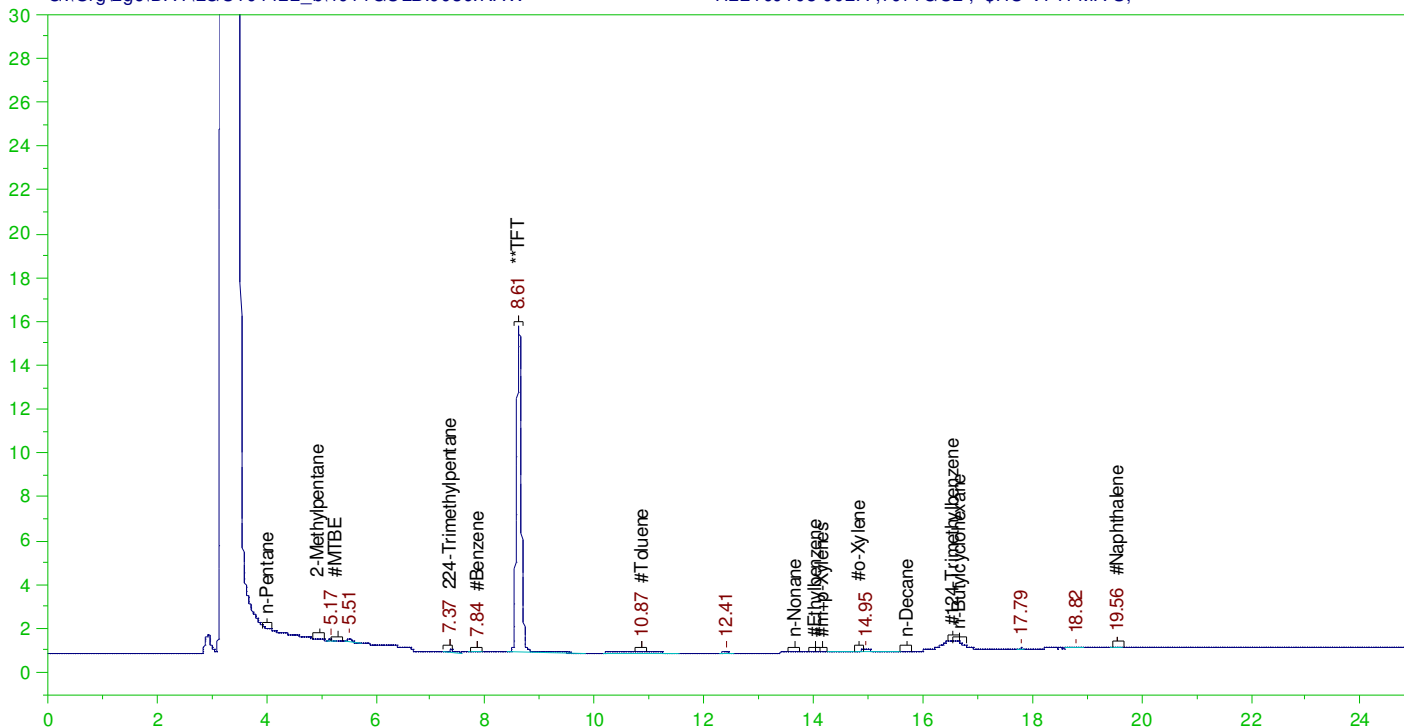
TARGET ANALYTES	RT	CAL RRT	RRT	AREA	AMOUNT	FLAG
MTBE	.	.	.	.	.1	U
Benzene	7.836	7.836	7.836	157	.05	U
Toluene	10.851	10.851	10.851	330	.05	U
Ethylbenzene	.	.	.	.	.05	U
m+p-Xylenes	14.149	14.149	14.149	52	.05	U
o-Xylene	.	.	.	.	.05	U
124-Trimethylbenzene	.	.	.	.	.05	U
Naphthalene	19.559	19.559	19.559	346	.1	U

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	QC LIMITS
**TRIFLUOROTOLUENE	8.609	2.5	2.373	94.91	70-130

Batch ID: 63671

H22100108-002A ;1011GC2 , \$HC-VPH-MA-S,

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VPH ALIPHATICS FLAME IONIZATION DETECTOR CHROMATOGRAM REPORT

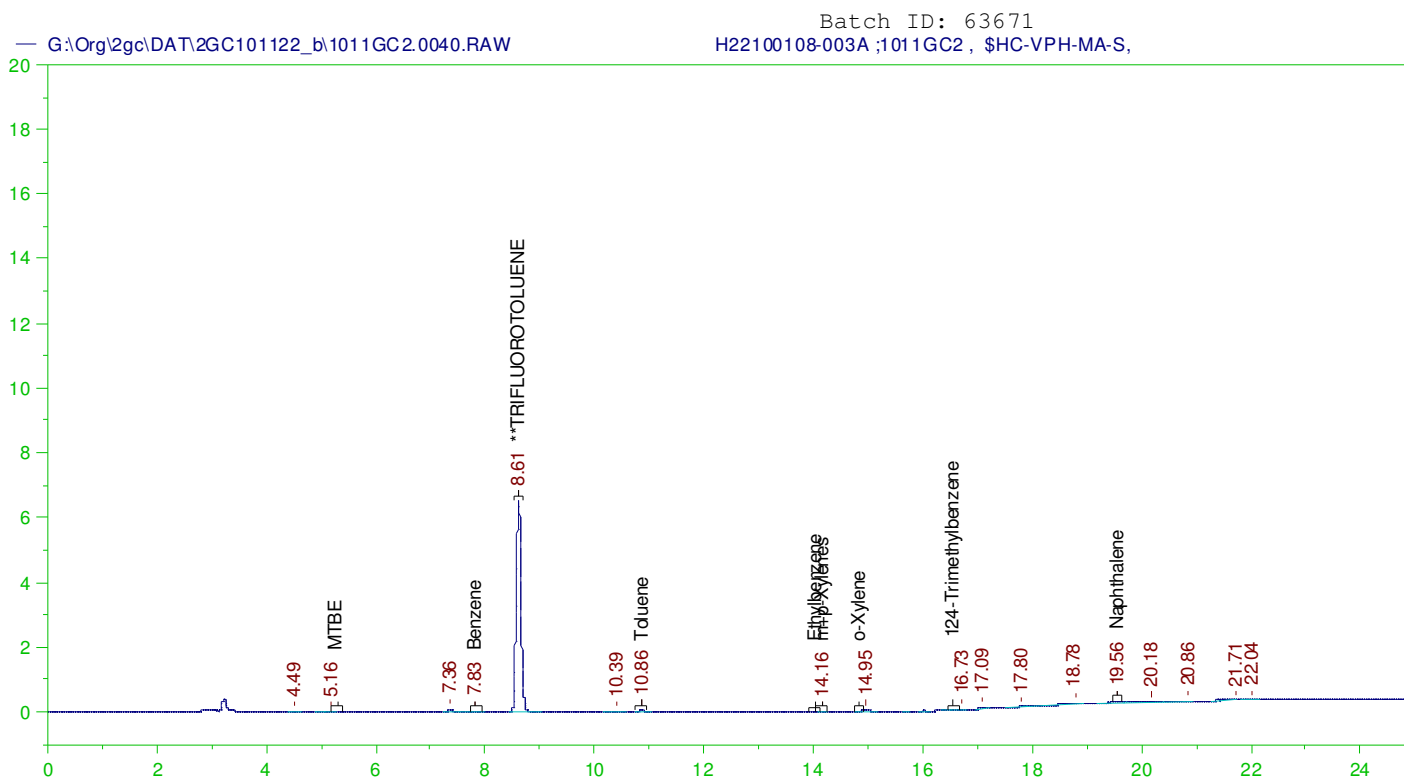
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Date & Time Acquired: 10/12/2022 8:22:36 AM
Method File: G:\Org\2GC\Methods\10112237B.MET
Calibration File: G:\Org\2GC\Cals\GC2100722B.cal
Sample Weight: 50 Dilution: 1 S.A.: 1

Mean RF for C5 to C8 Aliphatic Hydrocarbons: 926.2681
Mean RF for C9 to C12 Aliphatic Hydrocarbons: 807.8274
Mean RF for all calibrated compounds: 947.1428
Rt range for Gasoline Range Organics: 4.851 to 15.799
Rt range for C5 to C8 Aliphatic Hydrocarbons: 3.907 to 13.558
Rt range for C9 to C12 Aliphatic Hydrocarbons: 13.608 to 19.459

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
**TFT_____	8.615	2.5	2.426	97.06

GRO Area:6448.688 GRO Amount: 0.1361714
TPH Area:6867.063 TPH Amount: 0.1450059

Aliphatic Hydrocarbon Areas and Quantitations uncorrected for Aromatics:
C5-C8 Area:4775.164 C5-C8 Amount: 0.1031054
C9-C12 Area:1942.025 C9-C12 Amount: 0.0480802



VPH AROMATICS PHOTOIONIZATION DETECTOR CHROMATOGRAM REPORT

Sample Name: H22100108-003A ;1011GC2 , \$HC-VPH-MA-S,
Raw File: G:\Org\2gc\DAT\2GC101122_b\1011GC2.0040.RAW
Date & Time Acquired: 10/12/2022 8:53:37 AM
Method File: G:\Org\2GC\Methods\10112236.MET
Calibration File: G:\Org\2GC\Cals\GC2100722.cal
Sample Weight: 50 Dilution: 1 S.A.: 1

Mean RF for C9 to C10 Aromatic Hydrocarbons: 721.0174

Rt range for C9 to C10 Aromatics: 14.931 to 19.454

Aromatic Hydrocarbon Range Area and Quantitation:

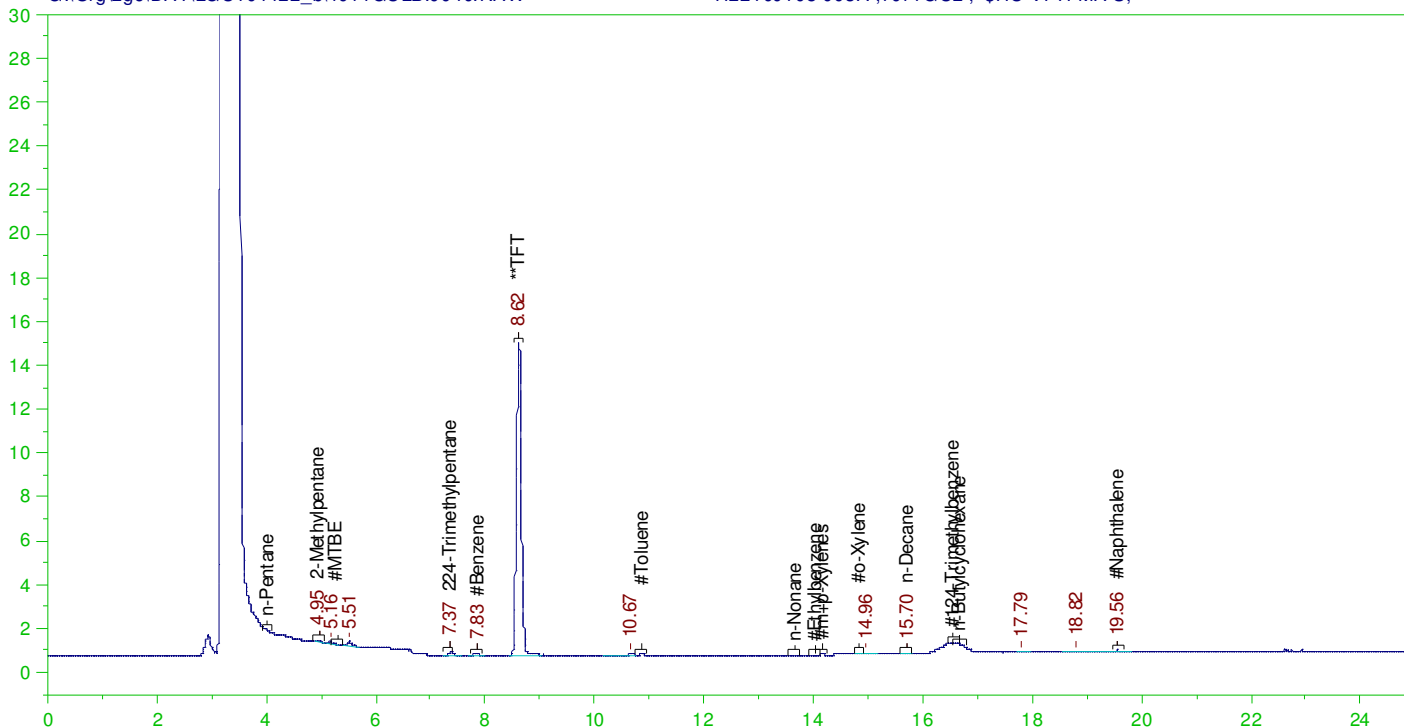
C9-C10 Aromatics Area:2274.014

C9-C10 Aromatics Amount: 6.307793E-02

TARGET ANALYTES	RT	CAL	RRT	AREA	AMOUNT	FLAG
MTBE	.	.	.	.	.1	U
Benzene	7.831	7.831	7.831	144	.05	U
Toluene	10.859	10.859	10.859	130	.05	U
Ethylbenzene	.	.	.	.	.05	U
m+p-Xylenes	14.156	14.156	14.156	69	.05	U
o-Xylene	.	.	.	.	.05	U
124-Trimethylbenzene	.	.	.	.	.05	U
Naphthalene	19.558	19.558	19.558	363	.1	U

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	QC LIMITS
**TRIFLUOROTOLUENE	8.61	2.5	2.28	91.18	70-130

Batch ID: 63671
G:\Org\2gc\DAT\2GC101122_b\1011GC2B.0040.RAW H22100108-003A ;1011GC2 , \$HC-VPH-MA-S,



