

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural
Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	nAPP2208051921
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Centennial Resource Production, Inc	OGRID: 372165
Contact Name: Nikki Mishler	Contact Telephone: 432-634-8722
Contact email: Nikki.Mishler@cdevinc.com	Incident #
Contact mailing address: 500 W. Illinois Ave, Suite 500, Midland Texas 79705	

Location of Release Source

Latitude 32.20953 _____ Longitude -103.46472 _____
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Romeo Fed 22 Battery 1	Site Type: Production Facility
Date Release Discovered: 03/21/2022	API# (if applicable)

Unit Letter	Section	Township	Range	County
D	22	24S	34E	Lea

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (Name: Quail Ranch)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

☒ Crude Oil	Volume Released (bbls) 15	Volume Recovered (bbls) 10
☒ Produced Water	Volume Released (bbls) 160	Volume Recovered (bbls) 160
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☒ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release:

The check valve failed on the SWD line which caused produced water to overflow the produced water tanks due to the disposal being down due to a power outage. 160 bbls of produced water was released and contained within the lined metal berm of the facility while 15 bbls of crude oil were released outside of the containment, including an overspray area which went north-northwest of the facility. The estimated volume of released produced water was calculated based on readouts from the meter and recovered fluids from the lined containment.

Based on the square footage of the impacted soils (2,180 sq. ft. and 21,885 sq. ft. of overspray) and an estimated depth of impact of approximately 1' and 0.25' for the overspray area, accounting for porosity and saturation % of the soils (sand), an estimated 15 bbls of crude oil was released. Approximately 10 bbls of crude oil were recovered during initial response activities.

State of New Mexico
Oil Conservation Division

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Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? The amount released was greater than 25 barrels.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Yes, a NOR was submitted by Nikki Mishler through the NMOCD Portal on 3/21/2022.	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

- ☒ The source of the release has been stopped.
- ☒ The impacted area has been secured to protect human health and the environment.
- ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
- ☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Nikki Mishler

Title: Sr. Environmental Representative

Signature: Nikki Mishler

Date: 3/22/2022

email: Nikki.Mishler@cdevinc.com

Telephone: 432-634-8722

OCD Only

Received by: _____

Date: _____

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Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	>100 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas not on an exploration, development, production, or storage site?	☒ Yes ☐ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

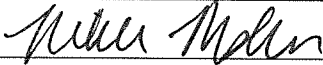
Characterization Report Checklist: *Each of the following items must be included in the report.*

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☐ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within 1/2-mile of the lateral extents of the release
- ☐ Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

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I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Nikki Mishler Title: Sr. Envionmental Representative
Signature:  Date: 6/15/22
email: Nikki.Mishler@cdevinc.com Telephone: 432-634-8722

OCD Only

Received by: _____ Date: _____

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Remediation Plan

Remediation Plan Checklist: *Each of the following items must be included in the plan.*

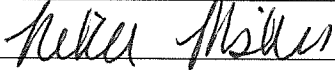
- ☒ Detailed description of proposed remediation technique
- ☒ Scaled sitemap with GPS coordinates showing delineation points
- ☒ Estimated volume of material to be remediated
- ☒ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☒ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☒ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☒ Extents of contamination must be fully delineated.
- ☒ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Nikki Mishler Title: Sr. Environmental Representative

Signature:  Date: 6/15/22

email: Nikki.Mishler@cdevinc.com Telephone: 432-634-8722

OCD Only

Received by: _____ Date: _____

☒ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature:  Date: 06/22/2022

2135 S. Loop 250 W,
Midland, Texas 79703
United States
www.ghd.com

Our ref: 12580761

June 15, 2022

New Mexico Oil Conservation Division
District 1
1625 N. French Drive
Hobbs, New Mexico 88240

**Re: Site Characterization and Remediation Work Plan
Romeo Federal 22 Battery 1 Release Site
Centennial Resources Production, Inc.
Incident ID: nAPP2208051921
D-22-24S-34E, Lea County, New Mexico
Centennial Project #: CDEV ID 54383**

To Whom It May Concern:

1. Introduction

GHD Services, Inc. (GHD), on behalf of Centennial Resources Production, Inc. (CRP), submits this Site Characterization and Remediation Work Plan to the New Mexico Oil Conservation Division (NMOCD) District 1 Office. This Report provides documentation of sampling, delineation, remedial activities, and analyses in the affected area at the Romeo Federal 22 Release Site (Site). The Site is located in Unit Letter D Section 22 of Township 24 South and Range 34 East in Lea County, New Mexico. The GPS coordinates for the release site are 32.20953 N latitude and 103.46472 W longitude. The private surface owner of the land where the release occurred is the Quail Ranch. Figure 1 depicts the Site location. The CRP production facility and other site details are depicted on Figure 2, Confirmation Sampling: Soil Analytical Results Map.

2. Background Information

A C-141 initial report for this release was submitted to the NMOCD on March 22, 2022. The C-141 stated that approximately fifteen (15) barrels of crude oil and one hundred-sixty (160) barrels of produced water were released. The release occurred as the result of failed check valve on the SWD line, which caused the produced water tanks to overfill. Approximately ten (10) barrels of crude oil and one hundred-sixty (160) barrels of produced water were recovered.

The release falls under the jurisdiction of the NMOCD District 1 Office in Hobbs, New Mexico. The NMOCD assigned the release with Incident Number nAPP2208051921. The Release Notification, Site Assessment/Characterization, and Remediation portions of Form C-141 are attached to the front of this report.

3. Groundwater and Site Characterization

GHD characterized the Site according to Table I, Closure Criteria for Soils Impacted by a Release, from New Mexico Administrative Code (NMAC) Title 19, Chapter 15, Part 29, Section 12 (NMAC 19.15.29.12).

According to the Site characterization evaluation and 19.15.29.12.C(4)(a)(i) the Site is located within an area of low karst potential. Two wells were located within a 0.5-mile radius of the Site. Well C03943 POD 1 is located approximately 0.28 miles from the Site, and has a recorded groundwater depth of 431 feet. Well C03932 POD 14 is located approximately 0.5 miles from the Site, was drilled to approximately 100 feet below ground surface (bgs) and was recorded as a dry hole. No other receptors (water wells, playas, wetlands, waterways, lakebeds or ordinance boundaries) were located within each specific boundaries or distance from the Site. According to the Site characterization evaluation and 19.15.29.12.C(4)(a)(i) the Site is located within an area with depth to groundwater greater than one hundred (>100) feet. The Site characterization documentation (Karst Potential, Points of Diversion, Well Logs, FEMA, and Wetlands maps) are provided in Attachment A. The soil and closure criteria are listed below:

General Site Characterization and Groundwater:

Site Characterization	Average Groundwater Depth (feet)
No Receptors Found	>100 feet

Table 3.1 Closure Criteria for Soils Impacted by a Release (NMAC 19.15.29.12)

Regulatory Standard	Chloride	TPH (GRO+DRO+MRO)	TPH (GRO+MRO)	BTEX	Benzene
19.15.29.13 Restoration, Reclamation and Re-Vegetation (Impacted Area 0-4 Feet)	600 mg/kg	100 mg/kg	---	50 mg/kg	10 mg/kg
19.15.29.12 NMAC Table I Closure Criteria for Soils Impacted by a Release	20,000 mg/kg	2,500 mg/kg	1,000 mg/kg	50 mg/kg	10 mg/kg
Notes: --- = not defined					

4. Initial Soil Delineation Assessment Summary and Findings

On April 7, 2022, GHD on behalf of CRP, installed seven (7) hand auger soil borings (HA-1 through HA-7) within the suspected impacted area. Samples were collected at varying depths from one half foot (0.5) to four (4) feet bgs (SB-1 through SB-7). Samples were submitted to Eurofins Laboratory in Carlsbad, New Mexico, and analyzed for benzene, toluene, ethylbenzene and xylenes (BTEX) by EPA Method 8021B, total petroleum hydrocarbons (TPH) by Method 8015B Modified, and chloride by EPA Method. Analytical results indicated three (3) of the soil samples (SB-2, SB-3, and SB-4) exhibited TPH concentrations above 19.15.29.13 for soils within the top four (4) feet. One (1) of the soil samples (SB-5) exhibited TPH concentrations above the selected Table I Closure Criteria for the Site (>100 feet DTW). Figure 2 depicts the locations of the initial assessment samples and the analytical concentrations. Analytical results are provided in Table 1, on Figure 2, and in the Laboratory Analytical Reports provided in Attachment C.

On April 11 and 12, 2022, GHD returned to the Site to collect samples in the overspray area of the release via hand auger. Samples were collected from surface (0 feet bgs) to one half foot (0.5) feet bgs (P1-S/P1-0.5 through P6-S/P6-0.5). The samples were submitted to Eurofins Laboratory in Carlsbad, New Mexico, and analyzed for benzene, toluene, ethylbenzene and xylenes (BTEX) by EPA Method 8021B, total petroleum hydrocarbons (TPH) by Method 8015B Modified, and chloride by EPA Method. None of the samples exhibited BTEX, TPH, or chloride concentrations above 19.15.29.13 for soils within the top four (4) feet. Figure 2 depicts the locations of the overspray area samples and the analytical concentrations. Analytical results are provided in Table 1, on Figure 2, and in the Laboratory Analytical Reports provided in Attachment C.

5. Excavation, Waste Management and Confirmation Sampling

On April 19, 2022, GHD and Standard Safety & Supply (SS) mobilized to the Site to perform excavation activities on the impacted area of the Site, excavation activities continued through April 27, 2022. The area of the excavation ranged in depth from one half foot (0.5) to seven (7) feet bgs. As shown on Figure 3, a total of forty-seven (47) bottom hole composite (BH-1 through BH-47) and ten (10) sidewall composite (SW-1 through SW-10) confirmation samples were collected. The samples were submitted to Eurofins Laboratory in Carlsbad, New Mexico, and analyzed for benzene, toluene, ethylbenzene and xylenes (BTEX) by EPA Method 8021B, total petroleum hydrocarbons (TPH) by Method 8015B Modified, and chloride by EPA Method. Analytical results indicated twenty-four (24) of the bottom hole composite samples (BH-3 through BH-7, BH-9 through BH-16, BH-19, BH-21 through BH-26, BH-28, BH-30, BH-31, and BH-34) exhibited TPH concentrations above 19.15.29.13 for soils within the top four (4) feet. Analytical results indicated five (5) of the sidewall composite samples (SW-1 through SW-4 and SW-10) exhibited TPH concentrations above 19.15.29.13 for soils within the top four (4) feet. Two (2) of the sidewall composite samples (SW-3 and SW-4) also exhibited chloride concentrations above 19.15.29.13 for soils within the top four (4) feet. Soil samples BH-19 and SW-3 also exhibited TPH concentrations above Table I Closure Criteria for GRO plus DRO (1,000 mg/Kg).

Waste Management activities were performed in coordination with CRP directives. GHD obtained regulatory approval via the successful processing of Form C-138 Request for Approval to Accept Solid Waste. The waste was approved for acceptance at the OCD-permitted (NMI-63), Northern Delaware Basin Landfill facility located at 2029 W NM HWY 128, Jal, NM 88252. Approximately 680 cubic yards of impacted soil were disposed at Northern Delaware Basin Landfill, the waste manifests from April 20, 2022, through April 26, 2022, are available upon request and aren't included in this report due to size of the file. A Daily Disposal Summary is provided as Table 2. A photographic log is included as Attachment B. Confirmation Sampling Notifications are provided at Attachment D.

6. nAPP2208051921 Proposed Remediation Work Plan

Soils impacted within the suspected impact area containing TPH and chloride concentrations over 100 mg/kg and 600 mg/kg, respectively, within the top four (4) feet will be excavated. GHD, on behalf of CRP, proposes to excavate the areas to the following depths:

- BH-3 through BH-7, BH-9 through BH-16, BH-21 through BH-26, and BH-28 will be excavated one (1) to four (4) feet bgs.
- BH-30, BH-31 and BH-34 will be excavated to four (4) feet bgs or until TPH concentrations are less than 100 mg/Kg in the top four (4) feet.

- BH-19 will be excavated until GRO plus DRO TPH concentrations are less than 1,000 mg/Kg or 100 mg/Kg in the top four (4) feet.

Also, the areas containing sidewall composite samples with TPH and chloride concentrations over 100 mg/kg and 600 mg/kg, respectively, within the top four (4) feet will be excavated further and resampled.

GHD on behalf of CRP requests deferral of excavation to a later date for areas with exceedances up against the tank battery and piping that runs just west of the battery as this is an active petroleum production facility. This includes deferral of the areas around SW-2 and SW-3.

Confirmation samples from the bottom of the excavation and the sidewalls of the excavation will be collected by way of five (5) point composite samples. Bottom hole and sidewall confirmation composite samples will represent areas no greater than two hundred (200) square feet. Confirmation samples will be taken to a certified laboratory and analyzed for BTEX by EPA Method 8021B, TPH by Method 8015B Modified, chloride by EPA Method 300.

Excavated soils will be transported to a NMOCD-approved disposal facility for disposal. The anticipated volume of soil to be disposed of is approximately 38 to 303 cubic yards. The excavation will be backfilled with non-impacted soil transported to the Site. The remediation will be performed within ninety (90) days after the work plan has been approved.

If you have any questions or comments concerning this Site Characterization and Remediation Work Plan, please do not hesitate to contact our Midland office at (432) 686-0086.

Sincerely,

GHD



Nate Reece
Environmental Scientist



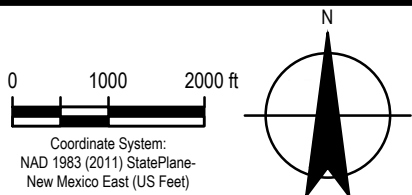
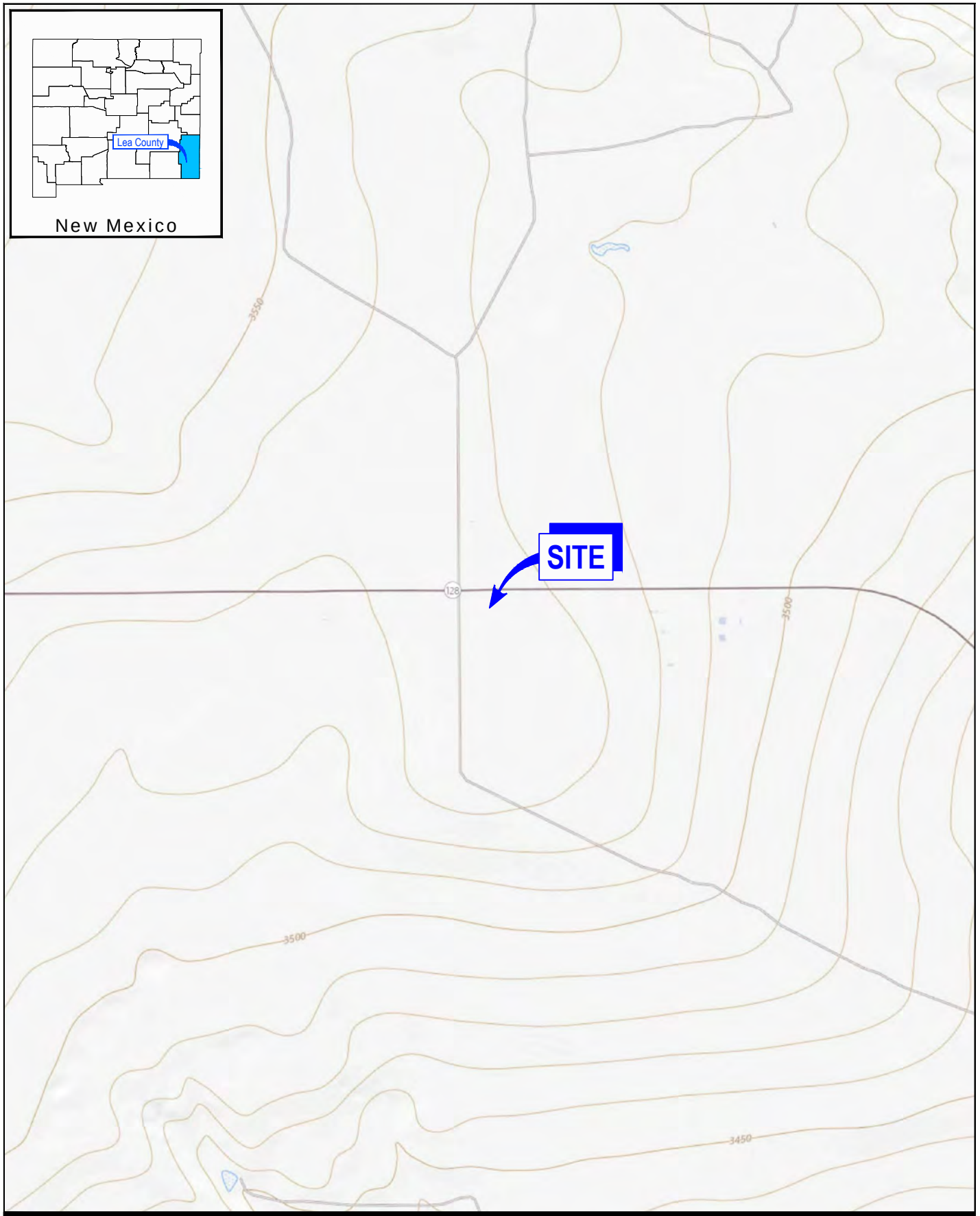
Becky Haskell
Senior Project Manager

NR/bh/1

- Encl. Figure 1 – Site Location Map
 Figure 2 – Initial Assessment Sampling Analytical Map
 Figure 3 – Confirmation Sampling Analytical and Proposed Excavation Map
 Table 1 – Summary of Soil Analytical Data
 Table 2 – Soil Disposal Summary
 Attachment A – Site Characterization Documentation
 Attachment B – Photographic Log
 Attachment C – Laboratory Analytical Reports and Chain-of-Custody Documentation
 Attachment D – Confirmation Sampling Notifications

cc: Nikki Mishler

Figures



CENTENNIAL RESOURCES PRODUCTION
LEA COUNTY, NEW MEXICO ROMEO
FEDERAL 22 BATTERY 1

Project No. 12580761
Date June 2022

SITE LOCATION MAP

FIGURE 1

Sample ID	Sample Date	Depth (ft bgs)	Benzene	BTEX	Total Petroleum Hydrocarbons (TPH)	Chloride
					Total GRO/DRO/MRO	
			Table I Closure Criteria for Soils >100 feet Depth to Groundwater 19.15.29 NMAC			
			10 mg/kg	50 mg/kg	2,500 mg/kg	20,000 mg/kg
Soil Boring Samples						
SB-1	4/7/22	1.5	0.000891	0.0233	67.8	10.0
SB-2	4/7/22	1	0.00136	1.07	194	3.75
SB-3	4/7/22	3.5	<0.00201	0.0945	167	5.89
SB-4	4/7/22	0.5	0.000556	0.108	584	10.8
SB-5	4/7/22	4	<0.101	0.127	1,350	174
SB-6	4/7/22	0.3	0.000788	0.0270	<50.0	8.51
SB-7	4/7/22	2.5	0.00177	1.58	436	2.51
Overspary Area Samples						
P1-S	4/11/22	Surface	<0.00199	0.0062	16.5	12.7
P1-0.5	4/11/22	0.5	<0.00200	<0.00400	16.2	11.5
P2-S	4/11/22	Surface	<0.00200	<0.00401	<50.0	7.45
P2-0.5	4/11/22	0.5	<0.00201	<0.00402	<50.0	2.58
P3-S	4/11/22	Surface	<0.00199	<0.00398	<49.9	34.4
P3-0.5	4/11/22	0.5	<0.00198	<0.00397	<49.9	6.87
P4-S	4/11/22	Surface	<0.00201	0.00112	<50.0	3.58
P4-0.5	4/11/22	0.5	<0.00199	0.00245	<50.0	9.03
P5-S	4/11/22	Surface	<0.00200	<0.00400	<50.0	4.48
P5-0.5	4/11/22	0.5	<0.00200	<0.00399	<49.9	3.13
P6-S	4/11/22	Surface	<0.00200	<0.00400	<50.0	2.92
P6-0.5	4/11/22	0.5	<0.00201	0.00159	<50.0	3.14
P7-S	4/12/22	Surface	0.000615	0.00119	37.8	2.94
P7-0.5	4/12/22	0.5	0.00136	0.00980	49.1	3.34



LEGEND

- OVERSPRAY AREA SAMPLE
- SOIL BORING LOCATION
- DEPTH DEPTH OF SAMPLE (FT)
- BTEX BENZENE, TOLUENE, ETHYLBENZENE & XYLENES CONCENTRATION (MG/KG)
- TPH TOTAL PETROLEUM HYDROCARBONS CONCENTRATION (MG/KG)

NOTES:

- RESULTS IN MILLIGRAMS PER KILOGRAM (MG/KG).
- SEE TABLE 1 FOR FULL ANALYTICAL RESULTS/DETAILS.
- YELLOW SHADED CELLS INDICATE EXCEEDANCE.