VPH ALIPHATICS FLAME IONIZATION DETECTOR CHROMATOGRAM REPORT

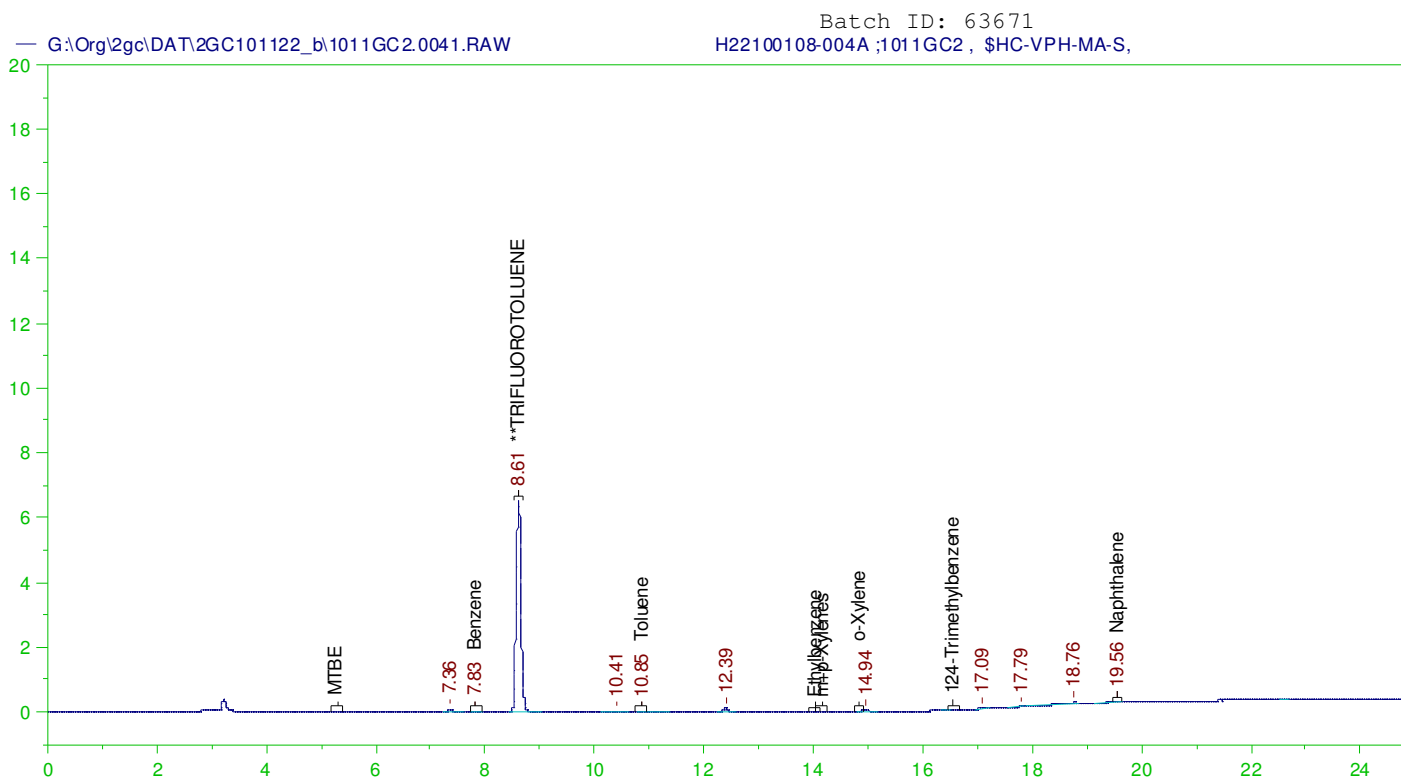
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Raw File: G:\Org\2gc\DAT\2GC101122_b\1011GC2B.0040.RAW
Date & Time Acquired: 10/12/2022 8:53:37 AM
Method File: G:\Org\2GC\Methods\10112237B.MET
Calibration File: G:\Org\2GC\Cals\GC2100722B.cal
Sample Weight: 50 Dilution: 1 S.A.: 1

Mean RF for C5 to C8 Aliphatic Hydrocarbons: 926.2681
Mean RF for C9 to C12 Aliphatic Hydrocarbons: 807.8274
Mean RF for all calibrated compounds: 947.1428
Rt range for Gasoline Range Organics: 4.851 to 15.799
Rt range for C5 to C8 Aliphatic Hydrocarbons: 3.907 to 13.558
Rt range for C9 to C12 Aliphatic Hydrocarbons: 13.608 to 19.459

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
**TFT	8.615	2.5	2.292	91.7

GRO Area:3482.867 GRO Amount: 7.354471E-02
TPH Area:4134.766 TPH Amount: 8.731029E-02

Aliphatic Hydrocarbon Areas and Quantitations uncorrected for Aromatics:
C5-C8 Area:2832.68 C5-C8 Amount: 6.116328E-02
C9-C12 Area:1101.879 C9-C12 Amount: 2.728007E-02



VPH AROMATICS PHOTOIONIZATION DETECTOR CHROMATOGRAM REPORT

Sample Name: H22100108-004A ;1011GC2 , \$HC-VPH-MA-S,
Raw File: G:\Org\2gc\DAT\2GC101122_b\1011GC2.0041.RAW
Date & Time Acquired: 10/12/2022 9:24:29 AM
Method File: G:\Org\2GC\Methods\10112236.MET
Calibration File: G:\Org\2GC\Cals\GC2100722.cal
Sample Weight: 50 Dilution: 1 S.A.: 1

Mean RF for C9 to C10 Aromatic Hydrocarbons: 721.0174
Rt range for C9 to C10 Aromatics: 14.931 to 19.454
Aromatic Hydrocarbon Range Area and Quantitation:
C9-C10 Aromatics Area:1589.392 C9-C10 Aromatics Amount: 4.408749E-02

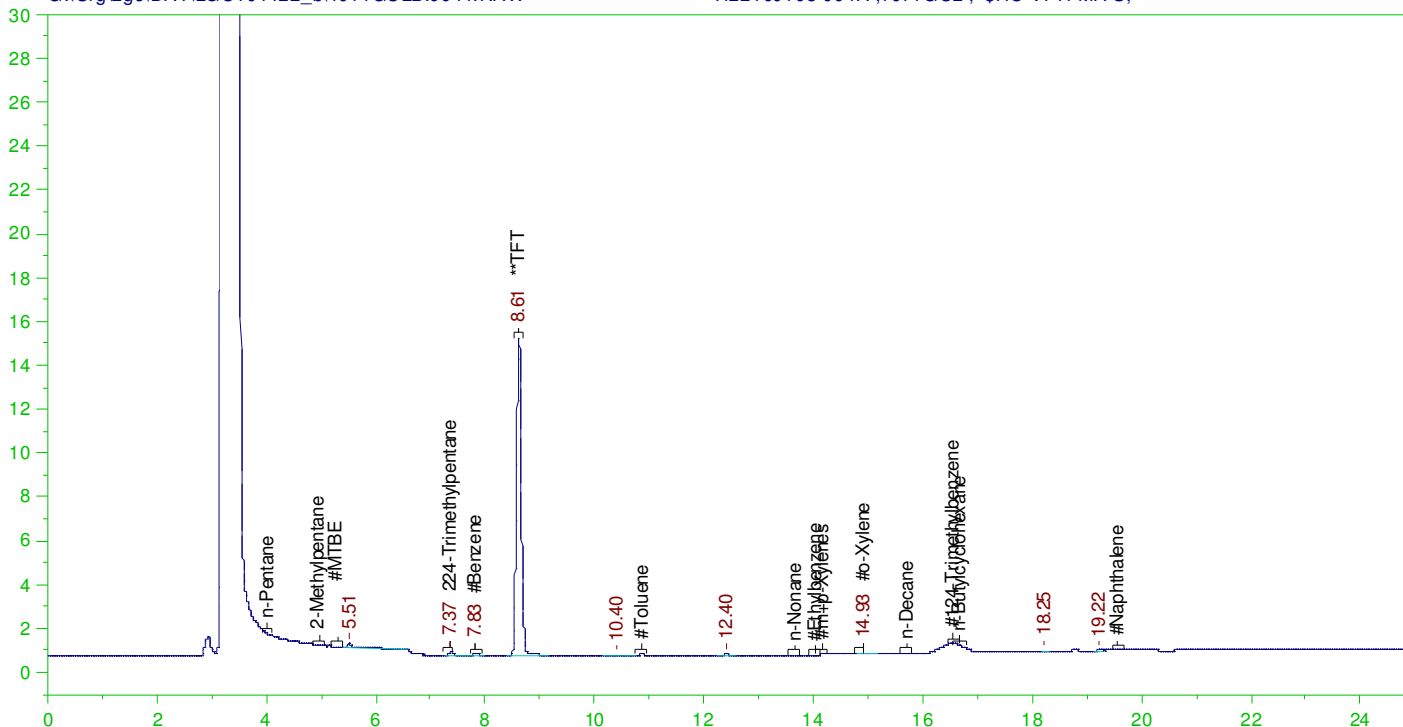
TARGET ANALYTES	RT	CAL	RRT	RRT	AREA	AMOUNT	FLAG
MTBE	.	.	.	.	.	.1	U
Benzene	7.83	7.83	7.83	7.83	135	.05	U
Toluene	10.849	10.849	10.849	10.849	324	.05	U
Ethylbenzene	.	.	.	.	.	.05	U
m+p-Xylenes	.	.	.	.	.	.05	U
o-Xylene	.	.	.	.	.	.05	U
124-Trimethylbenzene	.	.	.	.	.	.05	U
Naphthalene	19.557	19.557	19.557	19.557	282	.1	U

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	QC LIMITS
**TRIFLUOROTOLUENE	8.609	2.5	2.277	91.09	70-130

Batch ID: 63671

H22100108-004A ;1011GC2 , \$HC-VPH-MA-S,

G:\Org\2gc\DAT\2GC101122_b\1011GC2B.0041.RAW



VPH ALIPHATICS FLAME IONIZATION DETECTOR CHROMATOGRAM REPORT

Sample Name: H22100108-004A ;1011GC2 , \$HC-VPH-MA-S,
Raw File: G:\Org\2gc\DAT\2GC101122_b\1011GC2B.0041.RAW
Date & Time Acquired: 10/12/2022 9:24:29 AM
Method File: G:\Org\2GC\Methods\10112237B.MET
Calibration File: G:\Org\2GC\Cals\GC2100722B.cal
Sample Weight: 50 Dilution: 1 S.A.: 1

Mean RF for C5 to C8 Aliphatic Hydrocarbons: 926.2681
Mean RF for C9 to C12 Aliphatic Hydrocarbons: 807.8274
Mean RF for all calibrated compounds: 947.1428
Rt range for Gasoline Range Organics: 4.851 to 15.799
Rt range for C5 to C8 Aliphatic Hydrocarbons: 3.907 to 13.558
Rt range for C9 to C12 Aliphatic Hydrocarbons: 13.608 to 19.459

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
**TFT	8.615	2.5	2.33	93.19

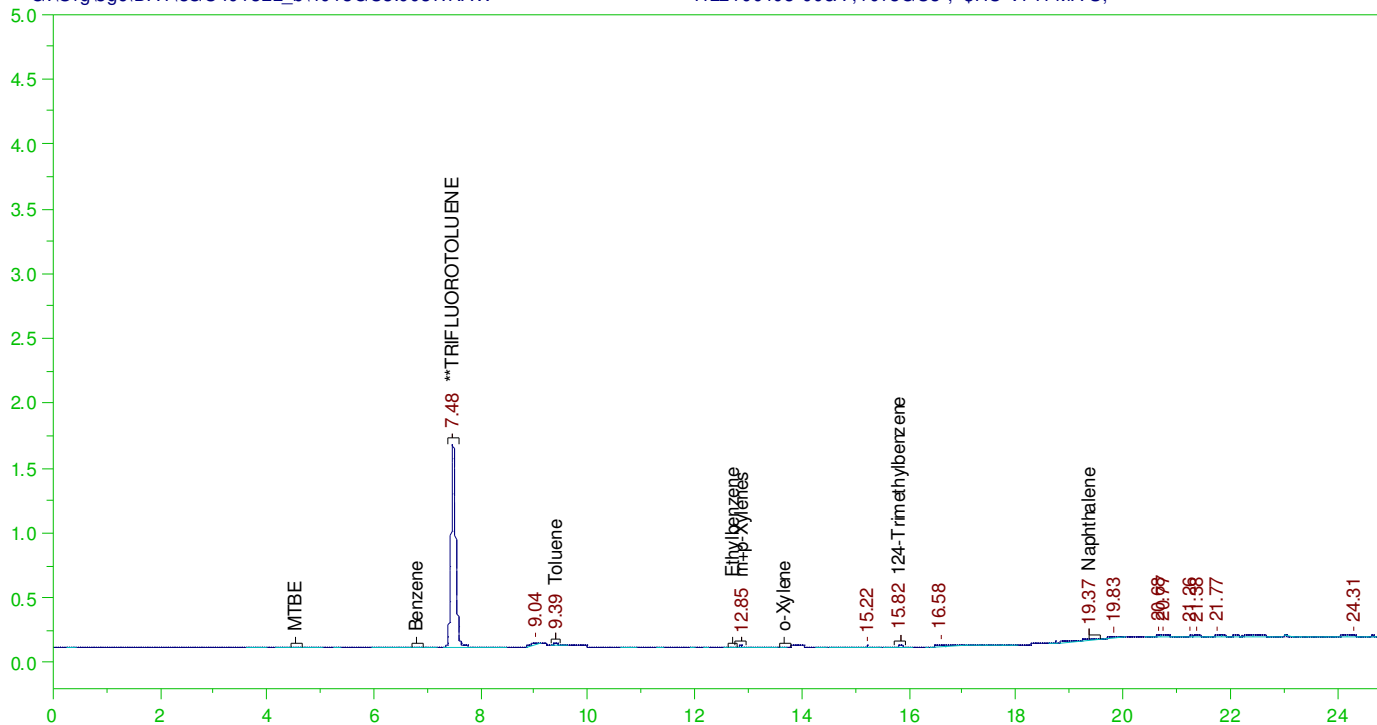
GRO Area:4379.648 GRO Amount: 9.248127E-02
TPH Area:4592.758 TPH Amount: 9.698132E-02

Aliphatic Hydrocarbon Areas and Quantitations uncorrected for Aromatics:
C5-C8 Area:3948.109 C5-C8 Amount: 8.524766E-02
C9-C12 Area:644.6466 C9-C12 Amount: 1.596001E-02

Batch ID: 63823

G:\Org\3gc\DAT\3GC101322_b\1013GC3.0037.RAW

H22100108-005A ; 1013GC3 , \$HC-VPH-MA-S,



VPH AROMATICS PHOTOIONIZATION DETECTOR CHROMATOGRAM REPORT

Sample Name: H22100108-005A ; 1013GC3 , \$HC-VPH-MA-S,
Raw File: G:\Org\3gc\DAT\3GC101322_b\1013GC3.0037.RAW
Date & Time Acquired: 10/14/2022 7:18:38 AM
Method File: G:\Org\3gc\Methods\10132237.MET
Calibration File: G:\Org\3gc\Cals\GC3031122.CAL
Sample Weight: 50 Dilution: 1 S.A.: 1

Mean RF for C9 to C10 Aromatic Hydrocarbons: 209.904

Rt range for C9 to C10 Aromatics: 13.789 to 19.361

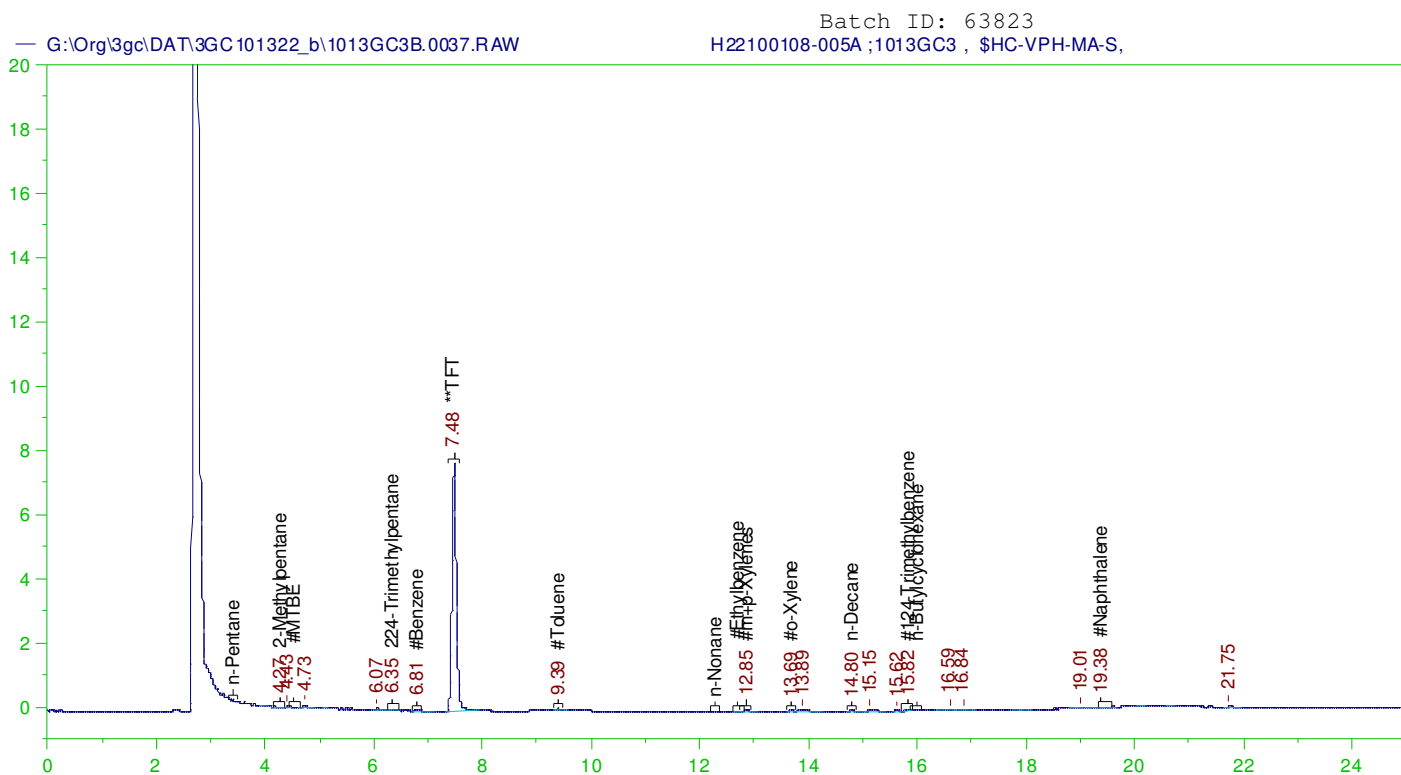
Aromatic Hydrocarbon Range Area and Quantitation:

C9-C10 Aromatics Area: 494.4125

C9-C10 Aromatics Amount: 4.710845E-02

TARGET ANALYTES	RT	CAL RRT	RRT	AREA	AMOUNT	FLAG
MTBE	.	.	.	.	.1	U
Benzene	.	.	.	.	.05	U
Toluene	9.386	9.386	9.386	74	.05	U
Ethylbenzene	.	.	.	.	.05	U
m+p-Xylenes	12.853	12.853	12.853	110	.05	U
o-Xylene	.	.	.	.	.05	U
124-Trimethylbenzene	15.824	15.824	15.824	67	.05	U
Naphthalene	19.372	19.372	19.372	55	.1	U

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	QC LIMITS
**TRIFLUOROTOLUENE	7.484	2.5	2.287	91.47	70-130



VPH ALIPHATICS FLAME IONIZATION DETECTOR CHROMATOGRAM REPORT

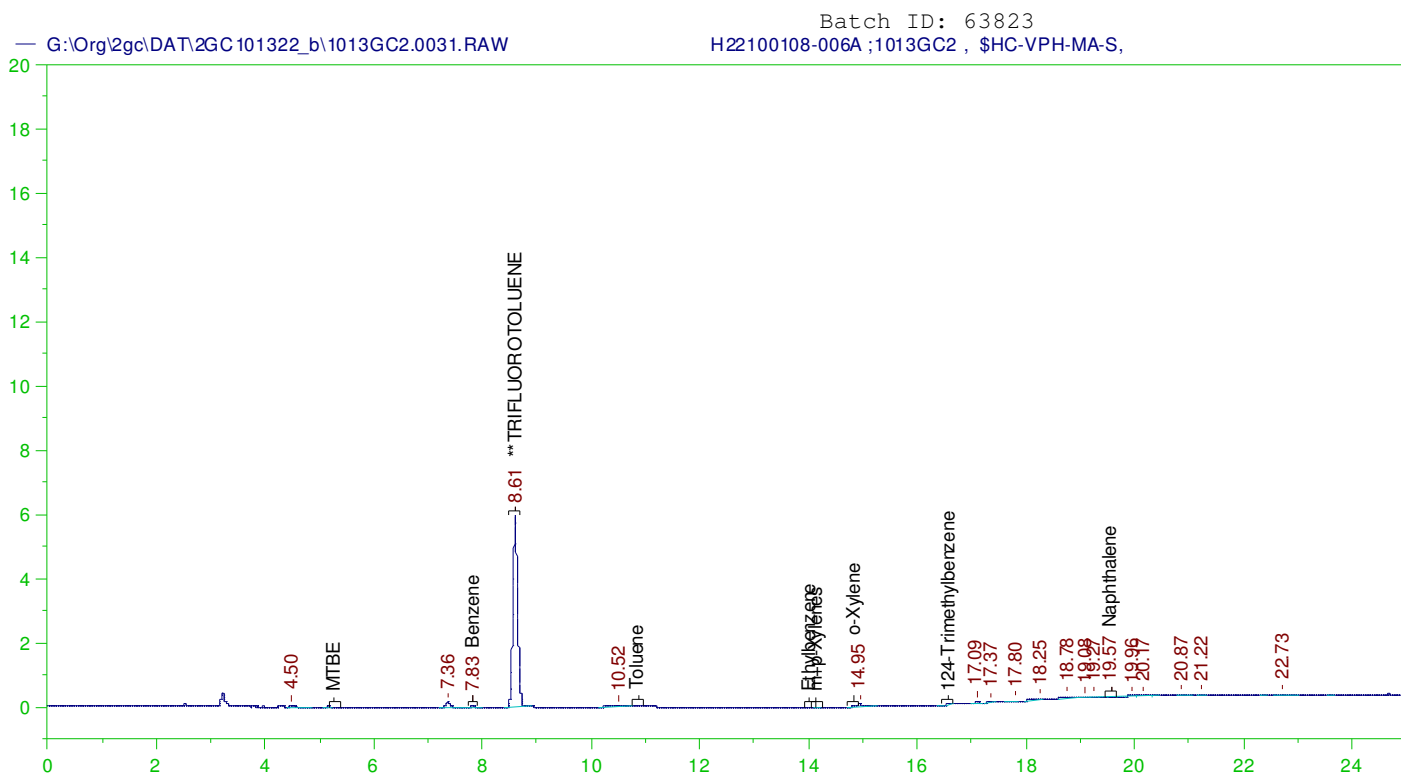
Sample Name: H22100108-005A ; 1013GC3 , \$HC-VPH-MA-S,
Raw File: G:\Org\3gc\DAT\3GC101322_b\1013GC3B.0037.RAW
Date & Time Acquired: 10/14/2022 7:18:38 AM
Method File: G:\Org\3gc\Methods\10132237B.MET
Calibration File: G:\Org\3gc\Cals\GC3031122B.CAL
Sample Weight: 50 Dilution: 1 S.A.: 1

Mean RF for C5 to C8 Aliphatic Hydrocarbons: 470.9312
Mean RF for C9 to C12 Aliphatic Hydrocarbons: 341.9892
Mean RF for all calibrated compounds: 463.4642
Rt range for Gasoline Range Organics: 4.151 to 14.901
Rt range for C5 to C8 Aliphatic Hydrocarbons: 3.32 to 12.184
Rt range for C9 to C12 Aliphatic Hydrocarbons: 12.234 to 19.358

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
**TFT	7.484	2.5	2.603	104.11

GRO Area: 2791.242 GRO Amount: 0.1204512
TPH Area: 4466.625 TPH Amount: 0.1927495

Aliphatic Hydrocarbon Areas and Quantitations uncorrected for Aromatics:
C5-C8 Area: 1842.172 C5-C8 Amount: 7.823528E-02
C9-C12 Area: 2194.104 C9-C12 Amount: 0.1283142



VPH AROMATICS PHOTOIONIZATION DETECTOR CHROMATOGRAM REPORT

Sample Name: H22100108-006A ;1013GC2 , \$HC-VPH-MA-S,
Raw File: G:\Org\2gc\DAT\2GC101322_b\1013GC2.0031.RAW
Date & Time Acquired: 10/14/2022 3:14:04 AM
Method File: G:\Org\2GC\Methods\10132231.MET
Calibration File: G:\Org\2GC\Cals\GC2100722.cal
Sample Weight: 50 Dilution: 1 S.A.: 1

Mean RF for C9 to C10 Aromatic Hydrocarbons: 721.0174

Rt range for C9 to C10 Aromatics: 14.931 to 19.454

Aromatic Hydrocarbon Range Area and Quantitation:

C9-C10 Aromatics Area:2138.369

C9-C10 Aromatics Amount: 5.931533E-02

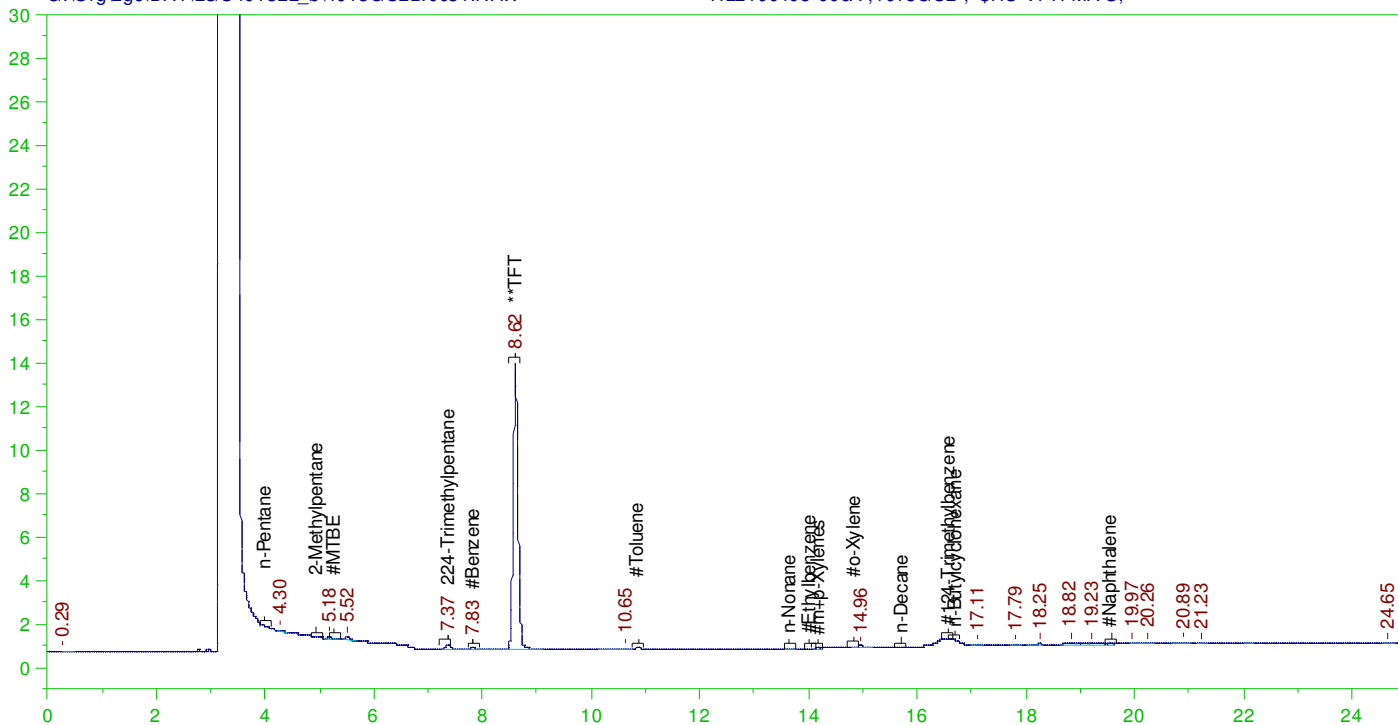
TARGET ANALYTES	RT	CAL	RRT	RRT	AREA	AMOUNT	FLAG
MTBE	.	.	.	.	.	.1	U
Benzene	7.831	7.831	7.831	7.831	171	.05	U
Toluene	.	.	.	.	.	.05	U
Ethylbenzene	.	.	.	.	.	.05	U
m+p-Xylenes	.	.	.	.	.	.05	U
o-Xylene	.	.	.	.	.	.05	U
124-Trimethylbenzene	.	.	.	.	.	.05	U
Naphthalene	19.566	19.566	19.566	19.566	70	.1	U

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	QC LIMITS
**TRIFLUOROTOLUENE	8.611	2.5	2.075	83.	70-130

Batch ID: 63823

G:\Org\2gc\DAT\2GC101322_b\1013GC2B.0031.RAW

H22100108-006A ; 1013GC2 , \$HC-VPH-MA-S,



VPH ALIPHATICS FLAME IONIZATION DETECTOR CHROMATOGRAM REPORT

Sample Name: H22100108-006A ; 1013GC2 , \$HC-VPH-MA-S,
Raw File: G:\Org\2gc\DAT\2GC101322_b\1013GC2B.0031.RAW
Date & Time Acquired: 10/14/2022 3:14:04 AM
Method File: G:\Org\2GC\Methods\10132231B.MET
Calibration File: G:\Org\2GC\Cals\GC2100722B.cal
Sample Weight: 50 Dilution: 1 S.A.: 1

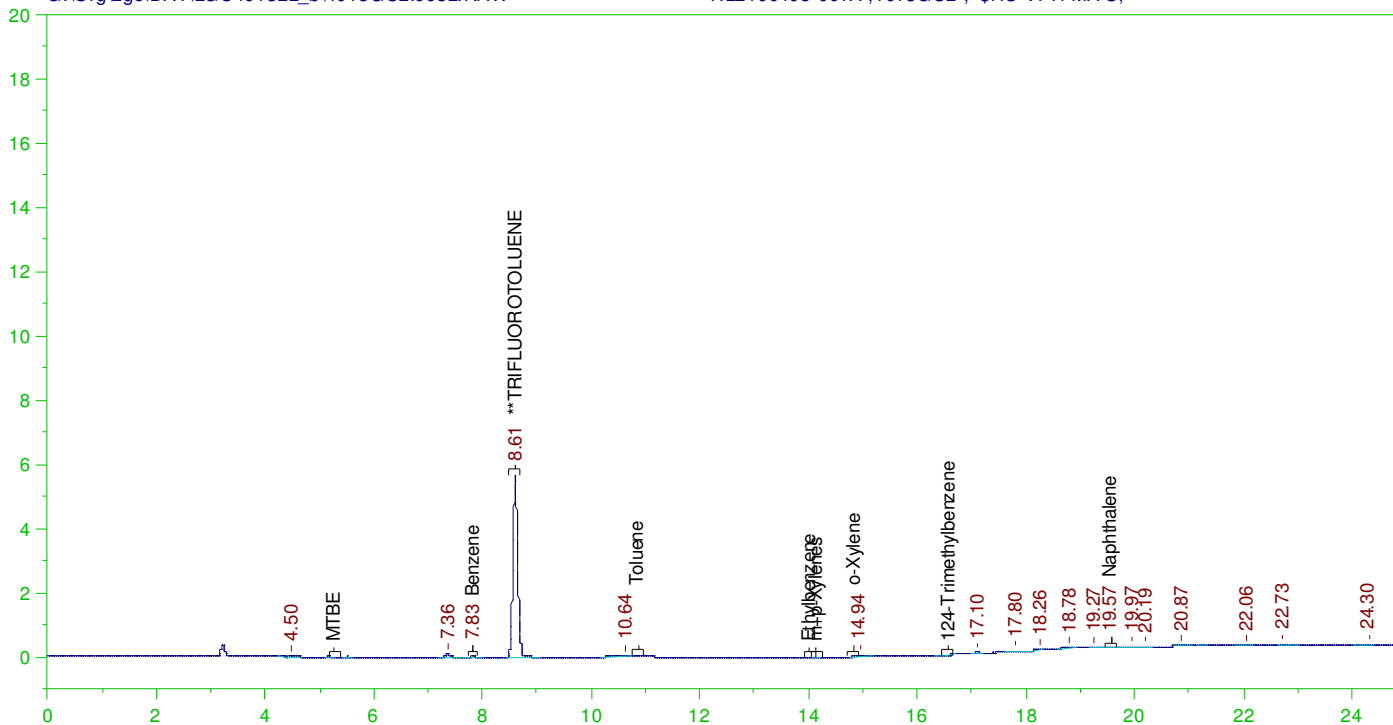
Mean RF for C5 to C8 Aliphatic Hydrocarbons: 926.2681
Mean RF for C9 to C12 Aliphatic Hydrocarbons: 807.8274
Mean RF for all calibrated compounds: 947.1428
Rt range for Gasoline Range Organics: 4.851 to 15.799
Rt range for C5 to C8 Aliphatic Hydrocarbons: 3.907 to 13.558
Rt range for C9 to C12 Aliphatic Hydrocarbons: 13.608 to 19.459