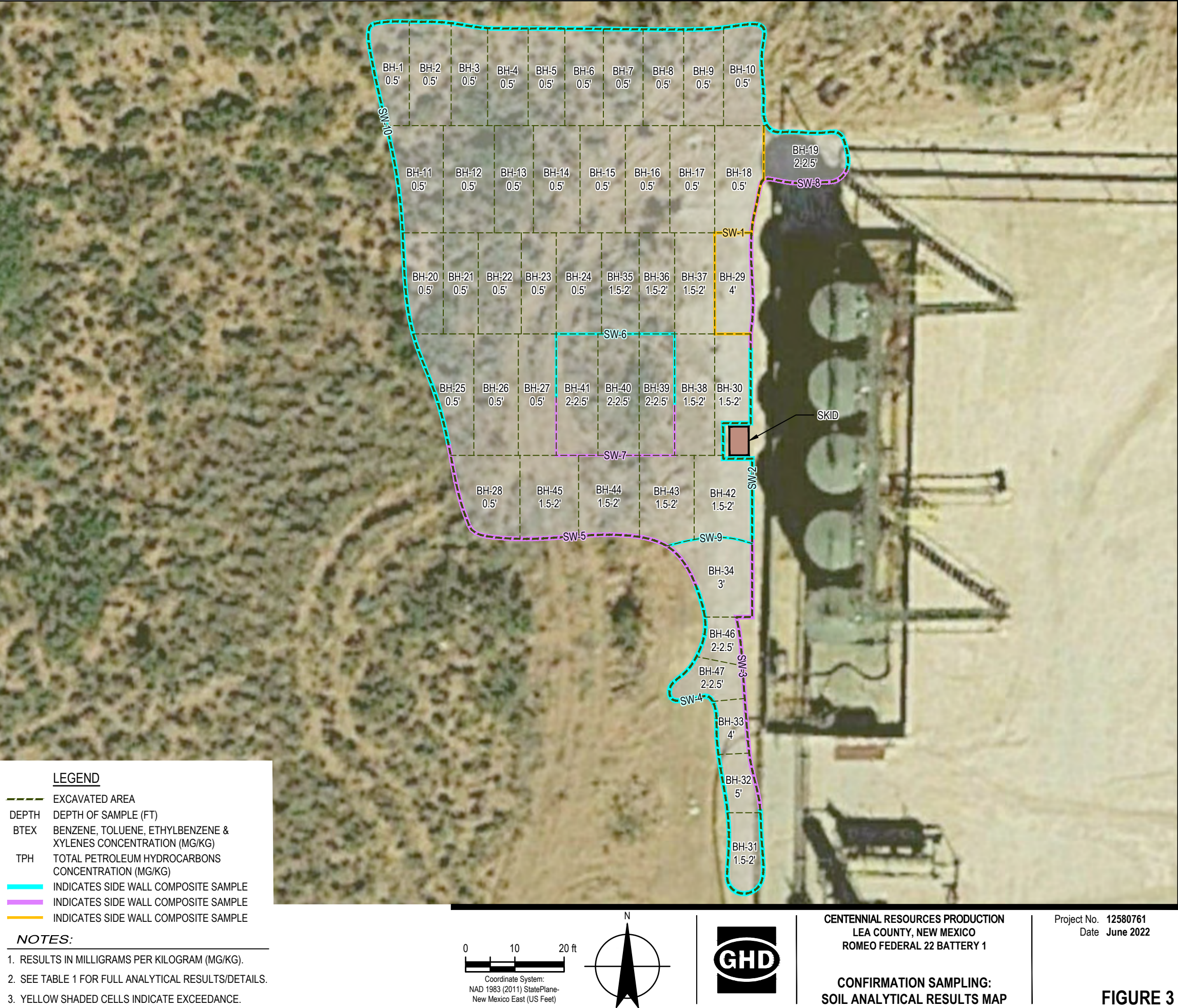
CENTENNIAL RESOURCES PRODUCTION
LEA COUNTY, NEW MEXICO
ROMEO FEDERAL 22 BATTERY 1

Project No. 12580761
Date June 2022

SITE ASSESSMENT:
SOIL ANALYTICAL RESULTS MAP

FIGURE 2

Sample ID	Sample Date	Depth (ft bgs)	Benzene	BTEX	Total Petroleum Hydrocarbons (TPH)	Chloride
					Total GRO/DRO/MRO	
			mg/kg	mg/kg	mg/kg	mg/kg
			Table I Closure Criteria for Soils >100 feet Depth to Groundwater 19.15.29 NMAC			
			10 mg/kg	50 mg/kg	2,500 mg/kg	20,000 mg/kg
Bottom Hole Confirmation Samples						
BH-1	4/19/22	0.5'	<0.00199	<0.00398	47.3	12.8
BH-2	4/19/22	0.5'	<0.00199	<0.00398	72.0	15.4
BH-3	4/19/22	0.5'	<0.00200	<0.00399	297	22.8
BH-4	4/20/22	0.5'	<0.00199	<0.00398	706	21.2
BH-5	4/20/22	0.5'	<0.00199	<0.00398	453	20.3
BH-6	4/20/22	0.5'	<0.00201	<0.00402	160	11.9
BH-7	4/20/22	0.5'	<0.00200	<0.00399	144	14.1
BH-8	4/20/22	0.5'	<0.00199	<0.00398	46.6	7.79
BH-9	4/20/22	0.5'	<0.00199	0.00171	166	30.5
BH-10	4/20/22	0.5'	<0.00200	<0.00399	297	12.8
BH-11	4/20/22	0.5'	<0.00199	<0.00398	202	11.4
BH-12	4/20/22	0.5'	<0.00200	<0.00401	284	17.1
BH-13	4/20/22	0.5'	<0.00199	0.0179	172	16.4
BH-14	4/20/22	0.5'	<0.00200	0.00245	230	14.8
BH-15	4/20/22	0.5'	<0.00199	0.00291	521	34.7
BH-16	4/21/22	0.5'	<0.00201	0.00160	344	51.0
BH-17	4/21/22	0.5'	<0.00200	0.00652	<50.0	7.20
BH-18	4/21/22	0.5'	<0.00201	0.00902	<50.0	29.8
BH-19	4/21/22	2-2.5	<0.00202	0.0118	1,990	522
BH-20	4/20/22	0.5'	<0.00200	<0.00400	60.2	4.92
BH-21	4/20/22	0.5'	<0.00200	<0.00401	195	8.70
BH-22	4/20/22	0.5'	<0.00201	<0.00402	170	34.4
BH-23	4/20/22	0.5'	<0.00201	0.0167	837	28.6
BH-24	4/21/22	0.5'	<0.00198	0.00303	103	17.0
BH-25	4/20/22	0.5'	<0.00201	<0.00402	103	11.4
BH-26	4/20/22	0.5'	<0.00200	<0.00401	198	14.2
BH-27	4/21/22	0.5'	<0.00200	0.00103	53.4	3.78
BH-28	4/20/22	0.5'	<0.00200	0.00627	150	13.4
BH-29	4/22/22	4	<0.00199	<0.00398	54.7	92.9
BH-30	4/21/22	1.5-2	<0.00201	0.00172	262	88.4
BH-31	4/21/22	1.5-2	<0.00202	0.00161	900	369
BH-32-5'	4/25/2021	5	<0.00201	<0.00402	24.8	2,720
BH-32-6'	4/25/2021	6	<0.00198	<0.00397	38.9	1,570
BH-32-7'	4/25/2021	7	<0.00198	<0.00396	43.6	722
BH-33-4'	4/25/2021	4	<0.00200	<0.00400	34.7	2,290
BH-33-5'	4/25/2021	5	<0.00200	<0.00401	20.6	1,640
BH-33-6'	4/25/2021	6	<0.00201	<0.00402	20.5	536
BH-33-7'	4/25/2021	7	<0.00202	<0.00403	22.3	136
BH-34	4/21/22	3	<0.00200	0.000955	711	143
BH-35	4/21/22	1.5-2	<0.00200	<0.00400	44.5	5.43
BH-36	4/21/22	1.5-2	<0.00200	<0.00399	<49.9	4.35
BH-37	4/25/22	1.5-2	<0.00199	0.01041	19.4	23.9
BH-38	4/25/22	1.5-2	<0.00200	0.0211	23.6	18.4
BH-39	4/25/22	2-2.5	<0.00200	<0.00401	35.6	21.1
BH-40	4/25/22	2-2.5	<0.00198	<0.00397	47.5	5.10
BH-41	4/25/22	2-2.5	<0.00201	<0.00402	22.4	4.74
BH-42	4/26/22	1.5-2	<0.00200	0.0115	71.2	8.58
BH-43	4/27/22	1.5-2	<0.00199	<0.00398	37.9	220
BH-44	4/27/22	1.5-2	<0.00200	0.00130	43.0	38.9
BH-45	4/27/22	1.5-2	<0.00199	0.00115	45.8	17.3
BH-46	4/27/22	2-2.5	<0.00201	<0.00402	52.8	294
BH-47	4/27/22	2-2.5	<0.00200	<0.00401	16.4	6.81
Sidewall Confirmation Samples						
SW-1	4/21/22	Sidewall	<0.00199	0.00124	309	596
SW-2	4/21/22	Sidewall	0.0114	0.116	361	93.5
SW-3	4/21/22	Sidewall	<0.00199	0.0829	2,450	1,120
SW-4	4/27/22	Sidewall	<0.00201	<0.00402	39.6	626
SW-5	4/27/22	Sidewall	<0.00202	<0.00403	<50.0	10.4
SW-6	4/27/22	Sidewall	<0.00202	<0.00404	<50.0	2.38
SW-7	4/27/22	Sidewall	<0.00200	0.00686	<49.9	11.8
SW-8	4/27/22	Sidewall	<0.00200	<0.00399	<49.9	591
SW-9	4/27/22	Sidewall	<0.00199	0.0123	<50.0	9.61
SW-10	4/27/22	Sidewall	<0.00199	<0.00398	120	11.4



Tables

Table 1
Summary of Soil Analytical Data
Romeo Federal 22 Battery 1
Centennial Resources Production
Lea County, New Mexico

Sample ID	Sample Date	Depth (ft bgs)	Benzene	Toluene	Ethylbenzene	Xylenes	BTEX	Total Petroleum Hydrocarbons (TPH)					Chloride
								GRO(C6-C10)	DRO(C10-C28)	GRO + DRO	MRO (C28-C35)	Total GRO/DRO/MRO	
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
			Table I Closure Criteria for Soils >100 feet Depth to Groundwater 19.15.29 NMAC										
10 mg/kg	---	---	---	50 mg/kg	---		1,000 mg/kg	---	2,500 mg/kg	20,000 mg/kg			
Initial Assessment (Hand Auger Samples)													
SB-1	4/7/22	1.5	0.000891	0.00829	0.00217	0.0119	0.0233	<49.9	67.8	67.8	<49.9	67.8	10.0
SB-2	4/7/22	1	0.00136	0.0991	0.173	0.792	1.07	<50.0	194	194	<50	194	3.75
SB-3	4/7/22	3.5	<0.00201	0.00311	0.014	0.0774	0.0945	<49.9	167	167	<49.9	167	5.89
SB-4	4/7/22	0.5	0.000556	0.049	0.00796	0.0502	0.108	<49.8	584	584	<49.8	584	10.8
SB-5	4/7/22	4	<0.101	0.127	<0.101	<0.202	0.127	109	1,240	1,349	<50.0	1,350	174
SB-6	4/7/22	0.5	0.000788	0.0075	0.00387	0.0148	0.0270	<50.0	<50.0	<50.0	<50.0	<50.0	8.51
SB-7	4/7/22	2.5	0.00177	0.215	0.234	1.13	1.58	28.1	408	436.1	<49.8	436	2.51
Overspary Area Samples													
P1-S	4/11/22	Surface	<0.00199	0.00134	0.00123	0.00363	0.0062	<49.9	16.5	16.5	<49.9	16.5	12.7
P1-0.5	4/11/22	0.5	<0.00200	<0.00200	<0.00200	0.000567	<0.00400	<50.0	16.2	16.2	<50.0	16.2	11.5
P2-S	4/11/22	Surface	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	7.45
P2-0.5	4/11/22	0.5	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	2.58
P3-S	4/11/22	Surface	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	34.4
P3-0.5	4/11/22	0.5	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	<49.9	<49.9	<49.9	<49.9	<49.9	6.87
P4-S	4/11/22	Surface	<0.00201	0.000768	<0.00201	<0.00402	0.00112	<50.0	<50.0	<50.0	<50.0	<50.0	3.58
P4-0.5	4/11/22	0.5	<0.00199	<0.00199	0.00769	0.00168	0.00245	<50.0	<50.0	<50.0	<50.0	<50.0	9.03
P5-S	4/11/22	Surface	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	4.48
P5-0.5	4/11/22	0.5	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	3.13
P6-S	4/11/22	Surface	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	2.92
P6-0.5	4/11/22	0.5	<0.00201	0.00159	<0.00201	<0.00402	0.00159	<50.0	<50.0	<50.0	<50.0	<50.0	3.14
P7-S	4/12/22	Surface	0.000615	0.000579	<0.00200	<0.00401	0.00119	16.0	21.8	37.8	<49.9	37.8	2.94
P7-0.5	4/12/22	0.5	0.00136	0.00281	0.00152	0.00411	0.00980	25.5	23.6	49.1	<50.0	49.1	3.34
Bottom Hole Confirmation Samples													
BH-1	4/19/22	0.5'	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<49.9	47.3	47.3	<49.9	47.3	12.8
BH-2	4/19/22	0.5'	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<50.0	72.0	72.0	<50.0	72.0	15.4
BH-3	4/19/22	0.5'	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	25.1	272	297	<50.0	297	22.8
BH-4	4/20/22	0.5'	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<49.9	564	564	142	706	21.2
BH-5	4/20/22	0.5'	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	24.9	329	353.9	98.7	453	20.3
BH-6	4/20/22	0.5'	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	<50.0	105	105	54.6	160	11.9
BH-7	4/20/22	0.5'	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<50.0	91.0	91.0	53.4	144	14.1
BH-8	4/20/22	0.5'	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	28.1	18.5	46.6	<49.9	46.6	7.79
BH-9	4/20/22	0.5'	<0.00199	<0.00199	<0.00199	0.00171	0.00171	22.3	99.2	121.5	44.8	166	30.5
BH-10	4/20/22	0.5'	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	15.4	214	229	67.3	297	12.8
BH-11	4/20/22	0.5'	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	17.1	137	154.1	47.8	202	11.4
BH-12	4/20/22	0.5'	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	18.7	200	219	64.8	284	17.1

Table 1
Summary of Soil Analytical Data
Romeo Federal 22 Battery 1
Centennial Resources Production
Lea County, New Mexico

Sample ID	Sample Date	Depth (ft bgs)	Benzene	Toluene	Ethylbenzene	Xylenes	BTEX	Total Petroleum Hydrocarbons (TPH)					Chloride
								GRO(C6-C10)	DRO(C10-C28)	GRO + DRO	MRO (C28-C35)	Total GRO/DRO/MRO	
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
			Table I Closure Criteria for Soils >100 feet Depth to Groundwater 19.15.29 NMAC										
			10 mg/kg	---	---	---	50 mg/kg	---		1,000 mg/kg	---	2,500 mg/kg	20,000 mg/kg
BH-13	4/20/22	0.5'	<0.00199	<0.00199	<0.00199	0.0179	0.0179	15.8	112	128	43.7	172	16.4
BH-14	4/20/22	0.5'	<0.00200	<0.00200	<0.00200	0.00245	0.00245	<49.9	182	182	47.9	230	14.8
BH-15	4/20/22	0.5'	<0.00199	<0.00199	<0.00199	0.00291	0.00291	<49.9	459	459	62.2	521	34.7
BH-16	4/21/22	0.5'	<0.00201	<0.00201	<0.00201	0.00160	0.00160	16.9	278	295	49.2	344	51.0
BH-17	4/21/22	0.5'	<0.00200	0.00148	<0.00200	0.00504	0.00652	<50.0	<50.0	<50.0	<50.0	<50.0	7.20
BH-18	4/21/22	0.5'	<0.00201	0.00209	<0.00201	0.00693	0.00902	<50.0	<50.0	<50.0	<50.0	<50.0	29.8
BH-19	4/21/22	2-2.5	<0.00202	<0.00202	<0.00202	0.0118	0.0118	38.2	1,670	1,708	285	1,990	522
BH-20	4/20/22	0.5'	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	26.5	<50.0	26.5	33.7	60.2	4.92
BH-21	4/20/22	0.5'	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	20.1	139	159.1	35.4	195	8.70
BH-22	4/20/22	0.5'	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	25.6	110	136	34.4	170	34.4
BH-23	4/20/22	0.5'	<0.00201	0.00188	0.00136	0.0134	0.0167	<50.0	709	709	128	837	28.6
BH-24	4/21/22	0.5'	<0.00198	0.000663	<0.00198	0.00237	0.00303	<49.9	41.8	41.8	61.0	103	17.0
BH-25	4/20/22	0.5'	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	20.1	37.1	57.2	45.3	103	11.4
BH-26	4/20/22	0.5'	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	19.1	135	154	43.7	198	14.2
BH-27	4/21/22	0.5'	<0.00200	<0.00200	<0.00200	0.00103	0.00103	<50.0	53.4	53.4	<50.0	53.4	3.78
BH-28	4/20/22	0.5'	<0.00200	0.00236	<0.00200	0.00391	0.00627	25.9	84.6	110.5	39.0	150	13.4
BH-29	4/22/22	4	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<50.0	54.7	54.7	<50.0	54.7	92.9
BH-30	4/21/22	1.5-2	<0.00201	0.00172	<0.00201	<0.00402	0.00172	<50.0	217	217	45.3	262	88.4
BH-31	4/21/22	1.5-2	<0.00202	0.00161	<0.00202	<0.00404	0.00161	<49.9	780	780	120	900	369
BH-32-5'	4/25/2021	5	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	<49.9	24.8	24.8	<49.9	24.8	2,720
BH-32-6'	4/25/2021	6	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	16.4	22.5	38.9	<50.0	38.9	1,570
BH-32-7'	4/25/2021	7	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	17.6	26.0	43.6	<49.9	43.6	722
BH-33-4'	4/25/2021	4	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	<50.0	34.7	34.7	<50.0	34.7	2,290
BH-33-5'	4/25/2021	5	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	<49.9	20.6	20.6	<49.9	20.6	1,640
BH-33-6'	4/25/2021	6	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	<50.0	20.5	20.5	<50.0	20.5	536
BH-33-7'	4/25/2021	7	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	<50.0	22.3	22.3	<50.0	22.3	136
BH-34	4/21/22	3	<0.00200	0.000955	<0.00200	<0.00401	0.000955	<49.9	592	592	119	711	143
BH-35	4/21/22	1.5-2	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	<50.0	<50.0	<50.0	44.5	44.5	5.43
BH-36	4/21/22	1.5-2	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	4.35
BH-37	4/25/22	1.5-2	<0.00199	0.00188	0.00128	0.00725	0.01041	<49.9	19.4	19.4	<49.9	19.4	23.9
BH-38	4/25/22	1.5-2	<0.00200	0.00226	0.00201	0.0168	0.0211	<50.0	23.6	23.6	<50.0	23.6	18.4
BH-39	4/25/22	2-2.5	<0.00200	0.000480	<0.00200	<0.00401	<0.00401	<50.0	35.6	35.6	<50.0	35.6	21.1
BH-40	4/25/22	2-2.5	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	24.4	23.1	47.5	<50.0	47.5	5.10
BH-41	4/25/22	2-2.5	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	<49.9	22.4	22.4	<49.9	22.4	4.74
BH-42	4/26/22	1.5-2	<0.00200	0.00181	0.00184	0.00786	0.0115	42.5	28.7	71.2	<50.0	71.2	8.58
BH-43	4/27/22	1.5-2	<0.00199	0.000500	<0.00199	<0.00398	<0.00398	37.9	<50.0	37.9	<50.0	37.9	220
BH-44	4/27/22	1.5-2	<0.00200	0.000564	0.000735	<0.00399	0.00130	18.2	24.8	43.0	<50.0	43.0	38.9