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
**TFT	8.616	2.5	2.128	85.12

GRO Area: 4073.656 GRO Amount: 0.0860199
TPH Area: 6610.914 TPH Amount: 0.139597

Aliphatic Hydrocarbon Areas and Quantitations uncorrected for Aromatics:
C5-C8 Area: 3599.375 C5-C8 Amount: 7.771778E-02
C9-C12 Area: 1795.44 C9-C12 Amount: 4.445107E-02

Batch ID: 63823
G:\Org\2gc\DAT\2GC101322_b\1013GC2.0032.RAW H22100108-007A ;1013GC2 , \$HC-VPH-MA-S,



VPH AROMATICS PHOTOIONIZATION DETECTOR CHROMATOGRAM REPORT

Sample Name: H22100108-007A ;1013GC2 , \$HC-VPH-MA-S,
Raw File: G:\Org\2gc\DAT\2GC101322_b\1013GC2.0032.RAW
Date & Time Acquired: 10/14/2022 3:45:09 AM
Method File: G:\Org\2GC\Methods\10132231.MET
Calibration File: G:\Org\2GC\Cals\GC2100722.cal
Sample Weight: 50 Dilution: 1 S.A.: 1

Mean RF for C9 to C10 Aromatic Hydrocarbons: 721.0174

Rt range for C9 to C10 Aromatics: 14.931 to 19.454

Aromatic Hydrocarbon Range Area and Quantitation:

C9-C10 Aromatics Area:1641.001 C9-C10 Aromatics Amount: 4.551905E-02

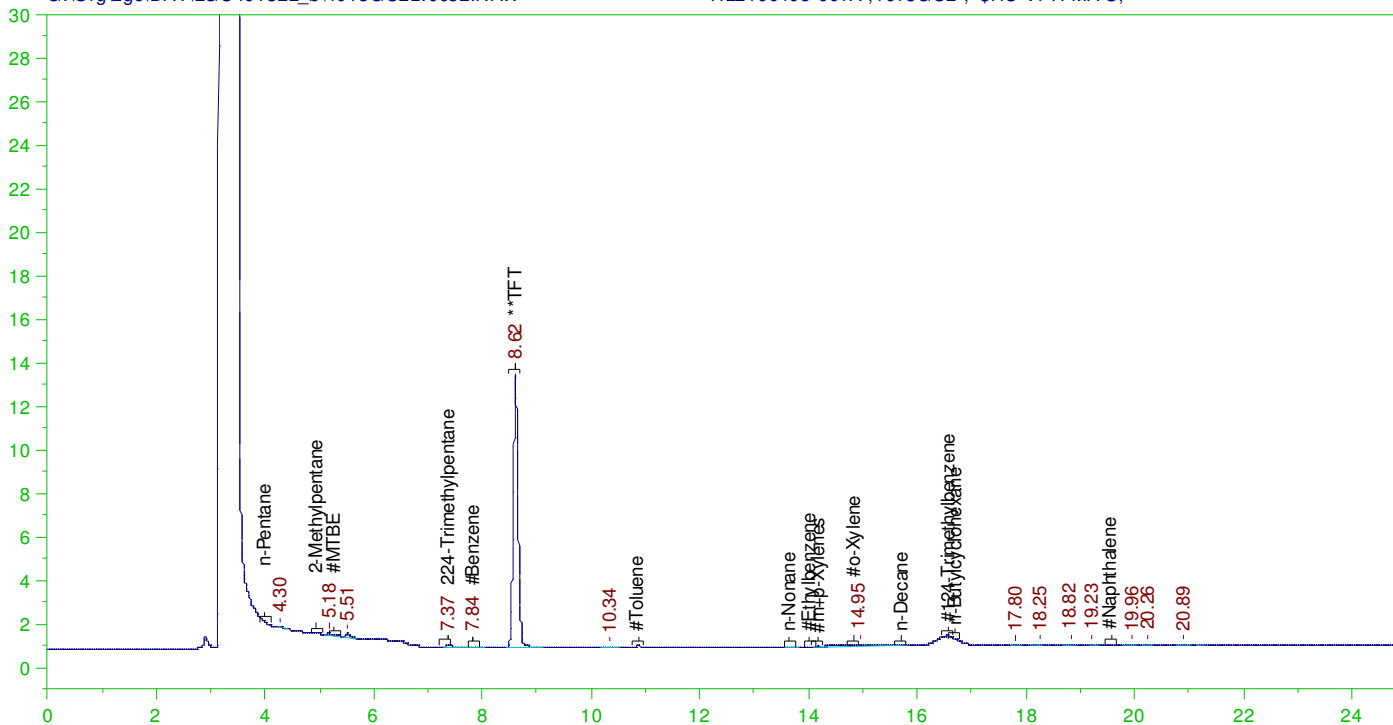
TARGET ANALYTES	RT	CAL	RRT	AREA	AMOUNT	FLAG
MTBE	.	.	.	.	.1	U
Benzene	7.835	7.835	7.835	105	.05	U
Toluene	.	.	.	.	.05	U
Ethylbenzene	.	.	.	.	.05	U
m+p-Xylenes	.	.	.	.	.05	U
o-Xylene	.	.	.	.	.05	U
124-Trimethylbenzene	.	.	.	.	.05	U
Naphthalene	19.565	19.565	19.565	59	.1	U

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	QC LIMITS
**TRIFLUOROTOLUENE	8.611	2.5	1.99	79.61	70-130

Batch ID: 63823

G:\Org\2gc\DAT\2GC101322_b\1013GC2B.0032.RAW

H22100108-007A ;1013GC2 , \$HC-VPH-MA-S,



VPH ALIPHATICS FLAME IONIZATION DETECTOR CHROMATOGRAM REPORT

Sample Name: H22100108-007A ;1013GC2 , \$HC-VPH-MA-S,
Raw File: G:\Org\2gc\DAT\2GC101322_b\1013GC2B.0032.RAW
Date & Time Acquired: 10/14/2022 3:45:09 AM
Method File: G:\Org\2GC\Methods\10132231B.MET
Calibration File: G:\Org\2GC\Cals\GC2100722B.cal
Sample Weight: 50 Dilution: 1 S.A.: 1

Mean RF for C5 to C8 Aliphatic Hydrocarbons: 926.2681
Mean RF for C9 to C12 Aliphatic Hydrocarbons: 807.8274
Mean RF for all calibrated compounds: 947.1428
Rt range for Gasoline Range Organics: 4.851 to 15.799
Rt range for C5 to C8 Aliphatic Hydrocarbons: 3.907 to 13.558
Rt range for C9 to C12 Aliphatic Hydrocarbons: 13.608 to 19.459

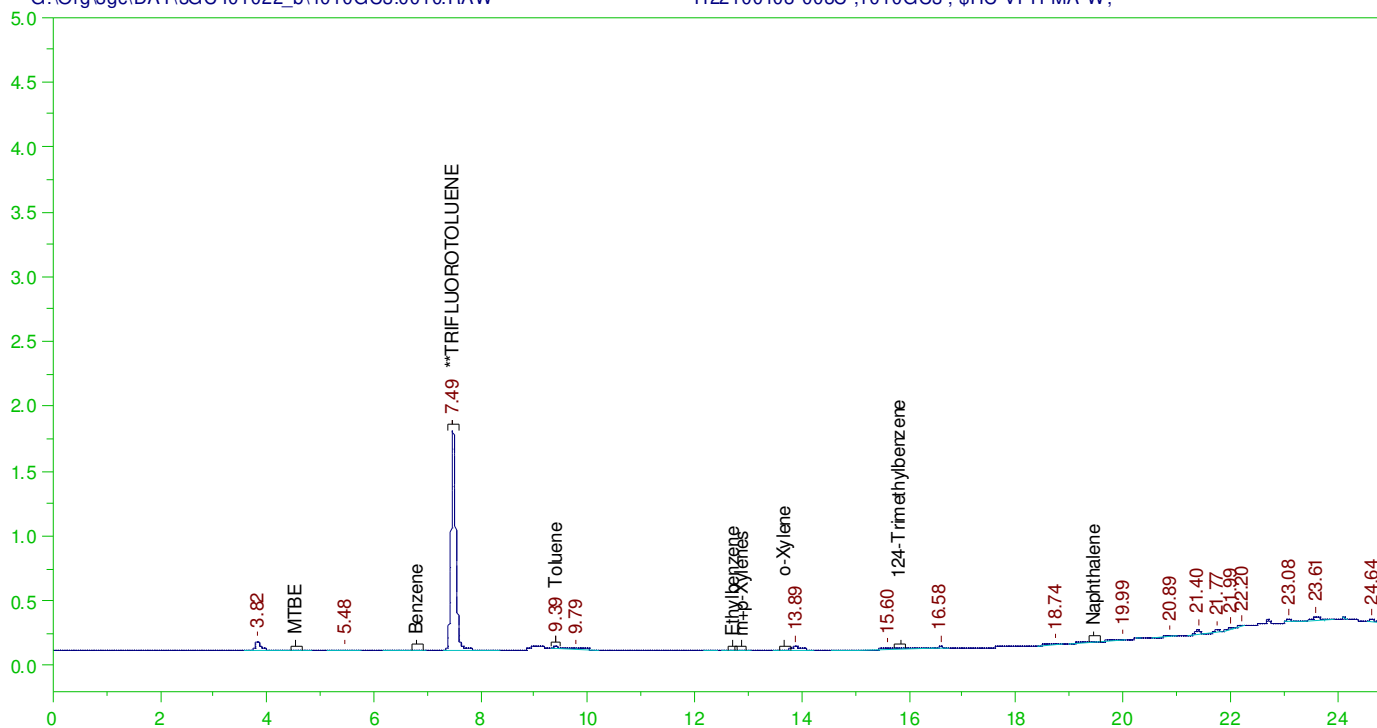
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
**TFT	8.617	2.5	2.031	81.22

GRO Area:4327.758 GRO Amount: 9.138554E-02
TPH Area:5574.922 TPH Amount: 0.1177208

Aliphatic Hydrocarbon Areas and Quantitations uncorrected for Aromatics:
C5-C8 Area:2653.617 C5-C8 Amount: 5.729696E-02
C9-C12 Area:2475.885 C9-C12 Amount: 6.129738E-02

G:\Org\3gc\DAT\3GC101022_b\1010GC3.0010.RAW

H22100108-008C ;1010GC3 , \$HC-VPH-MA-W,



VPH AROMATICS PHOTOIONIZATION DETECTOR CHROMATOGRAM REPORT

Sample Name: H22100108-008C ;1010GC3 , \$HC-VPH-MA-W,
Raw File: G:\Org\3gc\DAT\3GC101022_b\1010GC3.0010.RAW
Date & Time Acquired: 10/10/2022 6:37:28 PM
Method File: G:\Org\3gc\Methods\10102210.MET
Calibration File: G:\Org\3gc\Cals\GC3031122.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

Mean RF for C9 to C10 Aromatic Hydrocarbons: 209.904

Rt range for C9 to C10 Aromatics: 13.789 to 19.361

Aromatic Hydrocarbon Range Area and Quantitation:

C9-C10 Aromatics Area:727.252

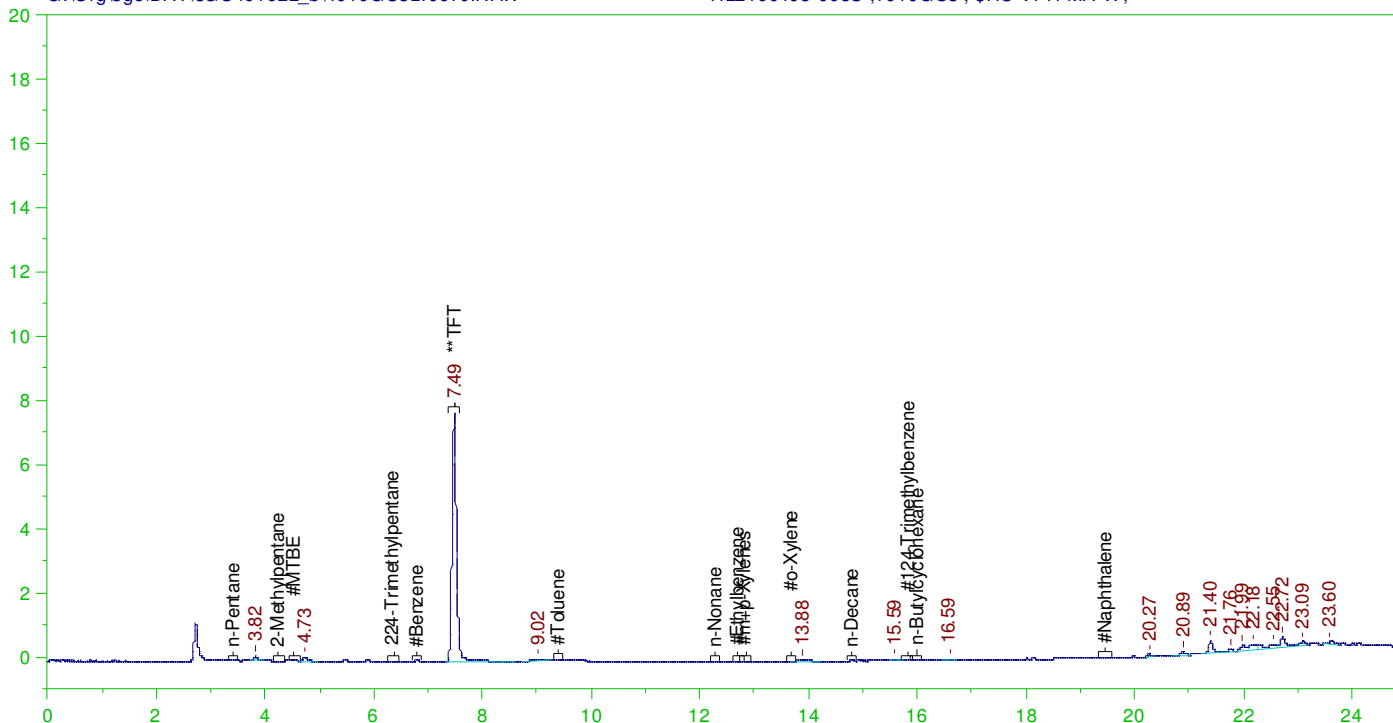
C9-C10 Aromatics Amount: 0.6929377

TARGET ANALYTES	RT	CAL	RRT	AREA	AMOUNT	FLAG
MTBE_____.		.	.		1.	U
Benzene_____.		.	.		.5	U
Toluene_____.	9.394	9.394	9.394	65	.5	U
Ethylbenzene_____.		.	.		.5	U
m+p-Xylenes_____.		.	.		.5	U
o-Xylene_____.		.	.		.5	U
124-Trimethylbenzene_____.		.	.		.5	U
Naphthalene_____.		.	.		1.	U

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	QC LIMITS
**TRIFLUOROTOLUENE_____.	7.485	25.	24.633	98.53	70-130

G:\Org\3gc\DAT\3GC101022_b\1010GC3B.0010.RAW

H22100108-008C ;1010GC3 , \$HC-VPH-MA-W,



VPH ALIPHATICS FLAME IONIZATION DETECTOR CHROMATOGRAM REPORT

Sample Name: H22100108-008C ;1010GC3 , \$HC-VPH-MA-W,
Raw File: G:\Org\3gc\DAT\3GC101022_b\1010GC3B.0010.RAW
Date & Time Acquired: 10/10/2022 6:37:28 PM
Method File: G:\Org\3gc\Methods\10102210B.MET
Calibration File: G:\Org\3gc\Cals\GC3031122B.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

Mean RF for C5 to C8 Aliphatic Hydrocarbons: 470.9312
Mean RF for C9 to C12 Aliphatic Hydrocarbons: 341.9892
Mean RF for all calibrated compounds: 463.4642
Rt range for Gasoline Range Organics: 4.151 to 14.901
Rt range for C5 to C8 Aliphatic Hydrocarbons: 3.32 to 12.184
Rt range for C9 to C12 Aliphatic Hydrocarbons: 12.234 to 19.358

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
**TFT	7.485	25.	26.407	105.63

GRO Area:1601.906 GRO Amount: 0.6912751
TPH Area:12126.11 TPH Amount: 5.232815

Aliphatic Hydrocarbon Areas and Quantitations uncorrected for Aromatics:
C5-C8 Area:1823.109 C5-C8 Amount: 0.7742571
C9-C12 Area:761.4857 C9-C12 Amount: 0.4453273



Work Order Receipt Checklist

WGM Group Inc

H22100108

Login completed by: Taylor K. Jones

Date Received: 10/5/2022

Reviewed by: BL2000\wjohnson

Received by: tkj

Reviewed Date: 10/16/2022

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on all shipping container(s)/cooler(s)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on all sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input type="checkbox"/>
Container/Temp Blank temperature:	1.2°C On Ice		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Not Applicable <input type="checkbox"/>

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

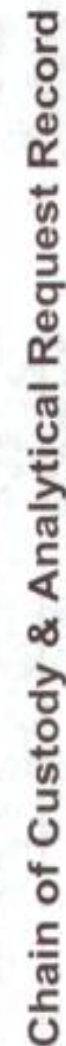
Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as —dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

The reference date for Radon analysis is the sample collection date. The reference date for all other Radiochemical analyses is the analysis date. Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

Contact and Corrective Action Comments:

Metals samples were preserved to pH <2 in laboratory upon receipt. In accordance with the Clean Water Act, these samples must be held for 24 hours prior to analysis.

tj 10/5/22



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Page 1 of 1

Report Information (if different than Account Information)

Company Name _____
Contact TYLER ETZEL
Phone _____
Mailing Address _____
City, State, Zip _____
Email TGTZEL@WGHGROUP.COM
Receive Report ☐ Hard Copy ☒ Email
Special Report Format: ☐ LEVEL I ☐ LEVEL IV ☐ NELAC ☐ ED/VEDT (contact laboratory) ☐ Other _____

Analysis Requested

<p> Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling - See Instructions Page </p>	<p> Attached </p>
---	--------------------------

[illegible]

All turnaround times are standard unless marked as RUSH.

ELI LAB ID
Laboratory Use Only

H22100108

PLEASE call
sampler w/ any
QUESTIONS

See Attached

Received by (print) <u>James</u>		Date/Time	Signature
Signed by Laboratory (print) <u>James</u>		Date/Time	Signature
LABORATORY USE ONLY			
Test Blank <input checked="" type="radio"/> N <input type="radio"/> Y	Do Ice <input type="radio"/> N <input checked="" type="radio"/> Y	Payment Type CC Cash Check	Amount \$
		Receipt Number (Webbase only)	

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analyses requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.



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www.energylab.com

Bilings, MT 808.733.4489 • Casper, WY 888.235.0515 • Gillette, WY 866.886.7175 • Helena, MT 877.472.0711

BOTTLE ORDER 41961

@1961

SHIPPED TO: WGM Group Inc

Contact: Brent Merritt
1111 East Broadway
Missoula MT 59802-
Phone: (406) 728-4611
Project: Samaritan House

Order Created by: Jessica C. Smith
Shipped From: Helena, MT
Ship Date: 9/13/2022
VIA: Ground







Bottle Size/Type	Bottles Per Samp	Method	Tests	Critical Hold Time	Preservative	Notes	Num of Samp
Soils (8 Sets)							
4 oz Wide Mouth Amber Glass	3	E6010.20	Metals by ICP/ICPMS, Total			RCRA mets	1
		SW3050 B	Total Metals Digestion by SW3050B				
		SW7471B	Mercury in Solid By CVAA				
		SW7471B	Mercury Digestion by SW7471B				
		SW8015M	Hydrocarbons, Extractable Petroleum-Scm				
		MA-VPH	Volatile Petroleum Hydrocarbons				
		SW8260B	8260-Volatile Organic Compounds - Short List				

BO#: 41961

1 of 2

Water (4 Sets)				
250 mL Plastic	1	E6010.20 SW3010A SW7470A SW7470A	Metals by ICP/ICPMS, Total Recoverable Metals Digestion by SW3010A Mercury, Total Mercury Digestion by SW7470A	1
40 mL Clear Glass VOA	3	SW8260B	8260-Volatile Organic Compounds-Short List	1
40 mL Clear Glass VOA	3	MA-VPH	Volatile Petroleum Hydrocarbons	1
1 Liter Amber Glass Narrow Mouth	2	SW8015M	Hydrocarbons, Extractable SW8015MPetroleum Screen	1
Supplies (3 Sets)				
Trip Blank	1	FIELD	Supplies	1
Return Shipping Packet (3 Sets)				
Chain of Custody	1	FIELD	Supplies	1
Custody Seal	1	FIELD	Supplies	1
Temp Blank	1	FIELD	Supplies	1
Misc	1	FIELD	Supplies	1

Comments

 HNO3 - Nitric Acid	 H2SO4 - Sulfuric Acid	 NaOH - Sodium Hydroxide	We strongly suggest that the samples are shipped the same day as they are collected.
 ZnAc - Zinc Acetate	 HCl - Hydrochloric Acid	 H3PO4 - Phosphoric Acid	
Material Safety Data Sheets(MSDS) Available @ EnergyLab.com ->Services -> MSDS Sheets			
Corrosive Chemicals: Nitric, Sulfuric, Phosphoric, Hydrochloric Acids and Sodium Hydroxide. Zinc Acetate is a skin irritant.			
Subcontracting of sample analyses to an outside laboratory may be required. If no, Energy Laboratories will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.			

BO#: 41961

2 of 2

APPENDIX D

TABULATED DATA



Table D-1
Samaritan House Phase II ESA Soil
Analytical Results
Kalispell, Montana

Analyte	Analytical Method	MT Background Threshold Values ¹ (mg/Kg)	DEQ-Adjusted Residential Direct Contact SL ² (mg/Kg)	DEQ-Adjusted Leaching to Groundwater SL ³ (mg/Kg)	SB1-1 2.5 - 4 ft bgs	SB1-2 6 - 8 ft bgs	SB2-1 2 - 4 ft bgs	SB2-2 6 - 8 ft bgs	SB3-1 3 - 4 ft bgs	SB3-2 6 - 8 ft bgs	SB4-2 (DUP of SB3-2)
EXTRACTABLE PETROLEUM HYDROCARBONS (EPH)											
TEH Screen	MDEP EPH	np	200 *	200 *	7.9 J	9.3 J	27	<20	826 *	<20	<20
C9-C18 Aliphatics		np	110	53,000	----	----	----	----	<10	----	----
C19-C36 Aliphatics		np	24,000	considered immobile	----	----	----	----	165	----	----
C11-C22 Aromatics		np	490	370	----	----	----	----	129	----	----
VOLATILE PETROLEUM HYDROCARBONS (VPH)											
C5-C8 Aliphatics	MDEP VPH	np	52	220	<2.2	<2.4	<2.1	<2.5	<2.1	<2.5	<2.5
C9-C12 Aliphatics		np	77	11,000	<2.2	<2.4	<2.1	<2.5	<2.1	<2.5	<2.5
C9-C10 Aromatics		np	130	130	<2.2	<2.4	<2.1	<2.5	<2.1	<2.5	<2.5
MTBE		np	52	0.078	<0.11	<0.12	<0.10	<0.12	<0.10	<0.13	<0.13
Benzene		np	1.3	0.07	<0.054	<0.059	<0.052	<0.062	<0.052	<0.064	<0.063
Toluene		np	610	21	<0.054	<0.059	<0.052	<0.062	<0.052	<0.064	<0.063
Ethylbenzene		np	6.4	26	<0.054	<0.059	<0.052	<0.062	<0.052	<0.064	<0.063
Xylenes		np	72	320	<0.054	<0.059	<0.052	<0.062	<0.052	<0.064	<0.063
Naphthalene		np	2.2	12	<0.11	<0.12	<0.10	<0.12	<0.10	<0.13	<0.13
VOLATILE ORGANIC COMPOUNDS (VOCs)											
Benzene	SW 8260B	np	1.3	0.07	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Bromobenzene		np	29	0.042	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Bromochloromethane		np	15	0.022	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Bromodichloromethane		np	0.29	0.028	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Bromoform		np	19	0.021	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Bromomethane		np	0.68	0.025	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Carbon Tetrachloride		np	0.65	0.012	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Chlorobenzene		np	28	0.068	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane		np	540	2.4	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroform		np	0.32	0.19	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Chloromethane		np	11	1.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
2-Chlorotoluene		np	160	0.23	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
4-Chlorotoluene		np	160	0.24	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Chlorodibromomethane		np	8.3	0.00023	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dibromoethane (EDB)		np	0.036	0.00048	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dibromomethane		np	2.4	0.0021	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene		np	180	0.58	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Dichlorobenzene		np	np	np	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,4-Dichlorobenzene		np	2.6	0.072	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dichlorodifluoromethane		np	8.7	15	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane		np	3.6	0.00078	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane (DCA)		np	0.46	0.011	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethene		np	23	0.0025	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
cis-1,2-Dichloroethene		np	16	0.021	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
trans-1,2-Dichloroethene		np	7.0	0.031	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane		np	1.6	0.0017	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Dichloropropane		np	160	0.0095	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
2,2-Dichloropropane		np	np	np	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloropropene		np	np	np	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
cis-1,3-Dichloropropene		np	np	np	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
trans-1,3-Dichloropropene		np	1.8	0.13	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Methyl t-butyl ether	SW 8260B	np	52	0.078	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Methylene Chloride (Dichloromethane)		np	35	0.0013	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Methyl Ethyl Ketone		np	2,700	1.2	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Styrene		np	600	0.11	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1,2-Tetrachloroethane		np	2.0	0.00022	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,2,2-Tetrachloroethane		np	0.60	0.00079	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Tetrachloroethene (Tetrachloroethylene)		np	8.1	0.0023	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane		np	810	0.070	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane		np	0.15	0.0095	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethene (Trichloroethylene)		np	0.41	0.0018	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichlorofluoromethane		np	2,300	12.7	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2,3-Trichloropropane		np	0.0051	0.0000032	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride (Chloroethene)		np	0.059	0.00068	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Ethylbenzene	SW 6010B	np	6.4	26	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Toluene		np	610	21	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Xylenes		np	72	320	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) METALS											
Arsenic	SW 6010B	22.5	n/a	22.5	6	6	5	6	17	7	6
Barium		429	1,500	421	73	271 D	103 D	293 D	107	582 D	353 D
Cadmium		0.7	7.1	3.8	<1	<1	<1	<1	<1	<1	<1
Chromium(III)		41.7	np	1,800,000	10	20	12	27	12	21	24
Lead	SW 6010B	29.8	200 ^d	140	6	13	7	16	41	13	16
Selenium		0.7	39	2.6	<1	<1	<1	<1	<1	<1	<1
Silver		0.3	39	8.5	<1	<1	2	<1	<1	<1	<1
Mercury	SW 7471	n/a	1.1	1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

Notes:

¹ Background Concentrations of Inorganic Constituents in Montana Surface Soils. Prepared for Montana DEQ, September 2013.

² DEQ Surface/Subsurface Soil Screening Flowchart Part 1 – Direct Contact. This process was used in conjunction with the most current applicable DEQ and EPA screening level sources ^{a,b,c} to list SLs (DEQ, 2021a).

³ DEQ Surface/Subsurface Soil Screening Flowchart Part 2 – Leaching to Groundwater. This process was used in conjunction with the most current applicable DEQ and EPA screening level sources ^{a,b,c} (as noted in the flowchart included in Appendix H) to list SLs (DEQ, 2021a).

^a DEQ Tier 1 RBSLs for soil – (DEQ, May 2018)

^b EPA RSLs for soil (TR=1E-06 THQ=0.1), May 2022

^c EPA RSLs for soil (TR=1E-06 THQ=1.0), May 2022

^d DEQ Integrated Exposure Uptake Biokinetic Model (IEUBK) based EPA's Integrated Exposure Uptake Biokinetic Model for Lead in Children (IEUBK) version 2 (EPA, 2021a, DEQ, 2021)

DEQ - Montana Department of Environmental Quality

SL - Screening Level

mg/kg - milligrams per kilogram (ppm)

* DEQ Risk-Based Corrective Action (RBCA) screening level used to determine whether EPH fractionation is required

np Indicates no screening level is published for the indicated parameter

---- Indicates parameter was not analyzed

J Indicates an estimated value, the analyte was present, but less than the Reporting Limit

D Indicates Reporting Limit increased due to sample matrix

Bolded indicates analyte was detected above the Reporting Limit

Bolded/shaded indicates analyte exceeded the DEQ-Adjusted Leaching to Groundwater Screening Level

Table D-2
Samaritan House Phase II
ESA Lead Dust Wipe
Analytical Results
Kalispell, Montana

Analyte	Analytical Method	EPA Dust-Lead Clearance Levels ¹		LD-1	LD-2	LD-3	LD-4	LD-5	LD-6	LD-7	LD-8	LD-9	LD-10	LD-11	LD-12	LD-13	LD-14	LD-15	LD-16	LD-17	LD-18	LD-19	LD-20	LD-21	LD-22	LD-23	LD-24	LD-25	LD-26	LD-27	LD-28	LD-30
		Floor Dust (ug/ft ²)	Windowsill Dust (ug/ft ²)																													
Lead	NIOSH 9100/SW3050 SW 6010/6020	10	100	< 5.0	< 5.0	< 5.0	11	27	11	42	25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	25	< 5.0	5.5	< 5.0	60	< 5.0

Notes:

¹ EPA Dust Lead Clearance Levels as established in 40 CFR 745.65(b)

NIOSH - National Institute for Occupational Safety and Health

ug/ft² - micrograms per square foot

< the analyte was not detected by the laboratory above the indicated Reporting Limit

Bolded indicates analyte was detected above the Reporting Limit

Bolded/shaded indicates analyte exceeded the DEQ Dust-Lead Clearance Levels for Windowsill Dust

Bolded/shaded indicates analyte exceeded the DEQ Dust-Lead Clearance Levels for Floor Dust

APPENDIX E

DATA VALIDATION FORMS



Montana DEQ - Waste Management and Remediation Division
Data Validation Summary Form (Version 1.3.0, Revised 1/26/18)

Please fill out the information below, using one form for each lab batch (one form can be used for multiple analytical methods). The form will grow and adjust, based on your responses. Please include a discussion regarding the sampling event in the report that is sent to DEQ with this form. For additional instructions, please click the Open Complete Instructions button.