Table 1
Summary of Soil Analytical Data
Romeo Federal 22 Battery 1
Centennial Resources Production
Lea County, New Mexico

Sample ID	Sample Date	Depth (ft bgs)	Benzene	Toluene	Ethylbenzene	Xylenes	BTEX	Total Petroleum Hydrocarbons (TPH)					Chloride
								GRO(C6-C10)	DRO(C10-C28)	GRO + DRO	MRO (C28-C35)	Total GRO/DRO/MRO	
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
			Table I Closure Criteria for Soils >100 feet Depth to Groundwater 19.15.29 NMAC										
			10 mg/kg	---	---	---	50 mg/kg	---		1,000 mg/kg	---	2,500 mg/kg	20,000 mg/kg
BH-45	4/27/22	1.5-2	<0.00199	0.000559	0.000587	<0.00398	0.00115	28.3	17.5	45.8	<50.0	45.8	17.3
BH-46	4/27/22	2-2.5	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	<50.0	52.8	52.8	<50.0	52.8	294
BH-47	4/27/22	2-2.5	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	16.4	<49.9	16.4	<49.9	16.4	6.81
Sidewall Confirmation Samples													
SW-1	4/21/22	Sidewall	<0.00199	0.000494	<0.00199	<0.00398	0.00124	<49.9	309.0	309	<49.9	309	596
SW-2	4/21/22	Sidewall	0.0114	0.0396	0.0101	0.0550	0.116	<50.0	318	318	42.6	361	93.5
SW-3	4/21/22	Sidewall	<0.00199	0.00559	0.0106	0.0667	0.0829	52.4	2,060	2,112	342	2,450	1,120
SW-4	4/27/22	Sidewall	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	<49.9	39.6	39.6	<49.9	39.6	626
SW-5	4/27/22	Sidewall	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	10.4
SW-6	4/27/22	Sidewall	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	2.38
SW-7	4/27/22	Sidewall	<0.00200	0.000683	<0.00200	0.00618	0.00686	<49.9	<49.9	<49.9	<49.9	<49.9	11.8
SW-8	4/27/22	Sidewall	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	591
SW-9	4/27/22	Sidewall	<0.00199	0.00349	<0.00199	0.00884	0.0123	<50.0	<50.0	<50.0	<50.0	<50.0	9.61
SW-10	4/27/22	Sidewall	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<49.9	120	120	<49.9	120	11.4

Notes:

1. Values reported in mg/kg
2. < = Value Less than Reporting Limit (RL)
3. Bold Indicates Analyte Detected
4. BTEX analyses by EPA Method SW 8021B.
5. TPH analyses by EPA Method SW 8015 Mod.

6. GRO/DRO/MRO = Gasoline/Diesel/Motor Oil

7. Yellow shaded cells indicate analytical samples that exceed the NMAC 19.15.29.12 Table 1 Closure Criteria for the site.

8. Peach shaded cells indicate analytical samples that exceed the NMAC 19.15.29.13 Table 1 Closure Criteria for the site (Surface to 4 Feet Below Grade).

9. J - the target analytes was positively identified below the quantitation limit and above the detection limit.

10. --- = not defined

~~B-BH-2~~ Sample Point Excavated

Table 2
Daily Disposal Summary
Romeo Federal 22 Battery 1
Centennial Resources
Eddy, County, New Mexico

Date of Disposal	Total Yards³ Disposed
4/20/2022	320
4/26/2022	360
Project Total	680

Attachment A

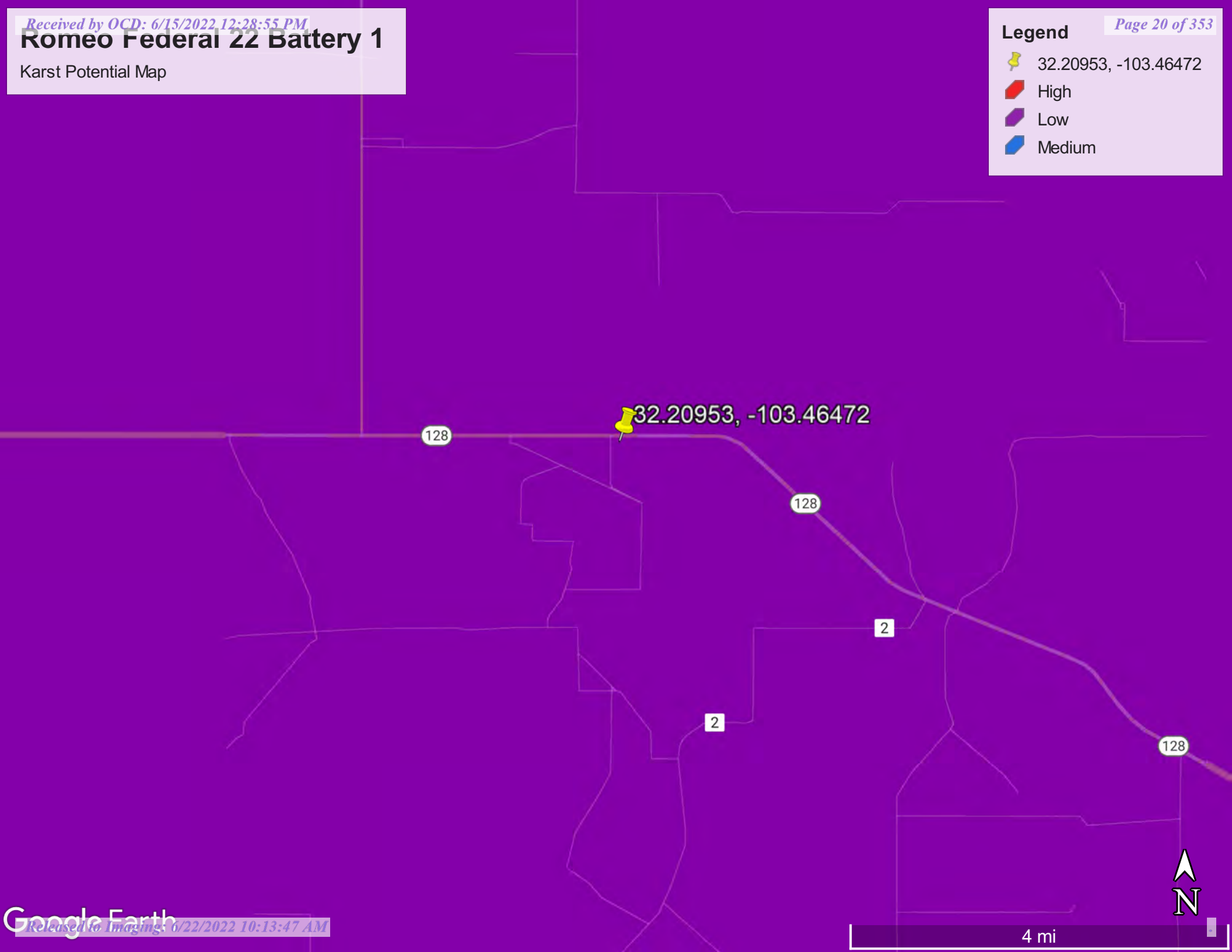
Site Characterization Documentation

Romeo Federal 22 Battery 1

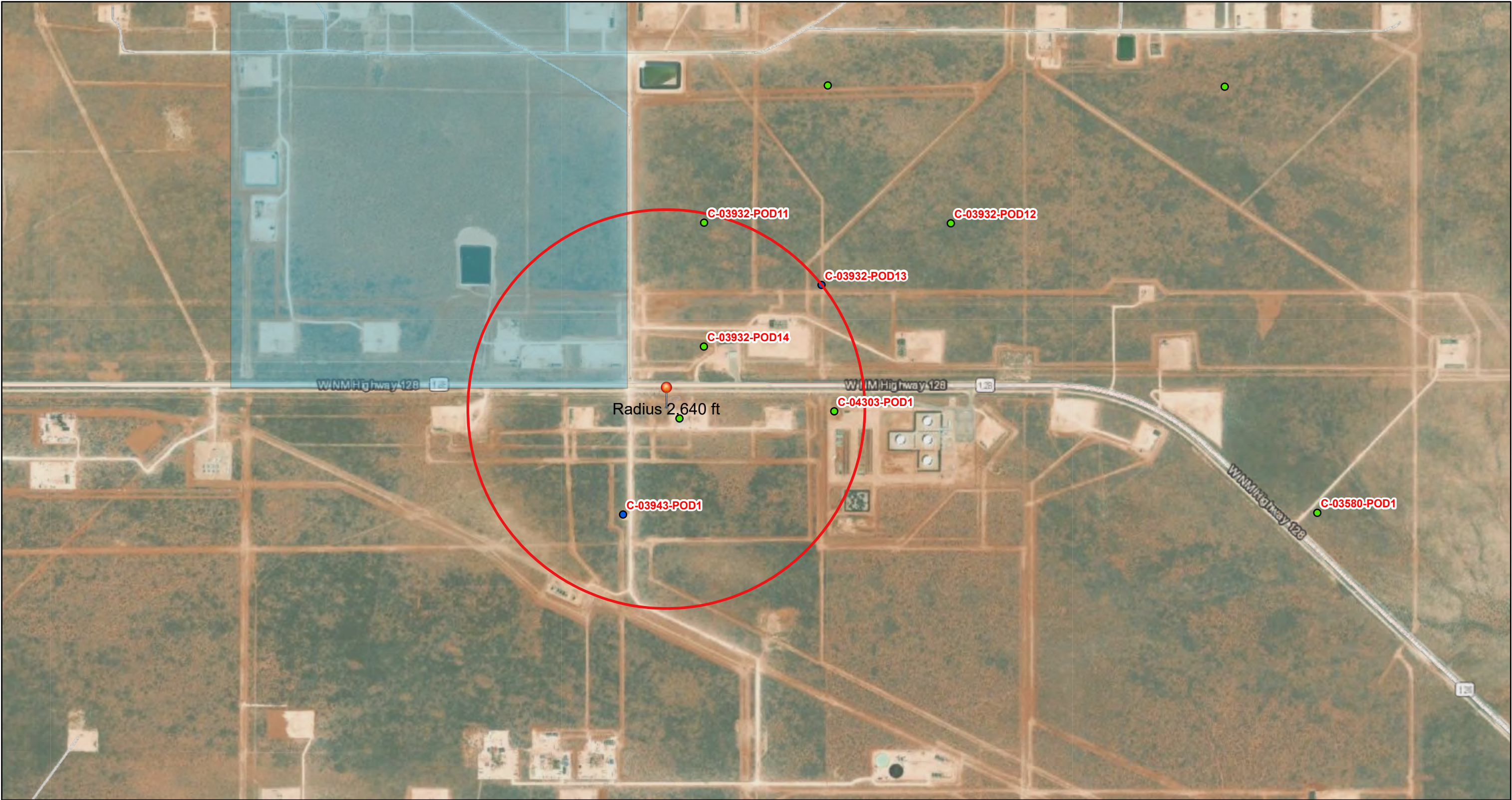
Karst Potential Map

Legend

-  32.20953, -103.46472
-  High
-  Low
-  Medium



OSE POD Locations Map



4/5/2022, 12:23:07 PM

Override 1

Override 1

GIS WATERS PODs

Active

Pending

OSE District Boundary

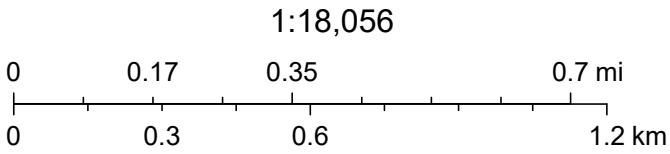
Water Right Regulations

Closure Area

New Mexico State Trust Lands

Both Estates

SiteBoundaries



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, U.S. Department of Energy Office of Legacy



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER) S5-BH-03				OSE FILE NUMBER(S) C 03932				
	WELL OWNER NAME(S) Bryce Krager % Parkhill, Smith & Cooper Attention: R.H. Holder				PHONE (OPTIONAL)				
	WELL OWNER MAILING ADDRESS 4222 85th Street				CITY Lubbock		STATE TX		
					ZIP 79423				
	WELL LOCATION (FROM GPS)		DEGREES 32	MINUTES 14	SECONDS 48.24	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
		LONGITUDE 103	29	16.72	W	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE SE 1/2 of SE 1/4 of SW 1/4 of NE 1/2 of Section 05, Township 24S, Range 34E									
2. DRILLING & CASING INFORMATION	LICENSE NUMBER WD-1222		NAME OF LICENSED DRILLER Lee Peterson				NAME OF WELL DRILLING COMPANY Peterson Drilling & Testing, Inc.		
	DRILLING STARTED 02/09/16		DRILLING ENDED 02/10/16		DEPTH OF COMPLETED WELL (FT)		BORE HOLE DEPTH (FT) 100'		
							DEPTH WATER FIRST ENCOUNTERED (FT)		
	COMPLETED WELL IS:		☐ ARTESIAN		☒ DRY HOLE		☐ SHALLOW (UNCONFINED)		
	DRILLING FLUID:		☒ AIR		☐ MUD		ADDITIVES - SPECIFY:		
	DRILLING METHOD:		☒ ROTARY		☐ HAMMER		☐ CABLE TOOL		
							OTHER - SPECIFY:		
	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)	
	FROM	TO							
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT			
	FROM	TO							

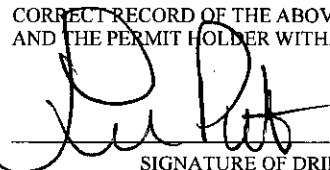
FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 10/29/15)

FILE NUMBER	C-3932	POD NUMBER	3	TRN NUMBER	581433
LOCATION	24S.34E.5.2.3.4			EXPL	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
	0	3	3	Reddish Brown Silty Sand	Y ✓ N	
	3	5	2	Light Reddish Brown Sand	Y ✓ N	
	5	7	2	Tan to White Caliche with Sand	Y ✓ N	
	7	25	18	Tan-White Caliche, Light Reddish Brown Sand	Y ✓ N	
	25	30	5	Light Reddish Brown Sand	Y ✓ N	
	30	50	20	Light Reddish Brown Fine Sand with Caliche Pebbles	Y ✓ N	
	50	58	8	Light Reddish Brown Sand	Y ✓ N	
	58	94	36	Light Reddish Brown Sand with Sandstone Pebbles	Y ✓ N	
	94	95	1	Reddish Brown Sandy Gravel	Y ✓ N	
	95	96	1	Green to Gray Shaley Claystone	Y ✓ N	
	96	99	1	Dark Reddish Brown Silty Sand	Y ✓ N	
	99	100	1	Green to Gray Clayey Shale	Y ✓ N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: ☐ PUMP ☐ AIR LIFT ☐ BAILER ☐ OTHER - SPECIFY:					TOTAL ESTIMATED WELL YIELD (gpm): 0.00	

5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.
	MISCELLANEOUS INFORMATION: Boring location drilled only as a soil boring and plugged after completion per well plugging plan.	
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:	

6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:	
	SIGNATURE OF DRILLER / PRINT SIGNEE NAME  LEE PETERSON	DATE 2/26/16

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	C-3932	POD NUMBER	3	TRN NUMBER	581433
LOCATION	24S.34E.5.2-3-4			EXPL	PAGE 2 OF 2

Tom Blaine, P.E.
State Engineer



Roswell Office
1900 WEST SECOND STREET
ROSWELL, NM 88201

**STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER**

Trn Nbr: 581433
File Nbr: C 03932
Well File Nbr: C 03932 POD3

Mar. 28, 2016

ROBERT H HOLDER
BRYCE KRAGER
4222 85TH ST
LUBBOCK, TX 79423

Greetings:

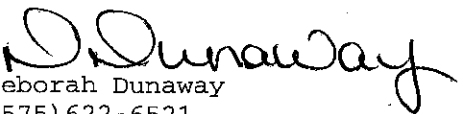
The above numbered permit was issued in your name on 01/27/2016.

The Well Record was received in this office on 03/01/2016, stating that it had been completed on 02/10/2016, and was a dry well. The well is to be plugged or capped or otherwise maintained in a manner satisfactory to the State Engineer.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 01/14/2017.

If you have any questions, please feel free to contact us.