[Open Complete Instructions](#)

Basic Questions

[View example](#) (Note: example optimized for viewing in Chrome browser)

1. Site/Facility name	Samaritan House		
2. Site code or facility ID (if applicable)			
3. Release ID (if applicable)			
4. Sample delivery group	H22100218		
5. Name of DEQ-approved sampling plan	Sampling & Analysis Plan - Phase II Environmental Site Assessment and Building Materials Inspection - Samaritan House Property, Kalispell, Montana		
6. Date DEQ approved the sampling plan	9/8/2022	M/D/YY	
7. Name of data validator	Jordan Westenberg		
8. Phone	406-360-0220		
9. Date validated	12/6/2022	M/D/YY	

Field Collection Questions

[View example](#) (Note: example optimized for viewing in Chrome browser)

10. Sample matrix	<input type="checkbox"/> Soil <input type="checkbox"/> Sediment <input type="checkbox"/> Surface water <input type="checkbox"/> Groundwater <input type="checkbox"/> Tap water <input type="checkbox"/> Air (including soil gas) <input checked="" type="checkbox"/> Other <input type="text" value="Lead Dust Wipe"/>							
11. Sample collection start date	10/6/2022	M/D/YY						
12. Sample collection end date	10/6/2022	M/D/YY						
13. Analytical methods used	<table border="1"> <tr> <td>Add Method</td> <td>Analytical Method(s)</td> </tr> <tr> <td>Delete Method</td> <td>Metals by ICP/ICPMS, Total Metals Digestion by SW3050B</td> </tr> </table>				Add Method	Analytical Method(s)	Delete Method	Metals by ICP/ICPMS, Total Metals Digestion by SW3050B
Add Method	Analytical Method(s)							
Delete Method	Metals by ICP/ICPMS, Total Metals Digestion by SW3050B							

Use Add Method button to list multiple methods. Enter any other methods in the field manually.

Laboratory-related Questions

[View example](#) (Note: example optimized for viewing in Chrome browser)

14. Laboratory name and location	Energy Laboratories, Helena, MT & Billings, MT			
15. Laboratory project ID	Samaritan House Ph II			
16. Were samples received in good condition and at appropriate temperature, chain-of-custody forms complete, and all samples analyzed within holding times?	Yes <input type="radio"/>	No <input checked="" type="radio"/>	See Below <input type="radio"/>	Comments The sample jar for 220512-LD-29 was received by the lab but no sample was present inside
16a. Were chain-of-custody forms complete?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Comments	

16b. Were samples received in good condition, preserved, and at appropriate temperature (VOA no headspace, appropriate pH, temperature 4° C +/- 2° for most samples)?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Comments <div style="border: 1px solid #ccc; height: 20px; margin-top: 5px;"></div>																				
16c. Were the samples analyzed within method-specified or technical holding times?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Comments <div style="border: 1px solid #ccc; height: 20px; margin-top: 5px;"></div>																				
17. Were all laboratory quality control procedures complied with and is data validated without qualifiers?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	See Below <div style="border: 1px solid #ccc; height: 20px; margin-top: 5px;"></div>																				
18. Were the total number of lab method blanks at least 5% of the total number of samples, or as required by the method?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Comments <div style="border: 1px solid #ccc; height: 20px; margin-top: 5px;"></div>																				
19. Were the total number of lab matrix spike samples prepared at least 5% of the total number of samples, or as required by the method?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Comments <div style="border: 1px solid #ccc; height: 20px; margin-top: 5px;"></div>																				
20. Please list any project samples used for matrix spike/matrix spike duplicates.																							
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #f2f2f2;"> <th style="width: 15%;">Add Sample</th> <th style="width: 20%;">Lab ID</th> <th style="width: 20%;">Field Sample ID</th> <th style="width: 45%;">Comments</th> </tr> </thead> <tbody> <tr> <td>Delete Sample</td> <td>H22100218-001AMS</td> <td>220512-LD-01</td> <td></td> </tr> <tr> <td>Delete Sample</td> <td>H22100218-001AMSD</td> <td>220512-LD-01</td> <td></td> </tr> <tr> <td>Delete Sample</td> <td>H22100218-021AMS</td> <td>220512-LD-21</td> <td></td> </tr> <tr> <td>Delete Sample</td> <td>H22100218-021AMSD</td> <td>220512-LD-21</td> <td></td> </tr> </tbody> </table>				Add Sample	Lab ID	Field Sample ID	Comments	Delete Sample	H22100218-001AMS	220512-LD-01		Delete Sample	H22100218-001AMSD	220512-LD-01		Delete Sample	H22100218-021AMS	220512-LD-21		Delete Sample	H22100218-021AMSD	220512-LD-21	
Add Sample	Lab ID	Field Sample ID	Comments																				
Delete Sample	H22100218-001AMS	220512-LD-01																					
Delete Sample	H22100218-001AMSD	220512-LD-01																					
Delete Sample	H22100218-021AMS	220512-LD-21																					
Delete Sample	H22100218-021AMSD	220512-LD-21																					
21. Is the total number of laboratory control samples at least 5% of the total number of samples?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Comments <div style="border: 1px solid #ccc; height: 20px; margin-top: 5px;"></div>																				
Consultant/Validator Questions View example (Note: example optimized for viewing in Chrome browser)																							
22. Are the detection limits appropriate for the project (i.e. at or below screening levels)?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Comments <div style="border: 1px solid #ccc; height: 20px; margin-top: 5px;"></div>																				
23. Are the reported units appropriate for the sample matrix (i.e. water results in ug/L, not mg/kg)?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Comments <div style="border: 1px solid #ccc; height: 20px; margin-top: 5px;"></div>																				
24. Do the analytical methods comply with project requirements (e.g. in the SAP, work plan, or QAPP)?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Comments <div style="border: 1px solid #ccc; height: 20px; margin-top: 5px;"></div>																				
25. Do the laboratory reports include all constituents requested to be analyzed on the chain-of-custody or under the sampling plan or other applicable document?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Comments <div style="border: 1px solid #ccc; height: 20px; margin-top: 5px;"></div>																				
26. Is the number of sample blanks (e.g. equipment, trip, or field blanks) equal to at least 10% of the total number of samples, or as otherwise required?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Comments <div style="border: 1px solid #ccc; height: 20px; margin-top: 5px;"></div>																				

27. Are field blanks free from contamination, duplicates collected as required, and field duplicate percent differences within data validation quality control limits?

Yes ☒ No ☐ See Below ☐ Comments

28. Please provide an Excel or CSV file to the DEQ project manager (via e-mail or CD) that lists all samples evaluated in this summary and lists any qualified data.
Please use the following format:

Lab ID	Field Sample ID	Qualifiers	Comments (indicate whether the issue biases the results high or low)
Example 48310-2.31E	Example GW-1	R	Sample dropped in lab and unrecoverable
Example 48310-2.32D	Example GW-2		

Please use the following format for qualifiers. See EPA's National Functional Guidelines for more information on qualifiers for unique samples such as dioxins.

Qualifier	Explanation
C	Pesticide and Arochlor results confirmed with GC/MS
J-	Estimated value, may be biased low
J	Analyte identified, but concentration is estimated
J+	Estimated value, may be biased high
NJ	Tentatively identified compound
R	Sample result rejected
U	Analyte analyzed for, but not detected above quantitation limit
UJ	Analyte not detected above CRQL, but CRQL may be inaccurate
X	Pesticide and Arochlor results attempted using GC/MS, but unsuccessful

If you wish to manually enter qualified sample results, please use the table below.

Add Sample	Lab ID	Field Sample ID	Qualifiers	Comments (indicate whether the issue biases the results high or low)
Delete Sample				

29. What is the percent completeness (samples planned versus valid samples collected)?

96.7% Comments

One sample, 220512-LD-29 was collected but did not get placed into the sample jar and was not analyzed.

30. Was the completeness goal met?

Yes ☒ No ☐ Comments

Although 220512-LD-29 was not collected, a sample (220512-LD-30) was collected from the sample representative location.

31. Does all data conform to analytical methods and data quality objectives specified for this project?

Yes ☒ No ☐ Comments

32. Other general comments or observations?

Split Samples

33. Did DEQ collect split samples?

Yes ☐ No ☒ Comments

DEQ did not obtain split samples.

(updated January 26, 2018)

This document was assembled by the Montana Department of Environmental Quality Contaminated Site Cleanup Bureau (DEQ) to formalize technical direction for conducting data validation. Data validation is a standardized review process for judging the analytical quality and usefulness of a discrete set of chemical data and is necessary to ensure that data of known and documented quality are used in making environmental decisions.

While these guidelines are generally used by DEQ, there may be circumstances that warrant a higher level of data validation review and DEQ reserves the right to require additional validation. For investigations where x-ray fluorescence (XRF) or other field screening equipment is used, provide an evaluation including the comparison and correlation of field screening data to laboratory confirmation data in the data validation discussion (please see DEQ's frequently asked questions at <http://deq.mt.gov/Land/StateSuperfund/FrequentlyAskedQuestions> for specifics associated with the use of XRF equipment and data collection/evaluation).

Please complete a separate data validation report for each sample batch as determined by the laboratory (Note: large data collection events may result in multiple batches). A brief summary of this validation report and the acceptability and usability of the data should be included in the text of the project report with the validation report included as an appendix. The data validation should include an assessment of data using the precision, accuracy, representativeness, comparability, and completeness (PARCC) parameters:

Precision: The degree of mutual agreement between individual measurements of the same property under similar conditions.

Combined field and laboratory precision is evaluated by collecting and analyzing field duplicates and then calculating the variance between the samples, typically as a relative percent difference (RPD). Laboratory analytical precision is evaluated by analyzing matrix spike/matrix spike duplicate (MS/MSD) samples and using the results to calculate an RPD.

Accuracy: The degree of agreement between an analytical measurement and a reference accepted as a true value.

The accuracy of a measurement system can be affected by errors introduced by field contamination, sample preservation, sample handling, sample preparation, and analytical techniques. Analysis of matrix spike/matrix spike duplicate (MS/MSD) samples, laboratory control spikes (LCS) or blank spikes, surrogate standards, and method blanks are typically used to calculate the percent recovery (%R) for evaluating accuracy.

Please note that some methods, such as EPH and VPH, require calibration data. For such methods, please provide and verify the calibration data.

Representativeness: The degree to which sample data accurately and precisely represent the characteristics of a population, variations in a parameter at a sampling point, or an environmental condition that they are intended to represent.

Typically, representative data will be obtained through careful selection of sampling locations and analytical parameters; proper collection and handling of samples; and through use and consistent application of established field and laboratory procedures. Evaluation of field and laboratory blank samples for presence of contaminants can be useful in evaluating representativeness of sample results.

Completeness: A measure of the percentage of project-specific data that is valid.

Valid data are obtained when samples are collected and analyzed in accordance with quality control (QC) procedures outlined in the sampling and analysis plan (SAP), and when none of the QC criteria that affect data usability are exceeded. Once data validation is complete, the number of usable sample results is divided by the total number of sample results planned for the investigation to determine the percent completeness. A completeness goal should be developed for each project (i.e., 100% completeness for residential samples to ensure that all properties requiring sampling are sampled). A discussion of completeness must also examine the number of samples called for in the SAP compared to the number of samples actually collected. Variance between the planned and collected sample numbers should be explained.

Comparability: Expression of the confidence with which one data set can be compared with another.

Comparability of data is achieved by consistently following standard field and laboratory procedures and by using standard measurement units in reporting analytical data.

For complete information regarding data validation, please see the EPA National Functional Guidelines at <http://www2.epa.gov/clp/contract-laboratory-program-national-functional-guidelines-data-review>

Determination of Data Usability Qualifiers

Step 1: Review QC Parameter and Document Finding	Step 2: Determine Which Samples to Qualify	Step 3: Determine Which Results to Qualify	Step 4: Apply Qualifier and Bias Code
Lab Receipt of Samples			
Preservative (including sample temperature) outside of specifications.	Affected samples and professional judgment	Detected Results Non-detected Results	J- UJ or R
Samples not accounted for on Chain-of-Custody	Affected samples	All samples	R
Samples analyzed outside of method specified or technical holding time.	Affected samples	Detected Results Non-detected Results	J- R (UJ for SVOC, pesticides, aroclors)
Samples analyzed grossly outside of method specified or technical holding time.	Affected samples	Detected Results Non-detected Results	J- R
Lab Quality Control			
Calibration verification results outside of acceptable limits.	Samples associated with initial and/or continuing calibration verification	Detected Results Non-detected Results	J UJ
Analyte detected in Method Blank (MB) at concentration less than Contract Required Quantitation Limit (CRQL) ¹ (i.e. , J-flag)	Samples in preparation batch	Detected Results ≤ CRQL Detected Results > CRQL	U J (use professional judgment)
Analyte detected in Method Blank (MB) at concentration greater than or equal to CRQL	Samples in preparation batch	Detected Results < Blank Concentration Detected Results ≥ Blank Concentration	U Use professional judgment
Matrix Spike:			
%Recovery above specifications	Sample and professional judgment for samples in preparation batch from same matrix.	Detected Results Non-detected Results	J+ No qualifier
%Recovery below specifications and greater than 20% (30% for inorganics)	Sample and professional judgment for samples in preparation batch from same matrix.	Detected Results Non-detected Results	J- UJ

Step 1: Review QC Parameter and Document Finding	Step 2: Determine Which Samples to Qualify	Step 3: Determine Which Results to Qualify	Step 4: Apply Qualifier and Bias Code
%Recovery below 20% (30% for inorganics)	Sample and professional judgment for samples in preparation batch from same matrix.	Detected Results Non-detected Results	J- R
Note: If the spiking amount is less than four times the result in the unspiked parent sample, the MS/MSD data may not represent the matrix effect. Professional judgment should be use in evaluating and qualifying the data.			
Laboratory Control Sample:			
%Recovery above specifications	Samples in preparation batch.	Detected Results Non-detected Results	J+ No qualifier
%Recovery below specifications and greater than 20% (40% for inorganics; see NFG for pesticides and Aroclors; 10% for dioxins)	Samples in preparation batch.	Detected Results Non-detected Results	J- UJ
%Recovery below 20% (40% for inorganics; see NFG for pesticides and Aroclors; 10% for dioxins)	Samples in preparation batch.	Detected Results Non-detected Results	J- R
Laboratory Duplicate Samples (including LCSD and MSD):			
Relative Percent Difference outside specifications	Samples in preparation batch.	Detected Results	J
Surrogate Recoveries:			
Surrogate Recovery greater than Upper Acceptance Limit	Target analytes in sample	Detected Results Non-detected Results	J+ No qualification (UJ for dioxins)
Surrogate Recovery less than Lower Acceptance Limit and greater than 10%	Target analytes in sample	Detected Results Non-detected Results	J- UJ
Surrogate Recovery less than 10%	Target analytes in sample	Detected Results Non-detected Results	J- R (see NFG for dioxins)
Field QC Samples			
Blanks			
Analyte detected in Field Blank, Equipment Blank, and/or Trip Blank at concentration less than Contract Required Quantitation Limit (CRQL)1 (i.e. , J-flag)	Associated samples	Detected Results <CRQL Detected Results >=CRQL	U Use professional judgment
Analyte detected in Field Blank, Equipment Blank, and/or Trip Blank at concentration greater than or equal to CRQL	Associated samples	Detected Results < Blank Concentration Detected Results >= Blank Concentration	U Use professional judgment
Duplicates			
Field Duplicate Relative Percent Difference outside specifications and analyte concentration >=5x CRQL	Associated samples	Detected Results	J

Step 1: Review QC Parameter and Document Finding	Step 2: Determine Which Samples to Qualify	Step 3: Determine Which Results to Qualify	Step 4: Apply Qualifier and Bias Code
Field Duplicate Relative Percent Difference outside specifications and analyte concentrations <5x CRQL with absolute difference between sample and duplicate > CRQL	Associated samples	Detected Results Non-detected Results	J UJ
Field Duplicate Relative Percent Difference outside specifications and analyte concentrations <5x CRQL with absolute difference between sample and duplicate <= CRQL	Associated samples	Detected Results Non-detected Results	No qualification No qualification
Consultant/Validator Questions			
Reported Units not appropriate for sample matrix	Affected samples	All results	Inquire, document, and use professional judgment
Analytical methods do not comply with project requirements. And/Or Detection Limits not appropriate for the project.	Affected samples	Detected Results Non-detected Results	Use professional judgment Use professional judgment, if Reporting Limits > Screening Levels; results may not be usable
QC Sample Frequency			
Method Blanks analyzed less than 5% of total samples	Use professional judgment	Use professional judgment	Inquire, document, and use professional judgment
Matrix Spike samples analyzed less than 5% of total samples	Use professional judgment	Use professional judgment	Inquire, document, and use professional judgment
Laboratory Control Samples analyzed less than 5% of total samples	Use professional judgment	Use professional judgment	Inquire, document, and use professional judgment
Field, equipment, or trip blanks analyzed less than required	Use professional judgment	Use professional judgment	Inquire, document, and use professional judgment
Notes:			
1. See the National Functional Guidelines (NFG) for contract required quantitation limit (CRQL) or blank results of common laboratory contaminants, including: methylene chloride, acetone, and 2-butanone.			
2. Screening Levels (SLs) is a generic term which may include Risk Based Screening Levels, Regional Screening Levels, and/or site specific screening levels.			

Montana DEQ - Waste Management and Remediation Division
Data Validation Summary Form (Version 1.3.0, Revised 1/26/18)

Please fill out the information below, using one form for each lab batch (one form can be used for multiple analytical methods). The form will grow and adjust, based on your responses. Please include a discussion regarding the sampling event in the report that is sent to DEQ with this form. For additional instructions, please click the Open Complete Instructions button.

[Open Complete Instructions](#)

Basic Questions

[View example](#) (Note: example optimized for viewing in Chrome browser)

1. Site/Facility name	Samaritan House		
2. Site code or facility ID (if applicable)			
3. Release ID (if applicable)			
4. Sample delivery group	H22100108		
5. Name of DEQ-approved sampling plan	Sampling & Analysis Plan - Phase II Environmental Site Assessment and Building Materials Inspection - Samaritan House Property, Kalispell, Montana		
6. Date DEQ approved the sampling plan	9/8/2022	M/D/YY	
7. Name of data validator	Jordan Westenberg		
8. Phone	406-360-0220		
9. Date validated		M/D/YY	

Field Collection Questions

[View example](#) (Note: example optimized for viewing in Chrome browser)

10. Sample matrix	<input checked="" type="checkbox"/> Soil <input type="checkbox"/> Sediment <input type="checkbox"/> Surface water <input type="checkbox"/> Groundwater <input type="checkbox"/> Tap water <input type="checkbox"/> Air (including soil gas) <input checked="" type="checkbox"/> Other													
	220512-SW1 was a rinsate sample from decontamination of sampling equipment													
11. Sample collection start date	10/5/2022	M/D/YY												
12. Sample collection end date	10/5/2022	M/D/YY												
13. Analytical methods used	<table border="1"> <thead> <tr> <th>Add Method</th> <th>Analytical Method(s)</th> </tr> </thead> <tbody> <tr> <td>Delete Method</td> <td>EPA Method 200.x: Metals (also known as 200-series metals)</td> </tr> <tr> <td>Delete Method</td> <td>EPA Method 8260 (SW-846): VOCs by GC/MS</td> </tr> <tr> <td>Delete Method</td> <td>Method MT-EPH: Extractable Petroleum Hydrocarbons</td> </tr> <tr> <td>Delete Method</td> <td>Method MT-VPH: Volatile Petroleum Hydrocarbons</td> </tr> </tbody> </table>				Add Method	Analytical Method(s)	Delete Method	EPA Method 200.x: Metals (also known as 200-series metals)	Delete Method	EPA Method 8260 (SW-846): VOCs by GC/MS	Delete Method	Method MT-EPH: Extractable Petroleum Hydrocarbons	Delete Method	Method MT-VPH: Volatile Petroleum Hydrocarbons
Add Method	Analytical Method(s)													
Delete Method	EPA Method 200.x: Metals (also known as 200-series metals)													
Delete Method	EPA Method 8260 (SW-846): VOCs by GC/MS													
Delete Method	Method MT-EPH: Extractable Petroleum Hydrocarbons													
Delete Method	Method MT-VPH: Volatile Petroleum Hydrocarbons													

Laboratory-related Questions

[View example](#) (Note: example optimized for viewing in Chrome browser)

14. Laboratory name and location	Energy Laboratories, Helena, MT & Billings, MT			
15. Laboratory project ID	Samaritan House Ph II			
16. Were samples received in good condition and at appropriate temperature, chain-of-custody forms complete, and all samples analyzed within holding times?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	See Below <input type="radio"/>	Comments <div></div>

17. Were all laboratory quality control procedures complied with and is data validated without qualifiers?	Yes <input type="radio"/>	No <input type="radio"/>	See Below <input checked="" type="radio"/>	Comments <div></div>
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Please explain

17a. Were all calibration verification results within acceptable limits?	Yes <input type="radio"/>	No <input checked="" type="radio"/>	Comments One Continuing Calibration Verification Standard run (Method SW8260B), Lab ID=11-Oct-22_CCV_24 had one analyte, Methyl ethyl ketone, flagged by the lab with an "S" qualifier for exceeding the percent recovery high limit. (UJ)
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If no, explain

One Continuing Calibration Verification Standard run (Method SW8260B), Lab ID=11-Oct-22_CCV_24 had one analyte (Methyl ethyl ketone) flagged with an "S" qualifier for exceeding the percent recovery high limit. (UJ)

17b. Were laboratory (method) blank samples free of contamination?	Yes <input type="radio"/>	No <input checked="" type="radio"/>	Comments Lab ID= MB-63895-63743 for C11 to C22 Aromatics exhibited 0.608 mg/kg of Benzo(a)Pyrene. (U)
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If no, explain

One Method Blank run (for Method MA_EPH), Lab ID= MB-63895-63743 exhibited 0.608 mg/kg of Benzo(a)Pyrene. (U)

17c. Are the percent recoveries and relative percent differences of matrix spike and matrix spike duplicates within quality control limits?	Yes <input type="radio"/>	No <input checked="" type="radio"/>	Comments <p>LAB ID H22100037-002AMSD SAMPLE MATRIX SPIKE DUPLICATE FOR C11 TO C22 AROMATICS. RPD EXCEEDED RPD LIMIT FOR PHENANTHRENE, ANTHRACENE, BENZO(A)ANTHRACENE, CHRYSENE, AND BENZO(A)PYRENE. LAB QUALIFIED WITH AN "R".</p> <p>LAB ID H22100108-008CMS SAMPLE MATRIX SPIKE DUPLICATE FOR VPH. %RECOVERY BELOW LOW LIMIT FOR MTBE, BENZENE, TOLUENE, ETHYLBENZENE, XYLENE, NAPHTHALENE, TPH. LAB QUALIFIED WITH AN "S".</p> <p>LAB ID H22100108-008CMS SAMPLE MATRIX SPIKE DUPLICATE FOR VPH. RPD EXCEEDED RPD LIMIT FOR MTBE, BENZENE, TOLUENE, ETHYLBENZENE, XYLENE, NAPHTHALENE, TPH. LAB QUALIFIED WITH AN "R".</p> <p>Lab ID=H22100108-008DMS Sample Matrix Spike (Method SW8260B) had five analytes; trans-1, 3-Dichloropropene; Methyl tert-butyl ether (MTBE); 1,1,2,2-Tetrachloroethane; 1,1,2-Trichloroethane; and 1,2,3-Trichloropropane, flagged with an "S" qualifier for exceeding percent recovery high limits.</p> <p>Lab ID=H22100108-008DMSD Sample Matrix Spike Duplicate (Method SW8260B) had two analytes; Bromomethane; and 1,1,2,2-Tetrachloroethane, flagged with an "S" qualifier for exceeding percent recovery high limits.</p>
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	<p>Lab ID=H22100108-001AMS Sample Matrix Spike (Method SW6020) had one analyte, Barium, flagged with an "SE" qualifier for exceeding the percent recovery high limit.</p> <p>Lab ID=H22100108-001AMSD Sample Matrix Spike Duplicate (Method SW6020) had one analyte, Barium, flagged with an "SE" qualifier for exceeding the percent recovery high limit.</p> <p>Lab ID=H22100108-008CMSD Sample Matrix Spike Duplicate (Method MA-VPH) had eight analytes; Methyl tert-butyl ether (MTBE); Benzene; Toluene; Ethylbenzene; m+p-Xylenes; o-Xylene; Napthalene; Total Purgeable Hydrocarbons, flagged with an "R" qualifier for exceeding relative percent differences limit.</p>
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If no, explain

<p>LAB ID H22100037-002AMSD SAMPLE MATRIX SPIKE DUPLICATE FOR C11 TO C22 AROMATICS. RPD EXCEEDED RPD LIMIT FOR PHENANTHRENE, ANTHRACENE, BENZO(A)ANTHRACENE, CHRYSENE, AND BENZO(A)PYRENE. LAB QUALIFIED WITH AN "R". (NO QUALIFIERS BECAUSE ANALYTE WAS NOT DETECTED)</p> <p>LAB ID H22100108-008CMS SAMPLE MATRIX SPIKE DUPLICATE FOR VPH. %RECOVERY BELOW LOW LIMIT FOR MTBE, BENZENE, TOLUENE, ETHYLBENZENE, XYLENE, NAPHTHALENE, TPH. LAB QUALIFIED WITH AN "S". (UJ - Analyte not detected above CRQL, but CRQL may be inaccurate - NO QUALIFIERS BECAUSE ANALYTE WAS NOT DETECTED)</p> <p>LAB ID H22100108-008CMS SAMPLE MATRIX SPIKE DUPLICATE FOR VPH. RPD EXCEEDED RPD LIMIT FOR MTBE, BENZENE, TOLUENE, ETHYLBENZENE, XYLENE, NAPHTHALENE, TPH. LAB QUALIFIED WITH AN "R". (NO QUALIFIERS BECAUSE ANALYTE WAS NOT DETECTED)</p> <p>Lab ID=H22100108-008DMS Sample Matrix Spike (Method SW8260B) had five analytes; trans-1, 3-Dichloropropene; Methyl tert-butyl ether (MTBE); 1,1,2,2-Tetrachloroethane; 1,1,2-Trichloroethane; and 1,2,3-Trichloropropane, flagged with an "S" qualifier for exceeding percent recovery high limits. (NO QUALIFIERS BECAUSE ANALYTE WAS NOT DETECTED)</p> <p>Lab ID=H22100108-008DMSD Sample Matrix Spike Duplicate (Method SW8260B) had two analytes; Bromomethane; and 1,1,2,2-Tetrachloroethane, flagged with an "S" qualifier for exceeding percent recovery high limits. (NO QUALIFIERS BECAUSE ANALYTE WAS NOT DETECTED)</p> <p>LAB ID H22100037-002AMSD SAMPLE MATRIX SPIKE DUPLICATE FOR C11 TO C22 AROMATICS. RPD EXCEEDED RPD LIMIT FOR PHENANTHRENE, ANTHRACENE, BENZO(A)ANTHRACENE, CHRYSENE, AND BENZO(A)PYRENE. LAB QUALIFIED WITH AN "R". (NO QUALIFIERS BECAUSE ANALYTE WAS NOT DETECTED)</p> <p>LAB ID H22100108-008CMS SAMPLE MATRIX SPIKE DUPLICATE FOR VPH. %RECOVERY BELOW LOW LIMIT FOR MTBE, BENZENE, TOLUENE, ETHYLBENZENE, XYLENE, NAPHTHALENE, TPH. LAB QUALIFIED WITH AN "S". (UJ - Analyte not detected above CRQL, but CRQL may be inaccurate - NO QUALIFIERS BECAUSE ANALYTE WAS NOT DETECTED)</p> <p>LAB ID H22100108-008CMS SAMPLE MATRIX SPIKE DUPLICATE FOR VPH. RPD EXCEEDED RPD LIMIT FOR MTBE, BENZENE, TOLUENE, ETHYLBENZENE, XYLENE, NAPHTHALENE, TPH. LAB QUALIFIED WITH AN "R". (NO QUALIFIERS BECAUSE ANALYTE WAS NOT DETECTED)</p> <p>Lab ID=H22100108-008DMS Sample Matrix Spike (Method SW8260B) had five analytes; trans-1, 3-</p>	
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Dichloropropene; Methyl tert-butyl ether (MTBE); 1,1,2,2-Tetrachloroethane; 1,1,2-Trichloroethane; and 1,2,3-Trichloropropane, flagged with an "S" qualifier for exceeding percent recovery high limits. (NO QUALIFIERS BECAUSE ANALYTE WAS NOT DETECTED)

Lab ID=H22100108-008DMSD Sample Matrix Spike Duplicate (Method SW8260B) had two analytes; Bromomethane; and 1,1,2,2-Tetrachloroethane, flagged with an "S" qualifier for exceeding percent recovery high limits. (NO QUALIFIERS BECAUSE ANALYTE WAS NOT DETECTED)

Lab ID=H22100108-001AMS Sample Matrix Spike (Method SW6020) had one analyte, Barium, flagged with an "SE" qualifier for exceeding the percent recovery high limit. (UJ - Analyte not detected above CRQL, but CRQL may be inaccurate - NO QUALIFIERS BECAUSE ANALYTE WAS NOT DETECTED)

Lab ID=H22100108-001AMSD Sample Matrix Spike Duplicate (Method SW6020) had one analyte, Barium, flagged with an "SE" qualifier for exceeding the percent recovery high limit. (UJ - Analyte not detected above CRQL, but CRQL may be inaccurate - NO QUALIFIERS BECAUSE ANALYTE WAS NOT DETECTED)

Lab ID=H22100108-008CMSD Sample Matrix Spike Duplicate (Method MA-VPH) had eight analytes; Methyl tert-butyl ether (MTBE); Benzene; Toluene; Ethylbenzene; m+p-Xylenes; o-Xylene; Napthalene; Total Purgeable Hydrocarbons, flagged with an "R" qualifier for exceeding relative percent differences limit. (NO QUALIFIERS BECAUSE ANALYTE WAS NOT DETECTED)

17d. Are the laboratory control samples the same matrix as the samples and prepared the same as associated samples?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Comments <div></div>
17e. Were laboratory control samples and laboratory control sample duplicate percent recoveries and relative percent differences within laboratory control limits?	Yes <input type="radio"/>	No <input checked="" type="radio"/>	Comments Lab ID=04-Oct-22_LCS_5 Laboratory Control Sample (Method SW8260B) had one analyte, Bromomethane, flagged with an "S" qualifier for exceeding the percent recovery high limit. (J+)

If no, explain

Lab ID=04-Oct-22_LCS_5 Laboratory Control Sample (Method SW8260B) had one analyte, bromomethane, flagged with an "S" qualifier for exceeding the percent recovery high limit. (J+)			
17f. Were surrogate recoveries within laboratory quality control limits?	Yes <input type="radio"/>	No <input checked="" type="radio"/>	Comments Lab=ID H22100108-008CMS Sample Matrix Spike (Method MA-VPH) had two analytes; VPH Aromatics Surrogate; VPH Aliphatics Surrogate, flagged with an "S" for recoveries falling below the percent recovery low limit. (J-) Lab=ID MB-63691 Method Blank (Method 8260B) had three analytes; 1,2-Dichloroethane-d4; Bibromofluoromethane; p-Bromofluorobenzene, flagged for surrogate recoveries exceeding the percent recovery high limit. (J+)

If no, explain. Note: If surrogate sampling was conducted on samples not related to the project, please explain that here.