Sincerely,


Deborah Dunaway
(575) 622-6521

drywell



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER) S5-BH-03				OSE FILE NUMBER(S) C 03932				
	WELL OWNER NAME(S) Bryce Krager % Parkhill, Smith & Cooper Attention: R.H. Holder				PHONE (OPTIONAL)				
	WELL OWNER MAILING ADDRESS 4222 85th Street				CITY Lubbock		STATE TX	ZIP 79423	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE	MINUTES 32	SECONDS 14	48.24	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
		LONGITUDE	103	29	16.72	W	* DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE SE 1/2 of SE 1/4 of SW 1/4 of NE 1/2 of Section 05, Township 24S, Range 34E									
2. DRILLING & CASING INFORMATION	LICENSE NUMBER WD-1222		NAME OF LICENSED DRILLER Lee Peterson			NAME OF WELL DRILLING COMPANY Peterson Drilling & Testing, Inc.			
	DRILLING STARTED 02/09/16		DRILLING ENDED 02/10/16		DEPTH OF COMPLETED WELL (FT)		BORE HOLE DEPTH (FT) 100'	DEPTH WATER FIRST ENCOUNTERED (FT)	
	COMPLETED WELL IS: ☐ ARTESIAN ☒ DRY HOLE ☐ SHALLOW (UNCONFINED)							STATIC WATER LEVEL IN COMPLETED WELL (FT)	
	DRILLING FLUID: ☒ AIR ☐ MUD ADDITIVES - SPECIFY:								
	DRILLING METHOD: ☒ ROTARY ☐ HAMMER ☐ CABLE TOOL ☐ OTHER - SPECIFY:								
	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)		CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
3. ANNULAR MATERIAL	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL		AMOUNT (cubic feet)		METHOD OF PLACEMENT	

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 10/29/15)

FILE NUMBER	C-3932	POD NUMBER	3	TRN NUMBER	581433
LOCATION	24S.34E.5.2.3.4			EXPL	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
	0	3	3	Reddish Brown Silty Sand	Y ✓ N	
	3	5	2	Light Reddish Brown Sand	Y ✓ N	
	5	7	2	Tan to White Caliche with Sand	Y ✓ N	
	7	25	18	Tan-White Caliche, Light Reddish Brown Sand	Y ✓ N	
	25	30	5	Light Reddish Brown Sand	Y ✓ N	
	30	50	20	Light Reddish Brown Fine Sand with Caliche Pebbles	Y ✓ N	
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	58	94	36	Light Reddish Brown Sand with Sandstone Pebbles	Y ✓ N	
	94	95	1	Reddish Brown Sandy Gravel	Y ✓ N	
	95	96	1	Green to Gray Shaley Claystone	Y ✓ N	
	96	99	1	Dark Reddish Brown Silty Sand	Y ✓ N	
	99	100	1	Green to Gray Clayey Shale	Y ✓ N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: ☐ PUMP ☐ AIR LIFT ☐ BAILER ☐ OTHER - SPECIFY:					TOTAL ESTIMATED WELL YIELD (gpm): 0.00	

5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.
	MISCELLANEOUS INFORMATION: Boring location drilled only as a soil boring and plugged after completion per well plugging plan.	
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:	

6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:	
	SIGNATURE OF DRILLER / PRINT SIGNEE NAME	DATE

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	C-3932	POD NUMBER	3	TRN NUMBER	581433
LOCATION	24S.34E.5.2-3-4			EXPL	PAGE 2 OF 2

Tom Blaine, P.E.
State Engineer



Roswell Office
1900 WEST SECOND STREET
ROSWELL, NM 88201

**STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER**

Trn Nbr: 581433
File Nbr: C 03932
Well File Nbr: C 03932 POD3

Apr. 12, 2016

ROBERT H. HOLDER
BRYCE KARGER
4222 85TH ST.
LUBBOCK, TX 79423

Greetings:

The above numbered permit was issued in your name on 01/27/2016.

The Well Record was received in this office on 03/01/2016, stating that it had been completed on 02/10/2016, and was a dry well. The well is to be plugged or capped or otherwise maintained in a manner satisfactory to the State Engineer.

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If you have any questions, please feel free to contact us.

Sincerely,

Deborah Dunaway
(575) 622-6521

drywell



New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tw	Rng	X	Y
C	03943 POD1	2	4	2	21	24S	34E	644523	3564266

Driller License: 1737

Driller Company: SHADE TREE DRILLING

Driller Name: JUSTIN MULLINS

Drill Start Date: 04/21/2016

Drill Finish Date: 04/24/2016

Plug Date:

Log File Date: 04/25/2016

PCW Rev Date:

Source: Shallow

Pump Type:

Pipe Discharge Size:

Estimated Yield: 5 GPM

Casing Size: 6.00

Depth Well: 610 feet

Depth Water: 431 feet

Water Bearing Stratifications:

Top Bottom Description

39 431 Sandstone/Gravel/Conglomerate

Casing Perforations:

Top Bottom

420 480

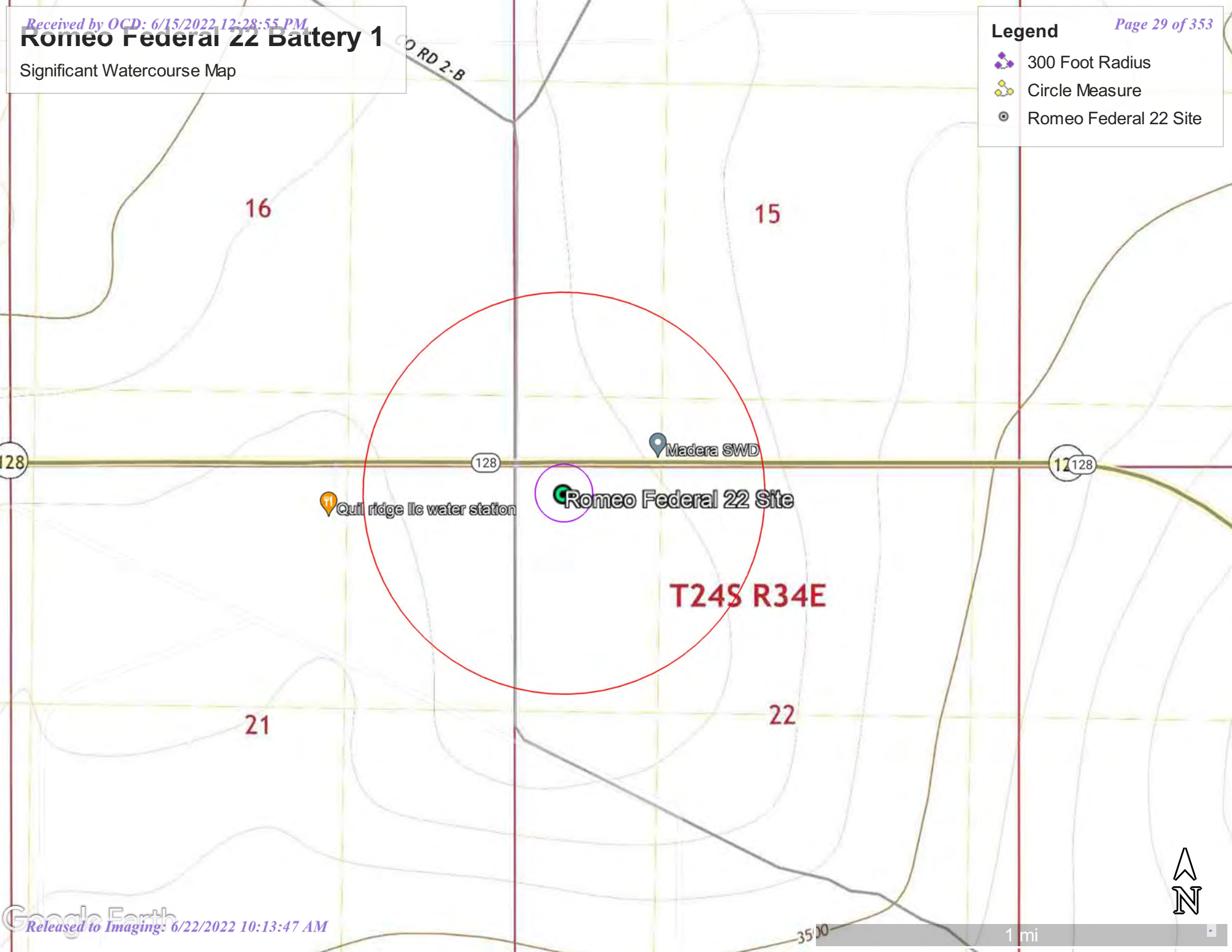
The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

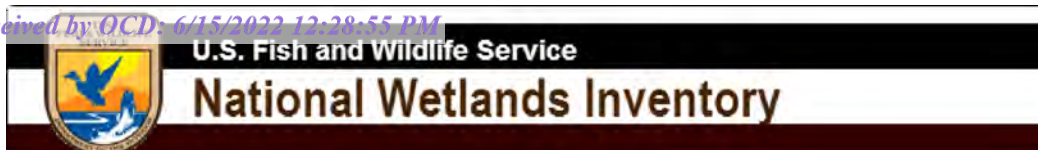
Romeo Federal 22 Battery 1

Significant Watercourse Map

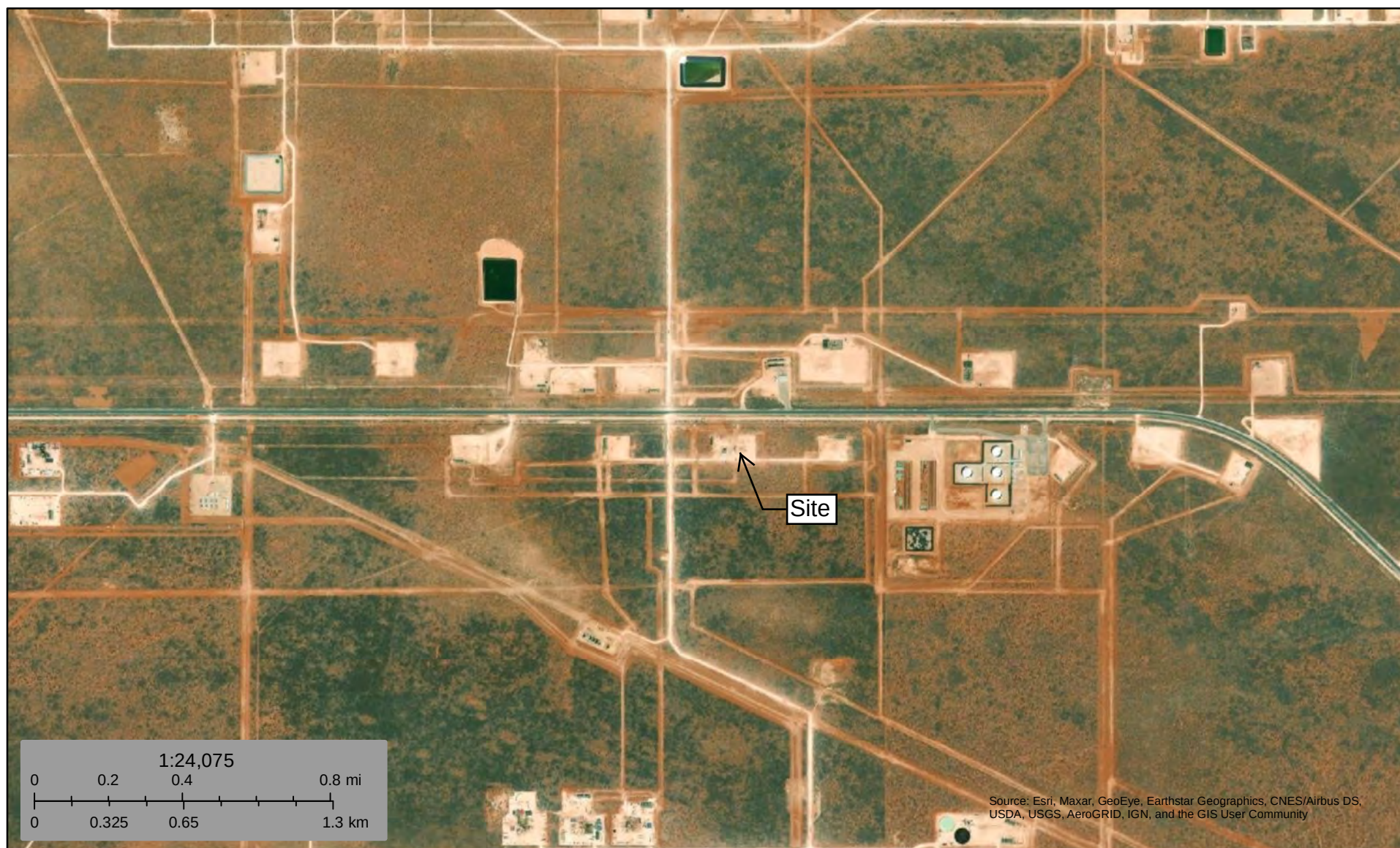
Legend

- 300 Foot Radius
- Circle Measure
- Romeo Federal 22 Site





Romeo Federal 22 Battery 1



April 5, 2022

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Flood Hazard Layer FIRMMette



103°28'12"W 32°12'50"N



0 250 500 1,000 1,500 2,000 Feet 1:6,000 103°27'34"W 32°12'19"N

Released to Imaging: 6/22/2022 10:13:47 AM

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 4/5/2022 at 1:45 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Attachment B Photographic Log



Site Photographic Log
CRP Federal 22 Battery 1 Release Site
GHD | Report for CRP | 12580761



Site Photographic Log
CRP Federal 22 Battery 1 Release Site
GHD | Report for CRP | 12580761



Site Photographic Log
CRP Federal 22 Battery 1 Release Site
GHD | Report for CRP | 12580761



Site Photographic Log
CRP Federal 22 Battery 1 Release Site
GHD | Report for CRP | 12580761



Site Photographic Log
CRP Federal 22 Battery 1 Release Site
GHD | Report for CRP | 12580761



Site Photographic Log
CRP Federal 22 Battery 1 Release Site
GHD | Report for CRP | 12580761

Attachment C

Laboratory Analytical Reports and Chain-of-Custody Documentation



Environment Testing America

ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-2173-1

Laboratory Sample Delivery Group: 12580761
Client Project/Site: Romeo Federal 22 Battery

For:

GHD Services Inc.
2135 South Loop 250 West
Midland, Texas 79703

Attn: Becky Haskell

A handwritten signature in black ink, appearing to read "Debbie Simmons".

Authorized for release by:
4/14/2022 5:34:26 PM

Debbie Simmons, Project Manager
(832)986-6768
Debbie.Simmons@et.eurofinsus.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

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

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

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Laboratory Job ID: 890-2173-1
SDG: 12580761

Table of Contents

Cover Page	1
Table of Contents	2
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Case Narrative	4
Client Sample Results	5
Surrogate Summary	11
QC Sample Results	12
QC Association Summary	16
Lab Chronicle	19
Certification Summary	22
Method Summary	23
Sample Summary	24
Chain of Custody	25
Receipt Checklists	27

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Definitions/Glossary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2173-1
SDG: 12580761

Qualifiers

GC VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Eurofins Carlsbad

Case Narrative

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2173-1
SDG: 12580761

Job ID: 890-2173-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2173-1

Receipt

The samples were received on 4/7/2022 3:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 22.0°C

GC VOA

Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-23437 and 880-23437 and analytical batch 880-23428 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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

GC Semi VOA

Method 8015MOD_NM: The method blank for preparation batch 880-23292 and analytical batch 880-23283 contained Diesel Range Organics (Over C10-C28) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

HPLC/IC

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

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2173-1
SDG: 12580761

Client Sample ID: SB-1

Lab Sample ID: 890-2173-1

Date Collected: 04/07/22 10:00

Matrix: Solid

Date Received: 04/07/22 15:00

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000891	J	0.00199	0.000383	mg/Kg		04/12/22 10:28	04/12/22 18:17	1
Toluene	0.00829		0.00199	0.000453	mg/Kg		04/12/22 10:28	04/12/22 18:17	1
Ethylbenzene	0.00217		0.00199	0.000562	mg/Kg		04/12/22 10:28	04/12/22 18:17	1
m-Xylene & p-Xylene	0.00885		0.00398	0.00100	mg/Kg		04/12/22 10:28	04/12/22 18:17	1
o-Xylene	0.00306		0.00199	0.000342	mg/Kg		04/12/22 10:28	04/12/22 18:17	1
Xylenes, Total	0.0119		0.00398	0.00100	mg/Kg		04/12/22 10:28	04/12/22 18:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	04/12/22 10:28	04/12/22 18:17	1
1,4-Difluorobenzene (Surr)	99		70 - 130	04/12/22 10:28	04/12/22 18:17	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0233		0.00398	0.00100	mg/Kg			04/13/22 10:19	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	67.8		49.9	15.0	mg/Kg			04/12/22 12:12	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	15.0	mg/Kg		04/11/22 10:15	04/11/22 13:28	1
Diesel Range Organics (Over C10-C28)	67.8	B	49.9	15.0	mg/Kg		04/11/22 10:15	04/11/22 13:28	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg		04/11/22 10:15	04/11/22 13:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130	04/11/22 10:15	04/11/22 13:28	1
o-Terphenyl	103		70 - 130	04/11/22 10:15	04/11/22 13:28	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.0		5.05	0.867	mg/Kg			04/13/22 00:00	1

Client Sample ID: SB-2

Lab Sample ID: 890-2173-2

Date Collected: 04/07/22 10:05

Matrix: Solid

Date Received: 04/07/22 15:00

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00136	J	0.00200	0.000386	mg/Kg		04/12/22 10:28	04/12/22 18:37	1
Toluene	0.0991		0.00200	0.000457	mg/Kg		04/12/22 10:28	04/12/22 18:37	1
Ethylbenzene	0.173		0.00200	0.000566	mg/Kg		04/12/22 10:28	04/12/22 18:37	1
m-Xylene & p-Xylene	0.579		0.00401	0.00101	mg/Kg		04/12/22 10:28	04/12/22 18:37	1
o-Xylene	0.213		0.00200	0.000345	mg/Kg		04/12/22 10:28	04/12/22 18:37	1
Xylenes, Total	0.792		0.00401	0.00101	mg/Kg		04/12/22 10:28	04/12/22 18:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	265	S1+	70 - 130	04/12/22 10:28	04/12/22 18:37	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2173-1
SDG: 12580761

Client Sample ID: SB-2

Lab Sample ID: 890-2173-2

Date Collected: 04/07/22 10:05

Matrix: Solid

Date Received: 04/07/22 15:00

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	86		70 - 130	04/12/22 10:28	04/12/22 18:37	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	1.07		0.00401	0.00101	mg/Kg			04/13/22 10:19	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	194		50.0	15.0	mg/Kg			04/12/22 12:12	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		04/11/22 10:15	04/11/22 13:50	1
Diesel Range Organics (Over C10-C28)	194	B	50.0	15.0	mg/Kg		04/11/22 10:15	04/11/22 13:50	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		04/11/22 10:15	04/11/22 13:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130				04/11/22 10:15	04/11/22 13:50	1
o-Terphenyl	85		70 - 130				04/11/22 10:15	04/11/22 13:50	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.75	J	5.05	0.867	mg/Kg			04/13/22 00:09	1

Client Sample ID: SB-3

Lab Sample ID: 890-2173-3

Date Collected: 04/07/22 10:10

Matrix: Solid

Date Received: 04/07/22 15:00

Sample Depth: 3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	0.000387	mg/Kg		04/12/22 10:28	04/12/22 18:58	1
Toluene	0.00311		0.00201	0.000458	mg/Kg		04/12/22 10:28	04/12/22 18:58	1
Ethylbenzene	0.0140		0.00201	0.000567	mg/Kg		04/12/22 10:28	04/12/22 18:58	1
m-Xylene & p-Xylene	0.0513		0.00402	0.00101	mg/Kg		04/12/22 10:28	04/12/22 18:58	1
o-Xylene	0.0261		0.00201	0.000345	mg/Kg		04/12/22 10:28	04/12/22 18:58	1
Xylenes, Total	0.0774		0.00402	0.00101	mg/Kg		04/12/22 10:28	04/12/22 18:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130	04/12/22 10:28	04/12/22 18:58	1
1,4-Difluorobenzene (Surr)	96		70 - 130	04/12/22 10:28	04/12/22 18:58	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0945		0.00402	0.00101	mg/Kg			04/13/22 10:19	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	167		49.9	15.0	mg/Kg			04/12/22 12:12	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2173-1
SDG: 12580761

Client Sample ID: SB-3

Lab Sample ID: 890-2173-3

Date Collected: 04/07/22 10:10

Matrix: Solid

Date Received: 04/07/22 15:00

Sample Depth: 3

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	15.0	mg/Kg		04/11/22 10:15	04/11/22 14:13	1
Diesel Range Organics (Over C10-C28)	167	B	49.9	15.0	mg/Kg		04/11/22 10:15	04/11/22 14:13	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg		04/11/22 10:15	04/11/22 14:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	81		70 - 130				04/11/22 10:15	04/11/22 14:13	1
o-Terphenyl	85		70 - 130				04/11/22 10:15	04/11/22 14:13	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.89		5.03	0.863	mg/Kg			04/13/22 00:19	1

Client Sample ID: SB-4

Lab Sample ID: 890-2173-4

Date Collected: 04/07/22 10:15

Matrix: Solid

Date Received: 04/07/22 15:00

Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000556	J	0.00200	0.000384	mg/Kg		04/12/22 10:28	04/12/22 19:18	1
Toluene	0.0490		0.00200	0.000455	mg/Kg		04/12/22 10:28	04/12/22 19:18	1
Ethylbenzene	0.00796		0.00200	0.000564	mg/Kg		04/12/22 10:28	04/12/22 19:18	1
m-Xylene & p-Xylene	0.0339		0.00399	0.00101	mg/Kg		04/12/22 10:28	04/12/22 19:18	1
o-Xylene	0.0163		0.00200	0.000343	mg/Kg		04/12/22 10:28	04/12/22 19:18	1
Xylenes, Total	0.0502		0.00399	0.00101	mg/Kg		04/12/22 10:28	04/12/22 19:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130				04/12/22 10:28	04/12/22 19:18	1
1,4-Difluorobenzene (Surr)	90		70 - 130				04/12/22 10:28	04/12/22 19:18	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.108		0.00399	0.00101	mg/Kg			04/13/22 10:19	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	584		49.8	14.9	mg/Kg			04/12/22 12:12	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	14.9	mg/Kg		04/11/22 10:15	04/11/22 14:35	1
Diesel Range Organics (Over C10-C28)	584	B	49.8	14.9	mg/Kg		04/11/22 10:15	04/11/22 14:35	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	14.9	mg/Kg		04/11/22 10:15	04/11/22 14:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130				04/11/22 10:15	04/11/22 14:35	1
o-Terphenyl	102		70 - 130				04/11/22 10:15	04/11/22 14:35	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2173-1
SDG: 12580761

Client Sample ID: SB-4

Lab Sample ID: 890-2173-4

Date Collected: 04/07/22 10:15

Matrix: Solid

Date Received: 04/07/22 15:00

Sample Depth: 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.8		5.00	0.858	mg/Kg			04/13/22 00:54	1

Client Sample ID: SB-5

Lab Sample ID: 890-2173-5

Date Collected: 04/07/22 10:20

Matrix: Solid

Date Received: 04/07/22 15:00

Sample Depth: 5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.101	U **	0.101	0.0194	mg/Kg		04/13/22 09:33	04/13/22 20:32	50
Toluene	0.127	**	0.101	0.0230	mg/Kg		04/13/22 09:33	04/13/22 20:32	50
Ethylbenzene	<0.101	U	0.101	0.0285	mg/Kg		04/13/22 09:33	04/13/22 20:32	50
m-Xylene & p-Xylene	<0.202	U	0.202	0.0510	mg/Kg		04/13/22 09:33	04/13/22 20:32	50
o-Xylene	<0.101	U	0.101	0.0174	mg/Kg		04/13/22 09:33	04/13/22 20:32	50
Xylenes, Total	<0.202	U	0.202	0.0510	mg/Kg		04/13/22 09:33	04/13/22 20:32	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	71		70 - 130				04/13/22 09:33	04/13/22 20:32	50
1,4-Difluorobenzene (Surr)	89		70 - 130				04/13/22 09:33	04/13/22 20:32	50

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.127	J	0.202	0.0510	mg/Kg			04/13/22 10:19	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1350		50.0	15.0	mg/Kg			04/12/22 12:12	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	109		50.0	15.0	mg/Kg		04/11/22 10:15	04/11/22 14:58	1
Diesel Range Organics (Over C10-C28)	1240	B	50.0	15.0	mg/Kg		04/11/22 10:15	04/11/22 14:58	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		04/11/22 10:15	04/11/22 14:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130				04/11/22 10:15	04/11/22 14:58	1
o-Terphenyl	93		70 - 130				04/11/22 10:15	04/11/22 14:58	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	174		4.99	0.857	mg/Kg			04/13/22 01:03	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2173-1
SDG: 12580761

Client Sample ID: SB-6

Lab Sample ID: 890-2173-6

Date Collected: 04/07/22 10:25

Matrix: Solid

Date Received: 04/07/22 15:00

Sample Depth: 6

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000788	J	0.00199	0.000383	mg/Kg		04/11/22 17:03	04/12/22 14:50	1
Toluene	0.00750		0.00199	0.000453	mg/Kg		04/11/22 17:03	04/12/22 14:50	1
Ethylbenzene	0.00387		0.00199	0.000562	mg/Kg		04/11/22 17:03	04/12/22 14:50	1
m-Xylene & p-Xylene	0.0108		0.00398	0.00100	mg/Kg		04/11/22 17:03	04/12/22 14:50	1
o-Xylene	0.00401		0.00199	0.000342	mg/Kg		04/11/22 17:03	04/12/22 14:50	1
Xylenes, Total	0.0148		0.00398	0.00100	mg/Kg		04/11/22 17:03	04/12/22 14:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130	04/11/22 17:03	04/12/22 14:50	1
1,4-Difluorobenzene (Surr)	94		70 - 130	04/11/22 17:03	04/12/22 14:50	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0270		0.00398	0.00100	mg/Kg			04/13/22 10:19	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	15.0	mg/Kg			04/12/22 12:12	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		04/11/22 10:15	04/11/22 15:20	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		04/11/22 10:15	04/11/22 15:20	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		04/11/22 10:15	04/11/22 15:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130	04/11/22 10:15	04/11/22 15:20	1
o-Terphenyl	93		70 - 130	04/11/22 10:15	04/11/22 15:20	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.51		4.98	0.855	mg/Kg			04/13/22 01:13	1

Client Sample ID: SB-7

Lab Sample ID: 890-2173-7

Date Collected: 04/07/22 10:30

Matrix: Solid

Date Received: 04/07/22 15:00

Sample Depth: 7

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00177	J	0.00200	0.000384	mg/Kg		04/11/22 17:03	04/12/22 15:10	1
Toluene	0.215		0.00200	0.000455	mg/Kg		04/11/22 17:03	04/12/22 15:10	1
Ethylbenzene	0.234		0.00200	0.000564	mg/Kg		04/11/22 17:03	04/12/22 15:10	1
m-Xylene & p-Xylene	0.792		0.00399	0.00101	mg/Kg		04/11/22 17:03	04/12/22 15:10	1
o-Xylene	0.337		0.00200	0.000343	mg/Kg		04/11/22 17:03	04/12/22 15:10	1
Xylenes, Total	1.13		0.00399	0.00101	mg/Kg		04/11/22 17:03	04/12/22 15:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	04/11/22 17:03	04/12/22 15:10	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2173-1
SDG: 12580761

Client Sample ID: SB-7

Lab Sample ID: 890-2173-7

Date Collected: 04/07/22 10:30

Matrix: Solid

Date Received: 04/07/22 15:00

Sample Depth: 7

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	94		70 - 130	04/11/22 17:03	04/12/22 15:10	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	1.58		0.00399	0.00101	mg/Kg			04/13/22 10:19	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	436		49.8	14.9	mg/Kg			04/12/22 12:12	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	28.1	J	49.8	14.9	mg/Kg		04/11/22 10:15	04/11/22 16:04	1
Diesel Range Organics (Over C10-C28)	408	B	49.8	14.9	mg/Kg		04/11/22 10:15	04/11/22 16:04	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	14.9	mg/Kg		04/11/22 10:15	04/11/22 16:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130	04/11/22 10:15	04/11/22 16:04	1
o-Terphenyl	93		70 - 130	04/11/22 10:15	04/11/22 16:04	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.51	J	4.98	0.855	mg/Kg			04/13/22 01:22	1

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Surrogate Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2173-1
SDG: 12580761

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-2173-1	SB-1	107	99
890-2173-2	SB-2	265 S1+	86
890-2173-3	SB-3	126	96
890-2173-4	SB-4	124	90
890-2173-5	SB-5	71	89
890-2173-6	SB-6	88	94
890-2173-7	SB-7	111	94
LCS 880-23328/1-A	Lab Control Sample	96	104
LCS 880-23368/1-A	Lab Control Sample	99	99
LCS 880-23437/1-A	Lab Control Sample	97	101
LCSD 880-23328/2-A	Lab Control Sample Dup	94	102
LCSD 880-23368/2-A	Lab Control Sample Dup	108	108
LCSD 880-23437/2-A	Lab Control Sample Dup	97	100
MB 880-23328/5-A	Method Blank	97	100
MB 880-23368/5-A	Method Blank	99	93
MB 880-23437/5-A	Method Blank	99	93
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-2173-1	SB-1	91	103
890-2173-2	SB-2	84	85
890-2173-3	SB-3	81	85
890-2173-4	SB-4	89	102
890-2173-5	SB-5	96	93
890-2173-6	SB-6	86	93
890-2173-7	SB-7	90	93
LCS 880-23292/2-A	Lab Control Sample	90	81
LCSD 880-23292/3-A	Lab Control Sample Dup	92	84
MB 880-23292/1-A	Method Blank	94	98
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2173-1
SDG: 12580761

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-23328/5-A

Matrix: Solid

Analysis Batch: 23365

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 23328

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		04/11/22 17:03	04/12/22 11:58	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		04/11/22 17:03	04/12/22 11:58	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		04/11/22 17:03	04/12/22 11:58	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		04/11/22 17:03	04/12/22 11:58	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		04/11/22 17:03	04/12/22 11:58	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		04/11/22 17:03	04/12/22 11:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	04/11/22 17:03	04/12/22 11:58	1
1,4-Difluorobenzene (Surr)	100		70 - 130	04/11/22 17:03	04/12/22 11:58	1

Lab Sample ID: LCS 880-23328/1-A

Matrix: Solid

Analysis Batch: 23365

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 23328

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08329		mg/Kg		83	70 - 130
Toluene	0.100	0.09279		mg/Kg		93	70 - 130
Ethylbenzene	0.100	0.09605		mg/Kg		96	70 - 130
m-Xylene & p-Xylene	0.200	0.1926		mg/Kg		96	70 - 130
o-Xylene	0.100	0.09385		mg/Kg		94	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: LCSD 880-23328/2-A

Matrix: Solid

Analysis Batch: 23365

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 23328

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08654		mg/Kg		87	70 - 130	4	35
Toluene	0.100	0.09625		mg/Kg		96	70 - 130	4	35
Ethylbenzene	0.100	0.09917		mg/Kg		99	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.1983		mg/Kg		99	70 - 130	3	35
o-Xylene	0.100	0.09711		mg/Kg		97	70 - 130	3	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: MB 880-23368/5-A

Matrix: Solid

Analysis Batch: 23364

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 23368

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		04/12/22 10:28	04/12/22 11:24	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		04/12/22 10:28	04/12/22 11:24	1

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2173-1
SDG: 12580761

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 880-23368/5-A

Matrix: Solid

Analysis Batch: 23364

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 23368

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		04/12/22 10:28	04/12/22 11:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		04/12/22 10:28	04/12/22 11:24	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		04/12/22 10:28	04/12/22 11:24	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		04/12/22 10:28	04/12/22 11:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	04/12/22 10:28	04/12/22 11:24	1
1,4-Difluorobenzene (Surr)	93		70 - 130	04/12/22 10:28	04/12/22 11:24	1

Lab Sample ID: LCS 880-23368/1-A

Matrix: Solid

Analysis Batch: 23364

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 23368

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Benzene	0.100	0.09374		mg/Kg		94	70 - 130
Toluene	0.100	0.09518		mg/Kg		95	70 - 130
Ethylbenzene	0.100	0.09971		mg/Kg		100	70 - 130
m-Xylene & p-Xylene	0.200	0.1991		mg/Kg		100	70 - 130
o-Xylene	0.100	0.1010		mg/Kg		101	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: LCSD 880-23368/2-A

Matrix: Solid

Analysis Batch: 23364

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 23368

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1015		mg/Kg		101	70 - 130	8	35
Toluene	0.100	0.1026		mg/Kg		103	70 - 130	7	35
Ethylbenzene	0.100	0.1056		mg/Kg		106	70 - 130	6	35
m-Xylene & p-Xylene	0.200	0.2119		mg/Kg		106	70 - 130	6	35
o-Xylene	0.100	0.1069		mg/Kg		107	70 - 130	6	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	108		70 - 130

Lab Sample ID: MB 880-23437/5-A

Matrix: Solid

Analysis Batch: 23428

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 23437

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		04/13/22 09:33	04/13/22 11:51	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		04/13/22 09:33	04/13/22 11:51	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		04/13/22 09:33	04/13/22 11:51	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		04/13/22 09:33	04/13/22 11:51	1

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2173-1
SDG: 12580761

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 880-23437/5-A

Matrix: Solid

Analysis Batch: 23428

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 23437

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		04/13/22 09:33	04/13/22 11:51	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		04/13/22 09:33	04/13/22 11:51	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130				04/13/22 09:33	04/13/22 11:51	1
1,4-Difluorobenzene (Surr)	93		70 - 130				04/13/22 09:33	04/13/22 11:51	1

Lab Sample ID: LCS 880-23437/1-A

Matrix: Solid

Analysis Batch: 23428

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 23437

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1189		mg/Kg		119	70 - 130
Toluene	0.100	0.1253		mg/Kg		125	70 - 130
Ethylbenzene	0.100	0.1123		mg/Kg		112	70 - 130
m-Xylene & p-Xylene	0.200	0.2305		mg/Kg		115	70 - 130
o-Xylene	0.100	0.1084		mg/Kg		108	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	97		70 - 130				
1,4-Difluorobenzene (Surr)	101		70 - 130				

Lab Sample ID: LCSD 880-23437/2-A

Matrix: Solid

Analysis Batch: 23428

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 23437

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1433	*+	mg/Kg		143	70 - 130	19	35
Toluene	0.100	0.1328	*+	mg/Kg		133	70 - 130	6	35
Ethylbenzene	0.100	0.1186		mg/Kg		119	70 - 130	6	35
m-Xylene & p-Xylene	0.200	0.2445		mg/Kg		122	70 - 130	6	35
o-Xylene	0.100	0.1142		mg/Kg		114	70 - 130	5	35
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	97		70 - 130						
1,4-Difluorobenzene (Surr)	100		70 - 130						

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-23292/1-A

Matrix: Solid

Analysis Batch: 23283

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 23292

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		04/11/22 10:15	04/11/22 10:16	1
Diesel Range Organics (Over C10-C28)	20.80	J	50.0	15.0	mg/Kg		04/11/22 10:15	04/11/22 10:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		04/11/22 10:15	04/11/22 10:16	1

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2173-1
SDG: 12580761

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	04/11/22 10:15	04/11/22 10:16	1
o-Terphenyl	98		70 - 130	04/11/22 10:15	04/11/22 10:16	1

Lab Sample ID: LCS 880-23292/2-A

Matrix: Solid

Analysis Batch: 23283

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 23292

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	770.7		mg/Kg		77	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1019		mg/Kg		102	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	90		70 - 130
o-Terphenyl	81		70 - 130

Lab Sample ID: LCSD 880-23292/3-A

Matrix: Solid

Analysis Batch: 23283

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 23292

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	874.1		mg/Kg		87	70 - 130	13	20
Diesel Range Organics (Over C10-C28)	1000	1043		mg/Kg		104	70 - 130	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	84		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-23319/1-A

Matrix: Solid

Analysis Batch: 23403

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	0.858	mg/Kg			04/12/22 22:28	1

Lab Sample ID: LCS 880-23319/2-A

Matrix: Solid

Analysis Batch: 23403

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	251.6		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-23319/3-A

Matrix: Solid

Analysis Batch: 23403

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	250.8		mg/Kg		100	90 - 110	0	20

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2173-1
SDG: 12580761

GC VOA

Prep Batch: 23328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2173-6	SB-6	Total/NA	Solid	5035	
890-2173-7	SB-7	Total/NA	Solid	5035	
MB 880-23328/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-23328/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-23328/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 23364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2173-1	SB-1	Total/NA	Solid	8021B	23368
890-2173-2	SB-2	Total/NA	Solid	8021B	23368
890-2173-3	SB-3	Total/NA	Solid	8021B	23368
890-2173-4	SB-4	Total/NA	Solid	8021B	23368
MB 880-23368/5-A	Method Blank	Total/NA	Solid	8021B	23368
LCS 880-23368/1-A	Lab Control Sample	Total/NA	Solid	8021B	23368
LCSD 880-23368/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	23368

Analysis Batch: 23365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2173-6	SB-6	Total/NA	Solid	8021B	23328
890-2173-7	SB-7	Total/NA	Solid	8021B	23328
MB 880-23328/5-A	Method Blank	Total/NA	Solid	8021B	23328
LCS 880-23328/1-A	Lab Control Sample	Total/NA	Solid	8021B	23328
LCSD 880-23328/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	23328

Prep Batch: 23368

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2173-1	SB-1	Total/NA	Solid	5035	
890-2173-2	SB-2	Total/NA	Solid	5035	
890-2173-3	SB-3	Total/NA	Solid	5035	
890-2173-4	SB-4	Total/NA	Solid	5035	
MB 880-23368/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-23368/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-23368/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 23428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2173-5	SB-5	Total/NA	Solid	8021B	23437
MB 880-23437/5-A	Method Blank	Total/NA	Solid	8021B	23437
LCS 880-23437/1-A	Lab Control Sample	Total/NA	Solid	8021B	23437
LCSD 880-23437/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	23437

Prep Batch: 23437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2173-5	SB-5	Total/NA	Solid	5035	
MB 880-23437/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-23437/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-23437/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 23445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2173-1	SB-1	Total/NA	Solid	Total BTEX	

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2173-1
SDG: 12580761

GC VOA (Continued)

Analysis Batch: 23445 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2173-2	SB-2	Total/NA	Solid	Total BTEX	
890-2173-3	SB-3	Total/NA	Solid	Total BTEX	
890-2173-4	SB-4	Total/NA	Solid	Total BTEX	
890-2173-5	SB-5	Total/NA	Solid	Total BTEX	
890-2173-6	SB-6	Total/NA	Solid	Total BTEX	
890-2173-7	SB-7	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 23283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2173-1	SB-1	Total/NA	Solid	8015B NM	23292
890-2173-2	SB-2	Total/NA	Solid	8015B NM	23292
890-2173-3	SB-3	Total/NA	Solid	8015B NM	23292
890-2173-4	SB-4	Total/NA	Solid	8015B NM	23292
890-2173-5	SB-5	Total/NA	Solid	8015B NM	23292
890-2173-6	SB-6	Total/NA	Solid	8015B NM	23292
890-2173-7	SB-7	Total/NA	Solid	8015B NM	23292
MB 880-23292/1-A	Method Blank	Total/NA	Solid	8015B NM	23292
LCS 880-23292/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	23292
LCSD 880-23292/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	23292

Prep Batch: 23292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2173-1	SB-1	Total/NA	Solid	8015NM Prep	
890-2173-2	SB-2	Total/NA	Solid	8015NM Prep	
890-2173-3	SB-3	Total/NA	Solid	8015NM Prep	
890-2173-4	SB-4	Total/NA	Solid	8015NM Prep	
890-2173-5	SB-5	Total/NA	Solid	8015NM Prep	
890-2173-6	SB-6	Total/NA	Solid	8015NM Prep	
890-2173-7	SB-7	Total/NA	Solid	8015NM Prep	
MB 880-23292/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-23292/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-23292/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 23380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2173-1	SB-1	Total/NA	Solid	8015 NM	
890-2173-2	SB-2	Total/NA	Solid	8015 NM	
890-2173-3	SB-3	Total/NA	Solid	8015 NM	
890-2173-4	SB-4	Total/NA	Solid	8015 NM	
890-2173-5	SB-5	Total/NA	Solid	8015 NM	
890-2173-6	SB-6	Total/NA	Solid	8015 NM	
890-2173-7	SB-7	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 23319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2173-1	SB-1	Soluble	Solid	DI Leach	
890-2173-2	SB-2	Soluble	Solid	DI Leach	
890-2173-3	SB-3	Soluble	Solid	DI Leach	