Lab=ID H22100108-008CMS Sample Matrix Spike (Method MA-VPH) had two analytes; VPH Aromatics Surrogate; VPH Aliphatics Surrogate, flagged with an "S" for recoveries falling below the percent recovery low limit. (J-)
Lab=ID MB-63691 Method Blank (Method 8260B) had three analytes; 1,2-Dichloroethane-d4; Bibromofluoromethane; p-Bromofluorobenzene, flagged for surrogate recoveries exceeding the percent recovery high limit. (J+)

17g. Were the laboratory duplicate relative percent differences within data validation quality control limits?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Comments <input type="text"/>
18. Were the total number of lab method blanks at least 5% of the total number of samples, or as required by the method?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Comments <input type="text"/>
19. Were the total number of lab matrix spike samples prepared at least 5% of the total number of samples, or as required by the method?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Comments <input type="text"/>

20. Please list any project samples used for matrix spike/matrix spike duplicates.

Add Sample	Lab ID	Field Sample ID	Comments
Delete Sample	H22100108-001AMS	220512-SB1-1	
Delete Sample	H22100108-001AMSD	220512-SB1-1	
Delete Sample	H22100108-005AMS	220512-SB3-1	
Delete Sample	H22100108-005AMSD	220512-SB3-1	
Delete Sample	H22100108-008CMS	220512-SW1	
Delete Sample	H22100108-008CMSD	220512-SW1	
Delete Sample	H22100108-008DMS	220512-SW1	
Delete Sample	H22100108-008DMSD	220512-SW1	
Delete Sample	H22100108-008AMS3	220512-SW1	
Delete Sample	H22100108-008AMSD	220512-SW1	

21. Is the total number of laboratory control samples at least 5% of the total number of samples?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Comments <input type="text"/>
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Consultant/Validator Questions

[View example](#) (Note: example optimized for viewing in Chrome browser)

22. Are the detection limits appropriate for the project (i.e. at or below screening levels)?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Comments <input type="text"/>
23. Are the reported units appropriate for the sample matrix (i.e. water results in ug/L, not mg/kg)?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Comments <input type="text"/>
24. Do the analytical methods comply with project requirements (e.g. in the SAP, work plan, or QAPP)?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Comments <input type="text"/>
25. Do the laboratory reports include all constituents requested to be analyzed on the chain-of-custody or under the sampling plan or other applicable document?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Comments <input type="text"/>
26. Is the number of sample blanks (e.g. equipment, trip, or field blanks) equal to at least 10% of the total number of samples, or as otherwise required?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Comments <input type="text"/>

27. Are field blanks free from contamination, duplicates collected as required, and field duplicate percent differences within data validation quality control limits?

Yes

No

See Below

Comments

28. Please provide an Excel or CSV file to the DEQ project manager (via e-mail or CD) that lists all samples evaluated in this summary and lists any qualified data.
Please use the following format:

Lab ID	Field Sample ID	Qualifiers	Comments (indicate whether the issue biases the results high or low)
Example 48310-2.31E	Example GW-1	R	Sample dropped in lab and unrecoverable
Example 48310-2.32D	Example GW-2		

Please use the following format for qualifiers. See EPA's National Functional Guidelines for more information on qualifiers for unique samples such as dioxins.

Qualifier	Explanation
C	Pesticide and Arochlor results confirmed with GC/MS
J-	Estimated value, may be biased low
J	Analyte identified, but concentration is estimated
J+	Estimated value, may be biased high
NJ	Tentatively identified compound
R	Sample result rejected
U	Analyte analyzed for, but not detected above quantitation limit
UJ	Analyte not detected above CRQL, but CRQL may be inaccurate
X	Pesticide and Arochlor results attempted using GC/MS, but unsuccessful

If you wish to manually enter qualified sample results, please use the table below.

Add Sample	Lab ID	Field Sample ID	Qualifiers	Comments (indicate whether the issue biases the results high or low)
Delete Sample	H22100108-001	220512-SB1-1	J	TEH identified, but concentration is estimated
Delete Sample	H22100108-002	220512-SB1-2	J	TEH identified, but concentration is estimated
Delete Sample	H22100108-008	220512-SW1	J	Chloroform identified, but concentration is estimated

29. What is the percent completeness (samples planned versus valid samples collected)?

100

Comments

30. Was the completeness goal met?

Yes

No

Comments

31. Does all data conform to analytical methods and data quality objectives specified for this project?

Yes

No

Comments

32. Other general comments or observations?

Split Samples

33. Did DEQ collect split samples?

Yes

No

Comments

DEQ did not obtain split samples.

Montana Department of Environmental Quality
Data Validation Guidelines for Evaluating Analytical Data
(updated January 26, 2018)

This document was assembled by the Montana Department of Environmental Quality Contaminated Site Cleanup Bureau (DEQ) to formalize technical direction for conducting data validation. Data validation is a standardized review process for judging the analytical quality and usefulness of a discrete set of chemical data and is necessary to ensure that data of known and documented quality are used in making environmental decisions.

While these guidelines are generally used by DEQ, there may be circumstances that warrant a higher level of data validation review and DEQ reserves the right to require additional validation. For investigations where x-ray fluorescence (XRF) or other field screening equipment is used, provide an evaluation including the comparison and correlation of field screening data to laboratory confirmation data in the data validation discussion (please see DEQ's frequently asked questions at <http://deq.mt.gov/Land/StateSuperfund/FrequentlyAskedQuestions> for specifics associated with the use of XRF equipment and data collection/evaluation).

Please complete a separate data validation report for each sample batch as determined by the laboratory (Note: large data collection events may result in multiple batches). A brief summary of this validation report and the acceptability and usability of the data should be included in the text of the project report with the validation report included as an appendix. The data validation should include an assessment of data using the precision, accuracy, representativeness, comparability, and completeness (PARCC) parameters:

Precision: The degree of mutual agreement between individual measurements of the same property under similar conditions.

Combined field and laboratory precision is evaluated by collecting and analyzing field duplicates and then calculating the variance between the samples, typically as a relative percent difference (RPD). Laboratory analytical precision is evaluated by analyzing matrix spike/matrix spike duplicate (MS/MSD) samples and using the results to calculate an RPD.

Accuracy: The degree of agreement between an analytical measurement and a reference accepted as a true value.

The accuracy of a measurement system can be affected by errors introduced by field contamination, sample preservation, sample handling, sample preparation, and analytical techniques. Analysis of matrix spike/matrix spike duplicate (MS/MSD) samples, laboratory control spikes (LCS) or blank spikes, surrogate standards, and method blanks are typically used to calculate the percent recovery (%R) for evaluating accuracy.

Please note that some methods, such as EPH and VPH, require calibration data. For such methods, please provide and verify the calibration data.

Representativeness: The degree to which sample data accurately and precisely represent the characteristics of a population, variations in a parameter at a sampling point, or an environmental condition that they are intended to represent.

Typically, representative data will be obtained through careful selection of sampling locations and analytical parameters; proper collection and handling of samples; and through use and consistent application of established field and laboratory procedures. Evaluation of field and laboratory blank samples for presence of contaminants can be useful in evaluating representativeness of sample results.

Completeness: A measure of the percentage of project-specific data that is valid.

Valid data are obtained when samples are collected and analyzed in accordance with quality control (QC) procedures outlined in the sampling and analysis plan (SAP), and when none of the QC criteria that affect data usability are exceeded. Once data validation is complete, the number of usable sample results is divided by the total number of sample results planned for the investigation to determine the percent completeness. A completeness goal should be developed for each project (i.e., 100% completeness for residential samples to ensure that all properties requiring sampling are sampled). A

discussion of completeness must also examine the number of samples called for in the SAP compared to the number of samples actually collected. Variance between the planned and collected sample numbers should be explained.

Comparability: Expression of the confidence with which one data set can be compared with another.

Comparability of data is achieved by consistently following standard field and laboratory procedures and by using standard measurement units in reporting analytical data.

For complete information regarding data validation, please see the EPA National Functional Guidelines at <http://www2.epa.gov/clp/contract-laboratory-program-national-functional-guidelines-data-review>

Determination of Data Usability Qualifiers

Step 1: Review QC Parameter and Document Finding	Step 2: Determine Which Samples to Qualify	Step 3: Determine Which Results to Qualify	Step 4: Apply Qualifier and Bias Code
Lab Receipt of Samples			
Preservative (including sample temperature) outside of specifications.	Affected samples and professional judgment	Detected Results Non-detected Results	J- UJ or R
Samples not accounted for on Chain-of-Custody	Affected samples	All samples	R
Samples analyzed outside of method specified or technical holding time.	Affected samples	Detected Results Non-detected Results	J- R (UJ for SVOC, pesticides, aroclors)
Samples analyzed grossly outside of method specified or technical holding time.	Affected samples	Detected Results Non-detected Results	J- R
Lab Quality Control			
Calibration verification results outside of acceptable limits.	Samples associated with initial and/or continuing calibration verification	Detected Results Non-detected Results	J UJ
Analyte detected in Method Blank (MB) at concentration less than Contract Required Quantitation Limit (CRQL) ¹ (i.e., J-flag)	Samples in preparation batch	Detected Results ≤ CRQL Detected Results > CRQL	U J (use professional judgment)
Analyte detected in Method Blank (MB) at concentration greater than or equal to CRQL	Samples in preparation batch	Detected Results < Blank Concentration Detected Results ≥ Blank Concentration	U Use professional judgment
Matrix Spike:			
%Recovery above specifications	Sample and professional judgment for samples in preparation batch from same matrix.	Detected Results Non-detected Results	J+ No qualifier
%Recovery below specifications and greater than 20% (30% for inorganics)	Sample and professional judgment for samples in preparation batch from same matrix.	Detected Results Non-detected Results	J- UJ

Step 1: Review QC Parameter and Document Finding	Step 2: Determine Which Samples to Qualify	Step 3: Determine Which Results to Qualify	Step 4: Apply Qualifier and Bias Code
%Recovery below 20% (30% for inorganics)	Sample and professional judgment for samples in preparation batch from same matrix.	Detected Results Non-detected Results	J- R
Note: If the spiking amount is less than four times the result in the unspiked parent sample, the MS/MSD data may not represent the matrix effect. Professional judgment should be use in evaluating and qualifying the data.			
Laboratory Control Sample:			
%Recovery above specifications	Samples in preparation batch.	Detected Results Non-detected Results	J+ No qualifier
%Recovery below specifications and greater than 20% (40% for inorganics; see NFG for pesticides and Aroclors; 10% for dioxins)	Samples in preparation batch.	Detected Results Non-detected Results	J- UJ
%Recovery below 20% (40% for inorganics; see NFG for pesticides and Aroclors; 10% for dioxins)	Samples in preparation batch.	Detected Results Non-detected Results	J- R
Laboratory Duplicate Samples (including LCSD and MSD):			
Relative Percent Difference outside specifications	Samples in preparation batch.	Detected Results	J
Surrogate Recoveries:			
Surrogate Recovery greater than Upper Acceptance Limit	Target analytes in sample	Detected Results Non-detected Results	J+ No qualification (UJ for dioxins)
Surrogate Recovery less than Lower Acceptance Limit and greater than 10%	Target analytes in sample	Detected Results Non-detected Results	J- UJ
Surrogate Recovery less than 10%	Target analytes in sample	Detected Results Non-detected Results	J- R (see NFG for dioxins)
Field QC Samples			
Blanks			
Analyte detected in Field Blank, Equipment Blank, and/or Trip Blank at concentration less than Contract Required Quantitation Limit (CRQL)1 (i.e. , J-flag)	Associated samples	Detected Results <CRQL Detected Results >=CRQL	U Use professional judgment
Analyte detected in Field Blank, Equipment Blank, and/or Trip Blank at concentration greater than or equal to CRQL	Associated samples	Detected Results < Blank Concentration Detected Results >= Blank Concentration	U Use professional judgment
Duplicates			
Field Duplicate Relative Percent Difference outside specifications and analyte concentration >=5x CRQL	Associated samples	Detected Results	J

Step 1: Review QC Parameter and Document Finding	Step 2: Determine Which Samples to Qualify	Step 3: Determine Which Results to Qualify	Step 4: Apply Qualifier and Bias Code
Field Duplicate Relative Percent Difference outside specifications and analyte concentrations <5x CRQL with absolute difference between sample and duplicate > CRQL	Associated samples	Detected Results Non-detected Results	J UJ
Field Duplicate Relative Percent Difference outside specifications and analyte concentrations <5x CRQL with absolute difference between sample and duplicate <= CRQL	Associated samples	Detected Results Non-detected Results	No qualification No qualification
Consultant/Validator Questions			
Reported Units not appropriate for sample matrix	Affected samples	All results	Inquire, document, and use professional judgment
Analytical methods do not comply with project requirements. And/Or Detection Limits not appropriate for the project.	Affected samples	Detected Results Non-detected Results	Use professional judgment Use professional judgment, if Reporting Limits > Screening Levels; results may not be usable
QC Sample Frequency			
Method Blanks analyzed less than 5% of total samples	Use professional judgment	Use professional judgment	Inquire, document, and use professional judgment
Matrix Spike samples analyzed less than 5% of total samples	Use professional judgment	Use professional judgment	Inquire, document, and use professional judgment
Laboratory Control Samples analyzed less than 5% of total samples	Use professional judgment	Use professional judgment	Inquire, document, and use professional judgment
Field, equipment, or trip blanks analyzed less than required	Use professional judgment	Use professional judgment	Inquire, document, and use professional judgment
Notes:			
1. See the National Functional Guidelines (NFG) for contract required quantitation limit (CRQL) or blank results of common laboratory contaminants, including: methylene chloride, acetone, and 2-butanone.			
2. Screening Levels (SLs) is a generic term which may include Risk Based Screening Levels, Regional Screening Levels, and/or site specific screening levels.			