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2173-1
SDG: 12580761

HPLC/IC (Continued)

Leach Batch: 23319 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2173-4	SB-4	Soluble	Solid	DI Leach	
890-2173-5	SB-5	Soluble	Solid	DI Leach	
890-2173-6	SB-6	Soluble	Solid	DI Leach	
890-2173-7	SB-7	Soluble	Solid	DI Leach	
MB 880-23319/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-23319/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-23319/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 23403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2173-1	SB-1	Soluble	Solid	300.0	23319
890-2173-2	SB-2	Soluble	Solid	300.0	23319
890-2173-3	SB-3	Soluble	Solid	300.0	23319
890-2173-4	SB-4	Soluble	Solid	300.0	23319
890-2173-5	SB-5	Soluble	Solid	300.0	23319
890-2173-6	SB-6	Soluble	Solid	300.0	23319
890-2173-7	SB-7	Soluble	Solid	300.0	23319
MB 880-23319/1-A	Method Blank	Soluble	Solid	300.0	23319
LCS 880-23319/2-A	Lab Control Sample	Soluble	Solid	300.0	23319
LCSD 880-23319/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	23319

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2173-1
SDG: 12580761

Client Sample ID: SB-1

Lab Sample ID: 890-2173-1

Date Collected: 04/07/22 10:00

Matrix: Solid

Date Received: 04/07/22 15:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	23368	04/12/22 10:28	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23364	04/12/22 18:17	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23445	04/13/22 10:19	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23380	04/12/22 12:12	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	23292	04/11/22 10:15	AM	XEN MID
Total/NA	Analysis	8015B NM		1			23283	04/11/22 13:28	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	23319	04/11/22 16:08	SC	XEN MID
Soluble	Analysis	300.0		1			23403	04/13/22 00:00	CH	XEN MID

Client Sample ID: SB-2

Lab Sample ID: 890-2173-2

Date Collected: 04/07/22 10:05

Matrix: Solid

Date Received: 04/07/22 15:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	23368	04/12/22 10:28	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23364	04/12/22 18:37	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23445	04/13/22 10:19	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23380	04/12/22 12:12	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	23292	04/11/22 10:15	AM	XEN MID
Total/NA	Analysis	8015B NM		1			23283	04/11/22 13:50	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	23319	04/11/22 16:08	SC	XEN MID
Soluble	Analysis	300.0		1			23403	04/13/22 00:09	CH	XEN MID

Client Sample ID: SB-3

Lab Sample ID: 890-2173-3

Date Collected: 04/07/22 10:10

Matrix: Solid

Date Received: 04/07/22 15:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	23368	04/12/22 10:28	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23364	04/12/22 18:58	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23445	04/13/22 10:19	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23380	04/12/22 12:12	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23292	04/11/22 10:15	AM	XEN MID
Total/NA	Analysis	8015B NM		1			23283	04/11/22 14:13	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	23319	04/11/22 16:08	SC	XEN MID
Soluble	Analysis	300.0		1			23403	04/13/22 00:19	CH	XEN MID

Client Sample ID: SB-4

Lab Sample ID: 890-2173-4

Date Collected: 04/07/22 10:15

Matrix: Solid

Date Received: 04/07/22 15:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	23368	04/12/22 10:28	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23364	04/12/22 19:18	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23445	04/13/22 10:19	AJ	XEN MID

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Lab Chronicle

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2173-1
SDG: 12580761

Client Sample ID: SB-4

Lab Sample ID: 890-2173-4

Date Collected: 04/07/22 10:15

Matrix: Solid

Date Received: 04/07/22 15:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			23380	04/12/22 12:12	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	23292	04/11/22 10:15	AM	XEN MID
Total/NA	Analysis	8015B NM		1			23283	04/11/22 14:35	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	23319	04/11/22 16:08	SC	XEN MID
Soluble	Analysis	300.0		1			23403	04/13/22 00:54	CH	XEN MID

Client Sample ID: SB-5

Lab Sample ID: 890-2173-5

Date Collected: 04/07/22 10:20

Matrix: Solid

Date Received: 04/07/22 15:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	23437	04/13/22 09:33	MR	XEN MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	23428	04/13/22 20:32	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23445	04/13/22 10:19	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23380	04/12/22 12:12	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	23292	04/11/22 10:15	AM	XEN MID
Total/NA	Analysis	8015B NM		1			23283	04/11/22 14:58	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	23319	04/11/22 16:08	SC	XEN MID
Soluble	Analysis	300.0		1			23403	04/13/22 01:03	CH	XEN MID

Client Sample ID: SB-6

Lab Sample ID: 890-2173-6

Date Collected: 04/07/22 10:25

Matrix: Solid

Date Received: 04/07/22 15:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	23328	04/11/22 17:03	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23365	04/12/22 14:50	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23445	04/13/22 10:19	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23380	04/12/22 12:12	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	23292	04/11/22 10:15	AM	XEN MID
Total/NA	Analysis	8015B NM		1			23283	04/11/22 15:20	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	23319	04/11/22 16:08	SC	XEN MID
Soluble	Analysis	300.0		1			23403	04/13/22 01:13	CH	XEN MID

Client Sample ID: SB-7

Lab Sample ID: 890-2173-7

Date Collected: 04/07/22 10:30

Matrix: Solid

Date Received: 04/07/22 15:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	23328	04/11/22 17:03	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23365	04/12/22 15:10	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23445	04/13/22 10:19	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23380	04/12/22 12:12	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	23292	04/11/22 10:15	AM	XEN MID
Total/NA	Analysis	8015B NM		1			23283	04/11/22 16:04	AJ	XEN MID

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Lab Chronicle

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2173-1
SDG: 12580761

Client Sample ID: SB-7
Date Collected: 04/07/22 10:30
Date Received: 04/07/22 15:00

Lab Sample ID: 890-2173-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	23319	04/11/22 16:08	SC	XEN MID
Soluble	Analysis	300.0		1			23403	04/13/22 01:22	CH	XEN MID

Laboratory References:
XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

- 1
- 2
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Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2173-1
SDG: 12580761

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

- 1
- 2
- 3
- 4
- 5
- 6
- 7
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- 10
- 11
- 12
- 13
- 14

Method Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2173-1
SDG: 12580761

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2173-1
SDG: 12580761

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2173-1	SB-1	Solid	04/07/22 10:00	04/07/22 15:00	1
890-2173-2	SB-2	Solid	04/07/22 10:05	04/07/22 15:00	2
890-2173-3	SB-3	Solid	04/07/22 10:10	04/07/22 15:00	3
890-2173-4	SB-4	Solid	04/07/22 10:15	04/07/22 15:00	4
890-2173-5	SB-5	Solid	04/07/22 10:20	04/07/22 15:00	5
890-2173-6	SB-6	Solid	04/07/22 10:25	04/07/22 15:00	6
890-2173-7	SB-7	Solid	04/07/22 10:30	04/07/22 15:00	7



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CHAIN OF CUSTODY

Page 1 Of 1

Odessa, Texas (432-563-1800)

Norcross, Georgia (770-449-8800)

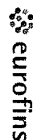
Tampa, Florida (813-620-2000)

[illegible]

Eurofins Carlsbad

1089 N Canal St
Carlsbad NM 88220
Phone 575-988-3199 Fax 575-988-3199

Chain of Custody Record



Environment Testing America

Client Information (Sub Contract Lab)						Sampler		Carrier Tracking No(s)		COC No													
Client Contact:						Lab PM				890-704 1													
Shipping/Receiving						Simmons Debbie																	
Company						E-Mail		State of Origin		Page													
Eurofins Environment Testing South Cent						Debbie Simmons@eurofins.com		New Mexico		Page 1 of 1													
Address						Accreditations Required (See note):		Job #		890-2173-1													
1211 W Florida Ave						NELAP - Louisiana NELAP - Texas																	
City						Due Date Requested		Analysis Requested															
Midland						4/13/2022																	
State Zip						TAT Requested (days):																	
TX 79701																							
Phone:						PO #:																	
432-704-5440(Tel)																							
Email						WO #:																	
Project Name:						Project #:																	
Romeo Federal 22 Battery						88001187																	
Site						SSOW#																	
Sample Identification - Client ID (Lab ID)						Sample Date		Sample Time		Sample Type (G=grab) G=grab		Matrix (W=water S=solid O=wastefl, BT=Tissue, P=Air)		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Total Number of containers		Special Instructions/Note			
SB-1 (890-2173-1)						4/7/22		10 00		Mountain		Solid		X		X		X		1			
SB-2 (890-2173-2)						4/7/22		10 05		Mountain		Solid		X		X		X		1			
SB-3 (890-2173-3)						4/7/22		10 10		Mountain		Solid		X		X		X		1			
SB-4 (890-2173-4)						4/7/22		10 15		Mountain		Solid		X		X		X		1			
SB-5 (890-2173-5)						4/7/22		10 20		Mountain		Solid		X		X		X		1			
SB-6 (890-2173-6)						4/7/22		10 25		Mountain		Solid		X		X		X		1			
SB-7 (890-2173-7)						4/7/22		10 30		Mountain		Solid		X		X		X		1			
Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method analyze & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis, the matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation on status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC.																							
Possible Hazard Identification																							
Unconfirmed																							
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2																							
Empty Kit Relinquished by _____ Date _____ Time _____ Method of Shipment _____																							
Relinquished by _____ Date/Time _____ Company _____ Received by _____ Date/Time _____ Company _____																							
Custody Seals Intact _____ Custody Seal No _____ Cooler Temperature(s) °C and Other Remarks _____																							

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 890-2173-1

SDG Number: 12580761

Login Number: 2173

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 890-2173-1

SDG Number: 12580761

Login Number: 2173

List Number: 2

Creator: Teel, Brianna

List Source: Eurofins Midland

List Creation: 04/11/22 08:15 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	



Environment Testing America

ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-2183-1

Laboratory Sample Delivery Group: 12580761
Client Project/Site: Romeo Federal 22 Battery

For:

GHD Services Inc.
2135 South Loop 250 West
Midland, Texas 79703

Attn: Becky Haskell

A handwritten signature in black ink, appearing to read "Debbie Simmons".

Authorized for release by:
4/18/2022 6:21:15 PM

Debbie Simmons, Project Manager
(832)986-6768
Debbie.Simmons@et.eurofinsus.com

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

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

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Laboratory Job ID: 890-2183-1
SDG: 12580761

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Definitions/Glossary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2183-1
SDG: 12580761

Qualifiers

GC VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Eurofins Carlsbad

Case Narrative

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2183-1
SDG: 12580761

Job ID: 890-2183-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2183-1

Receipt

The samples were received on 4/11/2022 2:41 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 25.8°C

GC VOA

Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-23548 and analytical batch 880-23567 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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

GC Semi VOA

Method 8015MOD_NM: The method blank for preparation batch 880-23434 and analytical batch 880-23435 contained <AffectedAnalytes> above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-23434 and analytical batch 880-23435 recovered outside control limits for the following analytes: <AffectedAnalytes>.

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

HPLC/IC

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

Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2183-1
SDG: 12580761

Client Sample ID: P1-S

Lab Sample ID: 890-2183-1

Date Collected: 04/11/22 09:40

Matrix: Solid

Date Received: 04/11/22 14:41

Sample Depth: S

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *	0.00199	0.000383	mg/Kg	-	04/14/22 14:57	04/15/22 23:58	1
Toluene	0.00134	J	0.00199	0.000454	mg/Kg	-	04/14/22 14:57	04/15/22 23:58	1
Ethylbenzene	0.00123	J	0.00199	0.000563	mg/Kg	-	04/14/22 14:57	04/15/22 23:58	1
m-Xylene & p-Xylene	0.00218	J	0.00398	0.00101	mg/Kg	-	04/14/22 14:57	04/15/22 23:58	1
o-Xylene	0.00145	J	0.00199	0.000343	mg/Kg	-	04/14/22 14:57	04/15/22 23:58	1
Xylenes, Total	0.00363	J	0.00398	0.00101	mg/Kg	-	04/14/22 14:57	04/15/22 23:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	04/14/22 14:57	04/15/22 23:58	1
1,4-Difluorobenzene (Surr)	89		70 - 130	04/14/22 14:57	04/15/22 23:58	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00620		0.00398	0.00101	mg/Kg	-		04/18/22 15:09	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	16.5	J	49.9	15.0	mg/Kg	-		04/14/22 13:25	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9	15.0	mg/Kg	-	04/13/22 09:18	04/13/22 11:25	1
Diesel Range Organics (Over C10-C28)	16.5	J B *1	49.9	15.0	mg/Kg	-	04/13/22 09:18	04/13/22 11:25	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg	-	04/13/22 09:18	04/13/22 11:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	04/13/22 09:18	04/13/22 11:25	1
o-Terphenyl	95		70 - 130	04/13/22 09:18	04/13/22 11:25	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.7		4.96	0.851	mg/Kg	-		04/13/22 06:16	1

Client Sample ID: P1-.5

Lab Sample ID: 890-2183-2

Date Collected: 04/11/22 09:45

Matrix: Solid

Date Received: 04/11/22 14:41

Sample Depth: .5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *	0.00200	0.000385	mg/Kg	-	04/14/22 14:57	04/16/22 00:19	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg	-	04/14/22 14:57	04/16/22 00:19	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg	-	04/14/22 14:57	04/16/22 00:19	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg	-	04/14/22 14:57	04/16/22 00:19	1
o-Xylene	0.000567	J	0.00200	0.000344	mg/Kg	-	04/14/22 14:57	04/16/22 00:19	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg	-	04/14/22 14:57	04/16/22 00:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	04/14/22 14:57	04/16/22 00:19	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2183-1
SDG: 12580761

Client Sample ID: P1-.5

Lab Sample ID: 890-2183-2

Date Collected: 04/11/22 09:45

Matrix: Solid

Date Received: 04/11/22 14:41

Sample Depth: .5

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	85		70 - 130	04/14/22 14:57	04/16/22 00:19	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	0.00101	mg/Kg			04/18/22 15:09	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	16.2	J	50.0	15.0	mg/Kg			04/14/22 13:25	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0	15.0	mg/Kg		04/13/22 09:18	04/13/22 12:27	1
Diesel Range Organics (Over C10-C28)	16.2	J B *1	50.0	15.0	mg/Kg		04/13/22 09:18	04/13/22 12:27	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		04/13/22 09:18	04/13/22 12:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130				04/13/22 09:18	04/13/22 12:27	1
o-Terphenyl	89		70 - 130				04/13/22 09:18	04/13/22 12:27	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.5		5.03	0.863	mg/Kg			04/13/22 06:25	1

Client Sample ID: P2-S

Lab Sample ID: 890-2183-3

Date Collected: 04/11/22 10:00

Matrix: Solid

Date Received: 04/11/22 14:41

Sample Depth: S

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *+	0.00200	0.000386	mg/Kg		04/14/22 14:57	04/16/22 00:39	1
Toluene	<0.00200	U	0.00200	0.000457	mg/Kg		04/14/22 14:57	04/16/22 00:39	1
Ethylbenzene	<0.00200	U	0.00200	0.000566	mg/Kg		04/14/22 14:57	04/16/22 00:39	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	0.00101	mg/Kg		04/14/22 14:57	04/16/22 00:39	1
o-Xylene	<0.00200	U	0.00200	0.000345	mg/Kg		04/14/22 14:57	04/16/22 00:39	1
Xylenes, Total	<0.00401	U	0.00401	0.00101	mg/Kg		04/14/22 14:57	04/16/22 00:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	04/14/22 14:57	04/16/22 00:39	1
1,4-Difluorobenzene (Surr)	98		70 - 130	04/14/22 14:57	04/16/22 00:39	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	0.00101	mg/Kg			04/18/22 15:09	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	15.0	mg/Kg			04/14/22 13:25	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2183-1
SDG: 12580761

Client Sample ID: P2-S

Date Collected: 04/11/22 10:00

Date Received: 04/11/22 14:41

Sample Depth: S

Lab Sample ID: 890-2183-3

Matrix: Solid

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0	15.0	mg/Kg	-	04/13/22 09:18	04/13/22 12:48	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0	15.0	mg/Kg	-	04/13/22 09:18	04/13/22 12:48	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg	-	04/13/22 09:18	04/13/22 12:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130				04/13/22 09:18	04/13/22 12:48	1
o-Terphenyl	96		70 - 130				04/13/22 09:18	04/13/22 12:48	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.45		4.98	0.855	mg/Kg	-		04/13/22 06:34	1

Client Sample ID: P2-.5

Date Collected: 04/11/22 10:05

Date Received: 04/11/22 14:41

Sample Depth: .5

Lab Sample ID: 890-2183-4

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U *	0.00201	0.000387	mg/Kg	-	04/14/22 14:57	04/16/22 01:00	1
Toluene	<0.00201	U	0.00201	0.000458	mg/Kg	-	04/14/22 14:57	04/16/22 01:00	1
Ethylbenzene	<0.00201	U	0.00201	0.000567	mg/Kg	-	04/14/22 14:57	04/16/22 01:00	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	0.00101	mg/Kg	-	04/14/22 14:57	04/16/22 01:00	1
o-Xylene	<0.00201	U	0.00201	0.000345	mg/Kg	-	04/14/22 14:57	04/16/22 01:00	1
Xylenes, Total	<0.00402	U	0.00402	0.00101	mg/Kg	-	04/14/22 14:57	04/16/22 01:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130				04/14/22 14:57	04/16/22 01:00	1
1,4-Difluorobenzene (Surr)	97		70 - 130				04/14/22 14:57	04/16/22 01:00	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	0.00101	mg/Kg	-		04/18/22 15:09	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	15.0	mg/Kg	-		04/14/22 13:25	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0	15.0	mg/Kg	-	04/13/22 09:18	04/13/22 13:09	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0	15.0	mg/Kg	-	04/13/22 09:18	04/13/22 13:09	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg	-	04/13/22 09:18	04/13/22 13:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130				04/13/22 09:18	04/13/22 13:09	1
o-Terphenyl	96		70 - 130				04/13/22 09:18	04/13/22 13:09	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2183-1
SDG: 12580761

Client Sample ID: P2-.5

Date Collected: 04/11/22 10:05

Date Received: 04/11/22 14:41

Sample Depth: .5

Lab Sample ID: 890-2183-4

Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.58	J	5.05	0.867	mg/Kg	-		04/13/22 08:19	1

Client Sample ID: P3-S

Date Collected: 04/11/22 10:10

Date Received: 04/11/22 14:41

Sample Depth: S

Lab Sample ID: 890-2183-5

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *	0.00199	0.000383	mg/Kg	-	04/14/22 14:57	04/16/22 01:20	1
Toluene	<0.00199	U	0.00199	0.000454	mg/Kg	-	04/14/22 14:57	04/16/22 01:20	1
Ethylbenzene	<0.00199	U	0.00199	0.000563	mg/Kg	-	04/14/22 14:57	04/16/22 01:20	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00101	mg/Kg	-	04/14/22 14:57	04/16/22 01:20	1
o-Xylene	<0.00199	U	0.00199	0.000343	mg/Kg	-	04/14/22 14:57	04/16/22 01:20	1
Xylenes, Total	<0.00398	U	0.00398	0.00101	mg/Kg	-	04/14/22 14:57	04/16/22 01:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130				04/14/22 14:57	04/16/22 01:20	1
1,4-Difluorobenzene (Surr)	100		70 - 130				04/14/22 14:57	04/16/22 01:20	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	0.00101	mg/Kg	-		04/18/22 15:09	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	15.0	mg/Kg	-		04/14/22 13:25	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9	15.0	mg/Kg	-	04/13/22 09:18	04/13/22 13:29	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9	15.0	mg/Kg	-	04/13/22 09:18	04/13/22 13:29	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg	-	04/13/22 09:18	04/13/22 13:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130				04/13/22 09:18	04/13/22 13:29	1
o-Terphenyl	95		70 - 130				04/13/22 09:18	04/13/22 13:29	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	34.4		25.0	4.29	mg/Kg	-		04/13/22 15:55	5

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2183-1
SDG: 12580761

Client Sample ID: P3-.5

Lab Sample ID: 890-2183-6

Date Collected: 04/11/22 10:15

Matrix: Solid

Date Received: 04/11/22 14:41

Sample Depth: .5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U *	0.00198	0.000382	mg/Kg	-	04/14/22 14:57	04/16/22 01:41	1
Toluene	<0.00198	U	0.00198	0.000452	mg/Kg	-	04/14/22 14:57	04/16/22 01:41	1
Ethylbenzene	<0.00198	U	0.00198	0.000561	mg/Kg	-	04/14/22 14:57	04/16/22 01:41	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	0.00100	mg/Kg	-	04/14/22 14:57	04/16/22 01:41	1
o-Xylene	0.000557	J	0.00198	0.000341	mg/Kg	-	04/14/22 14:57	04/16/22 01:41	1
Xylenes, Total	<0.00397	U	0.00397	0.00100	mg/Kg	-	04/14/22 14:57	04/16/22 01:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	04/14/22 14:57	04/16/22 01:41	1
1,4-Difluorobenzene (Surr)	91		70 - 130	04/14/22 14:57	04/16/22 01:41	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	0.00100	mg/Kg	-		04/18/22 15:09	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	15.0	mg/Kg	-		04/14/22 13:25	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9	15.0	mg/Kg	-	04/13/22 09:18	04/13/22 13:50	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9	15.0	mg/Kg	-	04/13/22 09:18	04/13/22 13:50	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg	-	04/13/22 09:18	04/13/22 13:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130	04/13/22 09:18	04/13/22 13:50	1
o-Terphenyl	96		70 - 130	04/13/22 09:18	04/13/22 13:50	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.87		4.99	0.857	mg/Kg	-		04/13/22 13:28	1

Client Sample ID: P4-S

Lab Sample ID: 890-2183-7

Date Collected: 04/11/22 10:20

Matrix: Solid

Date Received: 04/11/22 14:41

Sample Depth: S

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U *	0.00201	0.000387	mg/Kg	-	04/14/22 14:57	04/16/22 02:01	1
Toluene	0.000768	J	0.00201	0.000459	mg/Kg	-	04/14/22 14:57	04/16/22 02:01	1
Ethylbenzene	<0.00201	U	0.00201	0.000568	mg/Kg	-	04/14/22 14:57	04/16/22 02:01	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	0.00102	mg/Kg	-	04/14/22 14:57	04/16/22 02:01	1
o-Xylene	0.000352	J	0.00201	0.000346	mg/Kg	-	04/14/22 14:57	04/16/22 02:01	1
Xylenes, Total	<0.00402	U	0.00402	0.00102	mg/Kg	-	04/14/22 14:57	04/16/22 02:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	04/14/22 14:57	04/16/22 02:01	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2183-1
SDG: 12580761

Client Sample ID: P4-S

Lab Sample ID: 890-2183-7

Date Collected: 04/11/22 10:20

Matrix: Solid

Date Received: 04/11/22 14:41

Sample Depth: S

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	92		70 - 130	04/14/22 14:57	04/16/22 02:01	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00112	J	0.00402	0.00102	mg/Kg			04/18/22 15:09	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	15.0	mg/Kg			04/14/22 13:25	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0	15.0	mg/Kg		04/13/22 09:18	04/13/22 14:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0	15.0	mg/Kg		04/13/22 09:18	04/13/22 14:11	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		04/13/22 09:18	04/13/22 14:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				04/13/22 09:18	04/13/22 14:11	1
o-Terphenyl	102		70 - 130				04/13/22 09:18	04/13/22 14:11	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.58	J	5.01	0.860	mg/Kg			04/13/22 16:04	1

Client Sample ID: P4-.5

Lab Sample ID: 890-2183-8

Date Collected: 04/11/22 10:25

Matrix: Solid

Date Received: 04/11/22 14:41

Sample Depth: .5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *	0.00199	0.000383	mg/Kg		04/14/22 14:57	04/16/22 02:22	1
Toluene	<0.00199	U	0.00199	0.000453	mg/Kg		04/14/22 14:57	04/16/22 02:22	1
Ethylbenzene	0.000769	J	0.00199	0.000562	mg/Kg		04/14/22 14:57	04/16/22 02:22	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00100	mg/Kg		04/14/22 14:57	04/16/22 02:22	1
o-Xylene	0.00168	J	0.00199	0.000342	mg/Kg		04/14/22 14:57	04/16/22 02:22	1
Xylenes, Total	0.00168	J	0.00398	0.00100	mg/Kg		04/14/22 14:57	04/16/22 02:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130	04/14/22 14:57	04/16/22 02:22	1
1,4-Difluorobenzene (Surr)	101		70 - 130	04/14/22 14:57	04/16/22 02:22	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00245	J	0.00398	0.00100	mg/Kg			04/18/22 15:09	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	15.0	mg/Kg			04/14/22 13:25	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2183-1
SDG: 12580761

Client Sample ID: P4-.5

Date Collected: 04/11/22 10:25

Date Received: 04/11/22 14:41

Sample Depth: .5

Lab Sample ID: 890-2183-8

Matrix: Solid

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0	15.0	mg/Kg	-	04/13/22 09:18	04/13/22 14:32	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0	15.0	mg/Kg	-	04/13/22 09:18	04/13/22 14:32	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg	-	04/13/22 09:18	04/13/22 14:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130				04/13/22 09:18	04/13/22 14:32	1
o-Terphenyl	89		70 - 130				04/13/22 09:18	04/13/22 14:32	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.03		4.99	0.857	mg/Kg	-		04/13/22 14:13	1

Client Sample ID: P5-S

Date Collected: 04/11/22 10:30

Date Received: 04/11/22 14:41

Sample Depth: S

Lab Sample ID: 890-2183-9

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *+	0.00200	0.000385	mg/Kg	-	04/14/22 14:57	04/16/22 02:42	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg	-	04/14/22 14:57	04/16/22 02:42	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg	-	04/14/22 14:57	04/16/22 02:42	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg	-	04/14/22 14:57	04/16/22 02:42	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg	-	04/14/22 14:57	04/16/22 02:42	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg	-	04/14/22 14:57	04/16/22 02:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130				04/14/22 14:57	04/16/22 02:42	1
1,4-Difluorobenzene (Surr)	101		70 - 130				04/14/22 14:57	04/16/22 02:42	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	0.00101	mg/Kg	-		04/18/22 15:09	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	15.0	mg/Kg	-		04/14/22 13:25	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0	15.0	mg/Kg	-	04/13/22 09:18	04/13/22 14:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0	15.0	mg/Kg	-	04/13/22 09:18	04/13/22 14:53	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg	-	04/13/22 09:18	04/13/22 14:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130				04/13/22 09:18	04/13/22 14:53	1
o-Terphenyl	87		70 - 130				04/13/22 09:18	04/13/22 14:53	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2183-1
SDG: 12580761

Client Sample ID: P5-S

Date Collected: 04/11/22 10:30

Date Received: 04/11/22 14:41

Sample Depth: S

Lab Sample ID: 890-2183-9

Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.48	J	5.00	0.858	mg/Kg			04/13/22 14:23	1

Client Sample ID: P5-.5

Date Collected: 04/11/22 10:35

Date Received: 04/11/22 14:41

Sample Depth: .5

Lab Sample ID: 890-2183-10

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *	0.00200	0.000384	mg/Kg		04/14/22 14:57	04/16/22 03:02	1
Toluene	<0.00200	U	0.00200	0.000455	mg/Kg		04/14/22 14:57	04/16/22 03:02	1
Ethylbenzene	<0.00200	U	0.00200	0.000564	mg/Kg		04/14/22 14:57	04/16/22 03:02	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	0.00101	mg/Kg		04/14/22 14:57	04/16/22 03:02	1
o-Xylene	<0.00200	U	0.00200	0.000343	mg/Kg		04/14/22 14:57	04/16/22 03:02	1
Xylenes, Total	<0.00399	U	0.00399	0.00101	mg/Kg		04/14/22 14:57	04/16/22 03:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130				04/14/22 14:57	04/16/22 03:02	1
1,4-Difluorobenzene (Surr)	101		70 - 130				04/14/22 14:57	04/16/22 03:02	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	0.00101	mg/Kg			04/18/22 15:09	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	15.0	mg/Kg			04/14/22 13:25	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9	15.0	mg/Kg		04/13/22 09:18	04/13/22 15:14	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9	15.0	mg/Kg		04/13/22 09:18	04/13/22 15:14	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg		04/13/22 09:18	04/13/22 15:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130				04/13/22 09:18	04/13/22 15:14	1
o-Terphenyl	95		70 - 130				04/13/22 09:18	04/13/22 15:14	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.13	J	5.04	0.865	mg/Kg			04/13/22 14:50	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2183-1
SDG: 12580761

Client Sample ID: P6-S

Lab Sample ID: 890-2183-11

Date Collected: 04/11/22 10:40

Matrix: Solid

Date Received: 04/11/22 14:41

Sample Depth: S

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg	-	04/14/22 17:00	04/15/22 18:12	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg	-	04/14/22 17:00	04/15/22 18:12	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg	-	04/14/22 17:00	04/15/22 18:12	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg	-	04/14/22 17:00	04/15/22 18:12	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg	-	04/14/22 17:00	04/15/22 18:12	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg	-	04/14/22 17:00	04/15/22 18:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	04/14/22 17:00	04/15/22 18:12	1
1,4-Difluorobenzene (Surr)	98		70 - 130	04/14/22 17:00	04/15/22 18:12	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	0.00101	mg/Kg	-		04/18/22 15:09	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	15.0	mg/Kg	-		04/14/22 13:25	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0	15.0	mg/Kg	-	04/13/22 09:18	04/13/22 15:56	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0	15.0	mg/Kg	-	04/13/22 09:18	04/13/22 15:56	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg	-	04/13/22 09:18	04/13/22 15:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	04/13/22 09:18	04/13/22 15:56	1
o-Terphenyl	99		70 - 130	04/13/22 09:18	04/13/22 15:56	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.92	J	4.98	0.855	mg/Kg	-		04/13/22 14:59	1

Client Sample ID: P6-.5

Lab Sample ID: 890-2183-12

Date Collected: 04/11/22 10:45

Matrix: Solid

Date Received: 04/11/22 14:41

Sample Depth: .5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	0.000387	mg/Kg	-	04/14/22 17:00	04/15/22 18:32	1
Toluene	0.00159	J	0.00201	0.000458	mg/Kg	-	04/14/22 17:00	04/15/22 18:32	1
Ethylbenzene	<0.00201	U	0.00201	0.000567	mg/Kg	-	04/14/22 17:00	04/15/22 18:32	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	0.00101	mg/Kg	-	04/14/22 17:00	04/15/22 18:32	1
o-Xylene	<0.00201	U	0.00201	0.000345	mg/Kg	-	04/14/22 17:00	04/15/22 18:32	1
Xylenes, Total	<0.00402	U	0.00402	0.00101	mg/Kg	-	04/14/22 17:00	04/15/22 18:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	04/14/22 17:00	04/15/22 18:32	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2183-1
SDG: 12580761

Client Sample ID: P6-.5

Lab Sample ID: 890-2183-12

Date Collected: 04/11/22 10:45

Matrix: Solid

Date Received: 04/11/22 14:41

Sample Depth: .5

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	103		70 - 130	04/14/22 17:00	04/15/22 18:32	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00159	J	0.00402	0.00101	mg/Kg			04/18/22 15:09	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	15.0	mg/Kg			04/14/22 13:25	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0	15.0	mg/Kg		04/13/22 09:18	04/13/22 16:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0	15.0	mg/Kg		04/13/22 09:18	04/13/22 16:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		04/13/22 09:18	04/13/22 16:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130				04/13/22 09:18	04/13/22 16:17	1
o-Terphenyl	100		70 - 130				04/13/22 09:18	04/13/22 16:17	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.14	J	4.99	0.857	mg/Kg			04/13/22 15:27	1

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Surrogate Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2183-1
SDG: 12580761

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1	DFBZ1
		(70-130)	(70-130)
890-2183-1	P1-S	89	89
890-2183-1 MS	P1-S	99	104
890-2183-1 MSD	P1-S	100	104
890-2183-2	P1-.5	89	85
890-2183-3	P2-S	101	98
890-2183-4	P2-.5	102	97
890-2183-5	P3-S	102	100
890-2183-6	P3-.5	102	91
890-2183-7	P4-S	94	92
890-2183-8	P4-.5	83	101
890-2183-9	P5-S	103	101
890-2183-10	P5-.5	104	101
890-2183-11	P6-S	101	98
890-2183-12	P6-.5	106	103
LCS 880-23548/1-A	Lab Control Sample	96	103
LCS 880-23549/1-A	Lab Control Sample	95	101
LCSD 880-23548/2-A	Lab Control Sample Dup	98	104
LCSD 880-23549/2-A	Lab Control Sample Dup	97	102
MB 880-23548/5-A	Method Blank	100	96
MB 880-23549/5-A	Method Blank	95	92

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1	OTPH1
		(70-130)	(70-130)
890-2183-1	P1-S	95	95
890-2183-1 MS	P1-S	83	75
890-2183-1 MSD	P1-S	97	86
890-2183-2	P1-.5	90	89
890-2183-3	P2-S	97	96
890-2183-4	P2-.5	97	96
890-2183-5	P3-S	95	95
890-2183-6	P3-.5	98	96
890-2183-7	P4-S	102	102
890-2183-8	P4-.5	89	89
890-2183-9	P5-S	86	87
890-2183-10	P5-.5	97	95
890-2183-11	P6-S	99	99
890-2183-12	P6-.5	101	100
LCS 880-23434/2-A	Lab Control Sample	98	89
LCSD 880-23434/3-A	Lab Control Sample Dup	125	111
MB 880-23434/1-A	Method Blank	101	107

Surrogate Legend

1CO = 1-Chlorooctane

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Surrogate Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery
OTPH = o-Terphenyl

Job ID: 890-2183-1
SDG: 12580761

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2183-1
SDG: 12580761

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-23548/5-A

Matrix: Solid

Analysis Batch: 23567

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 23548

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		04/14/22 14:57	04/15/22 23:37	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		04/14/22 14:57	04/15/22 23:37	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		04/14/22 14:57	04/15/22 23:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		04/14/22 14:57	04/15/22 23:37	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		04/14/22 14:57	04/15/22 23:37	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		04/14/22 14:57	04/15/22 23:37	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	04/14/22 14:57	04/15/22 23:37	1
1,4-Difluorobenzene (Surr)	96		70 - 130	04/14/22 14:57	04/15/22 23:37	1

Lab Sample ID: LCS 880-23548/1-A

Matrix: Solid

Analysis Batch: 23567

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 23548

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1414	*+	mg/Kg		141	70 - 130
Toluene	0.100	0.1278		mg/Kg		128	70 - 130
Ethylbenzene	0.100	0.1105		mg/Kg		111	70 - 130
m-Xylene & p-Xylene	0.200	0.2272		mg/Kg		114	70 - 130
o-Xylene	0.100	0.1110		mg/Kg		111	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: LCSD 880-23548/2-A

Matrix: Solid

Analysis Batch: 23567

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 23548

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1390	*+	mg/Kg		139	70 - 130	2	35
Toluene	0.100	0.1249		mg/Kg		125	70 - 130	2	35
Ethylbenzene	0.100	0.1093		mg/Kg		109	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.2255		mg/Kg		113	70 - 130	1	35
o-Xylene	0.100	0.1083		mg/Kg		108	70 - 130	3	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: 890-2183-1 MS

Matrix: Solid

Analysis Batch: 23567

Client Sample ID: P1-S

Prep Type: Total/NA

Prep Batch: 23548

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U *+	0.100	0.1175		mg/Kg		117	70 - 130
Toluene	0.00134	J	0.100	0.1062		mg/Kg		105	70 - 130

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2183-1
SDG: 12580761

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-2183-1 MS

Matrix: Solid

Analysis Batch: 23567

Client Sample ID: P1-S

Prep Type: Total/NA

Prep Batch: 23548

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	0.00123	J	0.100	0.09053		mg/Kg		89	70 - 130
m-Xylene & p-Xylene	0.00218	J	0.200	0.1878		mg/Kg		93	70 - 130
o-Xylene	0.00145	J	0.100	0.09290		mg/Kg		91	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: 890-2183-1 MSD

Matrix: Solid

Analysis Batch: 23567

Client Sample ID: P1-S

Prep Type: Total/NA

Prep Batch: 23548

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	<0.00199	U *	0.101	0.1289		mg/Kg		128	70 - 130	9	35
Toluene	0.00134	J	0.101	0.1164		mg/Kg		114	70 - 130	9	35
Ethylbenzene	0.00123	J	0.101	0.1004		mg/Kg		98	70 - 130	10	35
m-Xylene & p-Xylene	0.00218	J	0.202	0.2071		mg/Kg		101	70 - 130	10	35
o-Xylene	0.00145	J	0.101	0.1011		mg/Kg		99	70 - 130	8	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: MB 880-23549/5-A

Matrix: Solid

Analysis Batch: 23567

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 23549

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		04/14/22 15:07	04/15/22 12:22	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		04/14/22 15:07	04/15/22 12:22	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		04/14/22 15:07	04/15/22 12:22	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		04/14/22 15:07	04/15/22 12:22	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		04/14/22 15:07	04/15/22 12:22	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		04/14/22 15:07	04/15/22 12:22	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	04/14/22 15:07	04/15/22 12:22	1
1,4-Difluorobenzene (Surr)	92		70 - 130	04/14/22 15:07	04/15/22 12:22	1

Lab Sample ID: LCS 880-23549/1-A

Matrix: Solid

Analysis Batch: 23567

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 23549

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1175		mg/Kg		118	70 - 130
Toluene	0.100	0.1280		mg/Kg		128	70 - 130
Ethylbenzene	0.100	0.1109		mg/Kg		111	70 - 130
m-Xylene & p-Xylene	0.200	0.2285		mg/Kg		114	70 - 130

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2183-1
SDG: 12580761

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 880-23549/1-A

Matrix: Solid

Analysis Batch: 23567

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 23549

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
o-Xylene	0.100	0.1077		mg/Kg		108	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: LCSD 880-23549/2-A

Matrix: Solid

Analysis Batch: 23567

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 23549

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.1137		mg/Kg		114	70 - 130	3	35
Toluene	0.100	0.1244		mg/Kg		124	70 - 130	3	35
Ethylbenzene	0.100	0.1083		mg/Kg		108	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.2230		mg/Kg		111	70 - 130	2	35
o-Xylene	0.100	0.1053		mg/Kg		105	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-23434/1-A

Matrix: Solid

Analysis Batch: 23435

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 23434

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	17.10	J	50.0	15.0	mg/Kg		04/13/22 09:18	04/13/22 10:24	1
Diesel Range Organics (Over C10-C28)	17.37	J	50.0	15.0	mg/Kg		04/13/22 09:18	04/13/22 10:24	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		04/13/22 09:18	04/13/22 10:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	04/13/22 09:18	04/13/22 10:24	1
o-Terphenyl	107		70 - 130	04/13/22 09:18	04/13/22 10:24	1

Lab Sample ID: LCS 880-23434/2-A

Matrix: Solid

Analysis Batch: 23435

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 23434

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	838.6		mg/Kg		84	70 - 130
Diesel Range Organics (Over C10-C28)	1000	887.9		mg/Kg		89	70 - 130

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2183-1
SDG: 12580761

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 880-23434/2-A

Matrix: Solid

Analysis Batch: 23435

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 23434

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	98		70 - 130
o-Terphenyl	89		70 - 130

Lab Sample ID: LCSD 880-23434/3-A

Matrix: Solid

Analysis Batch: 23435

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 23434

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1052	*1	mg/Kg		105	70 - 130	23	20
Diesel Range Organics (Over C10-C28)			1000	1099	*1	mg/Kg		110	70 - 130	21	20
Surrogate	LCSD	LCSD									
	%Recovery	Qualifier									
1-Chlorooctane	125										
o-Terphenyl	111										

Lab Sample ID: 890-2183-1 MS

Matrix: Solid

Analysis Batch: 23435

Client Sample ID: P1-S

Prep Type: Total/NA

Prep Batch: 23434

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	1000	804.3		mg/Kg		80	70 - 130		
Diesel Range Organics (Over C10-C28)	16.5	J B *1	1000	775.2		mg/Kg		76	70 - 130		
Surrogate	MS	MS									
	%Recovery	Qualifier									
1-Chlorooctane	83										
o-Terphenyl	75										

Lab Sample ID: 890-2183-1 MSD

Matrix: Solid

Analysis Batch: 23435

Client Sample ID: P1-S

Prep Type: Total/NA

Prep Batch: 23434

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	998	885.8		mg/Kg		89	70 - 130	10	20
Diesel Range Organics (Over C10-C28)	16.5	J B *1	998	897.0		mg/Kg		88	70 - 130	15	20
Surrogate	MSD	MSD									
	%Recovery	Qualifier									
1-Chlorooctane	97										
o-Terphenyl	86										

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2183-1
SDG: 12580761

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-23421/1-A

Matrix: Solid

Analysis Batch: 23424

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	0.858	mg/Kg			04/13/22 02:08	1

Lab Sample ID: LCS 880-23421/2-A

Matrix: Solid

Analysis Batch: 23424

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	249.0		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-23421/3-A

Matrix: Solid

Analysis Batch: 23424

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	242.0		mg/Kg		97	90 - 110	3	20

Lab Sample ID: MB 880-23423/1-A

Matrix: Solid

Analysis Batch: 23440

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	0.858	mg/Kg			04/13/22 11:28	1

Lab Sample ID: LCS 880-23423/2-A

Matrix: Solid

Analysis Batch: 23440

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	237.3		mg/Kg		95	90 - 110

Lab Sample ID: LCSD 880-23423/3-A

Matrix: Solid

Analysis Batch: 23440

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	240.4		mg/Kg		96	90 - 110	1	20

Lab Sample ID: 890-2183-9 MS

Matrix: Solid

Analysis Batch: 23440

Client Sample ID: P5-S

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	4.48	J	250	238.8		mg/Kg		94	90 - 110

Lab Sample ID: 890-2183-9 MSD

Matrix: Solid

Analysis Batch: 23440

Client Sample ID: P5-S

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	4.48	J	250	236.4		mg/Kg		93	90 - 110	1	20

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2183-1
SDG: 12580761

GC VOA

Prep Batch: 23548

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2183-1	P1-S	Total/NA	Solid	5035	
890-2183-2	P1-.5	Total/NA	Solid	5035	
890-2183-3	P2-S	Total/NA	Solid	5035	
890-2183-4	P2-.5	Total/NA	Solid	5035	
890-2183-5	P3-S	Total/NA	Solid	5035	
890-2183-6	P3-.5	Total/NA	Solid	5035	
890-2183-7	P4-S	Total/NA	Solid	5035	
890-2183-8	P4-.5	Total/NA	Solid	5035	
890-2183-9	P5-S	Total/NA	Solid	5035	
890-2183-10	P5-.5	Total/NA	Solid	5035	
MB 880-23548/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-23548/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-23548/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2183-1 MS	P1-S	Total/NA	Solid	5035	
890-2183-1 MSD	P1-S	Total/NA	Solid	5035	

Prep Batch: 23549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2183-11	P6-S	Total/NA	Solid	5035	
890-2183-12	P6-.5	Total/NA	Solid	5035	
MB 880-23549/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-23549/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-23549/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 23567

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2183-1	P1-S	Total/NA	Solid	8021B	23548
890-2183-2	P1-.5	Total/NA	Solid	8021B	23548
890-2183-3	P2-S	Total/NA	Solid	8021B	23548
890-2183-4	P2-.5	Total/NA	Solid	8021B	23548
890-2183-5	P3-S	Total/NA	Solid	8021B	23548
890-2183-6	P3-.5	Total/NA	Solid	8021B	23548
890-2183-7	P4-S	Total/NA	Solid	8021B	23548
890-2183-8	P4-.5	Total/NA	Solid	8021B	23548
890-2183-9	P5-S	Total/NA	Solid	8021B	23548
890-2183-10	P5-.5	Total/NA	Solid	8021B	23548
890-2183-11	P6-S	Total/NA	Solid	8021B	23549
890-2183-12	P6-.5	Total/NA	Solid	8021B	23549
MB 880-23548/5-A	Method Blank	Total/NA	Solid	8021B	23548
MB 880-23549/5-A	Method Blank	Total/NA	Solid	8021B	23549
LCS 880-23548/1-A	Lab Control Sample	Total/NA	Solid	8021B	23548
LCS 880-23549/1-A	Lab Control Sample	Total/NA	Solid	8021B	23549
LCSD 880-23548/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	23548
LCSD 880-23549/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	23549
890-2183-1 MS	P1-S	Total/NA	Solid	8021B	23548
890-2183-1 MSD	P1-S	Total/NA	Solid	8021B	23548

Analysis Batch: 23747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2183-1	P1-S	Total/NA	Solid	Total BTEX	
890-2183-2	P1-.5	Total/NA	Solid	Total BTEX	

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2183-1
SDG: 12580761

GC VOA (Continued)

Analysis Batch: 23747 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2183-3	P2-S	Total/NA	Solid	Total BTEX	
890-2183-4	P2-.5	Total/NA	Solid	Total BTEX	
890-2183-5	P3-S	Total/NA	Solid	Total BTEX	
890-2183-6	P3-.5	Total/NA	Solid	Total BTEX	
890-2183-7	P4-S	Total/NA	Solid	Total BTEX	
890-2183-8	P4-.5	Total/NA	Solid	Total BTEX	
890-2183-9	P5-S	Total/NA	Solid	Total BTEX	
890-2183-10	P5-.5	Total/NA	Solid	Total BTEX	
890-2183-11	P6-S	Total/NA	Solid	Total BTEX	
890-2183-12	P6-.5	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 23434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2183-1	P1-S	Total/NA	Solid	8015NM Prep	
890-2183-2	P1-.5	Total/NA	Solid	8015NM Prep	
890-2183-3	P2-S	Total/NA	Solid	8015NM Prep	
890-2183-4	P2-.5	Total/NA	Solid	8015NM Prep	
890-2183-5	P3-S	Total/NA	Solid	8015NM Prep	
890-2183-6	P3-.5	Total/NA	Solid	8015NM Prep	
890-2183-7	P4-S	Total/NA	Solid	8015NM Prep	
890-2183-8	P4-.5	Total/NA	Solid	8015NM Prep	
890-2183-9	P5-S	Total/NA	Solid	8015NM Prep	
890-2183-10	P5-.5	Total/NA	Solid	8015NM Prep	
890-2183-11	P6-S	Total/NA	Solid	8015NM Prep	
890-2183-12	P6-.5	Total/NA	Solid	8015NM Prep	
MB 880-23434/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-23434/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-23434/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2183-1 MS	P1-S	Total/NA	Solid	8015NM Prep	
890-2183-1 MSD	P1-S	Total/NA	Solid	8015NM Prep	

Analysis Batch: 23435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2183-1	P1-S	Total/NA	Solid	8015B NM	23434
890-2183-2	P1-.5	Total/NA	Solid	8015B NM	23434
890-2183-3	P2-S	Total/NA	Solid	8015B NM	23434
890-2183-4	P2-.5	Total/NA	Solid	8015B NM	23434
890-2183-5	P3-S	Total/NA	Solid	8015B NM	23434
890-2183-6	P3-.5	Total/NA	Solid	8015B NM	23434
890-2183-7	P4-S	Total/NA	Solid	8015B NM	23434
890-2183-8	P4-.5	Total/NA	Solid	8015B NM	23434
890-2183-9	P5-S	Total/NA	Solid	8015B NM	23434
890-2183-10	P5-.5	Total/NA	Solid	8015B NM	23434
890-2183-11	P6-S	Total/NA	Solid	8015B NM	23434
890-2183-12	P6-.5	Total/NA	Solid	8015B NM	23434
MB 880-23434/1-A	Method Blank	Total/NA	Solid	8015B NM	23434
LCS 880-23434/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	23434
LCSD 880-23434/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	23434
890-2183-1 MS	P1-S	Total/NA	Solid	8015B NM	23434

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2183-1
SDG: 12580761

GC Semi VOA (Continued)

Analysis Batch: 23435 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2183-1 MSD	P1-S	Total/NA	Solid	8015B NM	23434

Analysis Batch: 23527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2183-1	P1-S	Total/NA	Solid	8015 NM	
890-2183-2	P1-.5	Total/NA	Solid	8015 NM	
890-2183-3	P2-S	Total/NA	Solid	8015 NM	
890-2183-4	P2-.5	Total/NA	Solid	8015 NM	
890-2183-5	P3-S	Total/NA	Solid	8015 NM	
890-2183-6	P3-.5	Total/NA	Solid	8015 NM	
890-2183-7	P4-S	Total/NA	Solid	8015 NM	
890-2183-8	P4-.5	Total/NA	Solid	8015 NM	
890-2183-9	P5-S	Total/NA	Solid	8015 NM	
890-2183-10	P5-.5	Total/NA	Solid	8015 NM	
890-2183-11	P6-S	Total/NA	Solid	8015 NM	
890-2183-12	P6-.5	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 23421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2183-1	P1-S	Soluble	Solid	DI Leach	
890-2183-2	P1-.5	Soluble	Solid	DI Leach	
890-2183-3	P2-S	Soluble	Solid	DI Leach	
890-2183-4	P2-.5	Soluble	Solid	DI Leach	
MB 880-23421/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-23421/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-23421/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Leach Batch: 23423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2183-5	P3-S	Soluble	Solid	DI Leach	
890-2183-6	P3-.5	Soluble	Solid	DI Leach	
890-2183-7	P4-S	Soluble	Solid	DI Leach	
890-2183-8	P4-.5	Soluble	Solid	DI Leach	
890-2183-9	P5-S	Soluble	Solid	DI Leach	
890-2183-10	P5-.5	Soluble	Solid	DI Leach	
890-2183-11	P6-S	Soluble	Solid	DI Leach	
890-2183-12	P6-.5	Soluble	Solid	DI Leach	
MB 880-23423/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-23423/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-23423/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2183-9 MS	P5-S	Soluble	Solid	DI Leach	
890-2183-9 MSD	P5-S	Soluble	Solid	DI Leach	

Analysis Batch: 23424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2183-1	P1-S	Soluble	Solid	300.0	23421
890-2183-2	P1-.5	Soluble	Solid	300.0	23421
890-2183-3	P2-S	Soluble	Solid	300.0	23421
890-2183-4	P2-.5	Soluble	Solid	300.0	23421

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2183-1
SDG: 12580761

HPLC/IC (Continued)

Analysis Batch: 23424 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-23421/1-A	Method Blank	Soluble	Solid	300.0	23421
LCS 880-23421/2-A	Lab Control Sample	Soluble	Solid	300.0	23421
LCSD 880-23421/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	23421

Analysis Batch: 23440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2183-5	P3-S	Soluble	Solid	300.0	23423
890-2183-6	P3-.5	Soluble	Solid	300.0	23423
890-2183-7	P4-S	Soluble	Solid	300.0	23423
890-2183-8	P4-.5	Soluble	Solid	300.0	23423
890-2183-9	P5-S	Soluble	Solid	300.0	23423
890-2183-10	P5-.5	Soluble	Solid	300.0	23423
890-2183-11	P6-S	Soluble	Solid	300.0	23423
890-2183-12	P6-.5	Soluble	Solid	300.0	23423
MB 880-23423/1-A	Method Blank	Soluble	Solid	300.0	23423
LCS 880-23423/2-A	Lab Control Sample	Soluble	Solid	300.0	23423
LCSD 880-23423/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	23423
890-2183-9 MS	P5-S	Soluble	Solid	300.0	23423
890-2183-9 MSD	P5-S	Soluble	Solid	300.0	23423

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2183-1
SDG: 12580761

Client Sample ID: P1-S

Date Collected: 04/11/22 09:40

Date Received: 04/11/22 14:41

Lab Sample ID: 890-2183-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	23548	04/14/22 14:57	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23567	04/15/22 23:58	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23747	04/18/22 15:09	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23527	04/14/22 13:25	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23434	04/13/22 09:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23435	04/13/22 11:25	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	23421	04/12/22 17:07	CH	XEN MID
Soluble	Analysis	300.0		1			23424	04/13/22 06:16	CH	XEN MID

Client Sample ID: P1-5

Date Collected: 04/11/22 09:45

Date Received: 04/11/22 14:41

Lab Sample ID: 890-2183-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	23548	04/14/22 14:57	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23567	04/16/22 00:19	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23747	04/18/22 15:09	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23527	04/14/22 13:25	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	23434	04/13/22 09:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23435	04/13/22 12:27	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	23421	04/12/22 17:07	CH	XEN MID
Soluble	Analysis	300.0		1			23424	04/13/22 06:25	CH	XEN MID

Client Sample ID: P2-S

Date Collected: 04/11/22 10:00

Date Received: 04/11/22 14:41

Lab Sample ID: 890-2183-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	23548	04/14/22 14:57	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23567	04/16/22 00:39	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23747	04/18/22 15:09	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23527	04/14/22 13:25	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23434	04/13/22 09:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23435	04/13/22 12:48	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	23421	04/12/22 17:07	CH	XEN MID
Soluble	Analysis	300.0		1			23424	04/13/22 06:34	CH	XEN MID

Client Sample ID: P2-5

Date Collected: 04/11/22 10:05

Date Received: 04/11/22 14:41

Lab Sample ID: 890-2183-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	23548	04/14/22 14:57	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23567	04/16/22 01:00	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23747	04/18/22 15:09	AJ	XEN MID

Eurofins Carlsbad

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2183-1
SDG: 12580761

Client Sample ID: P2-.5

Date Collected: 04/11/22 10:05

Date Received: 04/11/22 14:41

Lab Sample ID: 890-2183-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			23527	04/14/22 13:25	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23434	04/13/22 09:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23435	04/13/22 13:09	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	23421	04/12/22 17:07	CH	XEN MID
Soluble	Analysis	300.0		1			23424	04/13/22 08:19	CH	XEN MID

Client Sample ID: P3-S

Date Collected: 04/11/22 10:10

Date Received: 04/11/22 14:41

Lab Sample ID: 890-2183-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	23548	04/14/22 14:57	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23567	04/16/22 01:20	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23747	04/18/22 15:09	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23527	04/14/22 13:25	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23434	04/13/22 09:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23435	04/13/22 13:29	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	23423	04/12/22 17:14	CH	XEN MID
Soluble	Analysis	300.0		5			23440	04/13/22 15:55	SC	XEN MID

Client Sample ID: P3-.5

Date Collected: 04/11/22 10:15

Date Received: 04/11/22 14:41

Lab Sample ID: 890-2183-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	23548	04/14/22 14:57	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23567	04/16/22 01:41	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23747	04/18/22 15:09	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23527	04/14/22 13:25	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	23434	04/13/22 09:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23435	04/13/22 13:50	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	23423	04/12/22 17:14	CH	XEN MID
Soluble	Analysis	300.0		1			23440	04/13/22 13:28	SC	XEN MID

Client Sample ID: P4-S

Date Collected: 04/11/22 10:20

Date Received: 04/11/22 14:41

Lab Sample ID: 890-2183-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	23548	04/14/22 14:57	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23567	04/16/22 02:01	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23747	04/18/22 15:09	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23527	04/14/22 13:25	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	23434	04/13/22 09:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23435	04/13/22 14:11	AJ	XEN MID

Eurofins Carlsbad

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2183-1
SDG: 12580761

Client Sample ID: P4-S

Date Collected: 04/11/22 10:20

Date Received: 04/11/22 14:41

Lab Sample ID: 890-2183-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.99 g	50 mL	23423	04/12/22 17:14	CH	XEN MID
Soluble	Analysis	300.0		1			23440	04/13/22 16:04	SC	XEN MID

Client Sample ID: P4-5

Date Collected: 04/11/22 10:25

Date Received: 04/11/22 14:41

Lab Sample ID: 890-2183-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	23548	04/14/22 14:57	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23567	04/16/22 02:22	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23747	04/18/22 15:09	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23527	04/14/22 13:25	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23434	04/13/22 09:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23435	04/13/22 14:32	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	23423	04/12/22 17:14	CH	XEN MID
Soluble	Analysis	300.0		1			23440	04/13/22 14:13	SC	XEN MID

Client Sample ID: P5-S

Date Collected: 04/11/22 10:30

Date Received: 04/11/22 14:41

Lab Sample ID: 890-2183-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	23548	04/14/22 14:57	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23567	04/16/22 02:42	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23747	04/18/22 15:09	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23527	04/14/22 13:25	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23434	04/13/22 09:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23435	04/13/22 14:53	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	23423	04/12/22 17:14	CH	XEN MID
Soluble	Analysis	300.0		1			23440	04/13/22 14:23	SC	XEN MID

Client Sample ID: P5-5

Date Collected: 04/11/22 10:35

Date Received: 04/11/22 14:41

Lab Sample ID: 890-2183-10

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	23548	04/14/22 14:57	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23567	04/16/22 03:02	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23747	04/18/22 15:09	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23527	04/14/22 13:25	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23434	04/13/22 09:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23435	04/13/22 15:14	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	23423	04/12/22 17:14	CH	XEN MID
Soluble	Analysis	300.0		1			23440	04/13/22 14:50	SC	XEN MID

Eurofins Carlsbad

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2183-1
SDG: 12580761

Client Sample ID: P6-S

Lab Sample ID: 890-2183-11

Date Collected: 04/11/22 10:40

Matrix: Solid

Date Received: 04/11/22 14:41

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	23549	04/14/22 17:00	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23567	04/15/22 18:12	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23747	04/18/22 15:09	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23527	04/14/22 13:25	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	23434	04/13/22 09:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23435	04/13/22 15:56	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	23423	04/12/22 17:14	CH	XEN MID
Soluble	Analysis	300.0		1			23440	04/13/22 14:59	SC	XEN MID

Client Sample ID: P6-5

Lab Sample ID: 890-2183-12

Date Collected: 04/11/22 10:45

Matrix: Solid

Date Received: 04/11/22 14:41

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	23549	04/14/22 17:00	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23567	04/15/22 18:32	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23747	04/18/22 15:09	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23527	04/14/22 13:25	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	23434	04/13/22 09:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23435	04/13/22 16:17	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	23423	04/12/22 17:14	CH	XEN MID
Soluble	Analysis	300.0		1			23440	04/13/22 15:27	SC	XEN MID

Laboratory References:

XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Carlsbad

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2183-1
SDG: 12580761

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2183-1
SDG: 12580761

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Carlsbad

Sample Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2183-1
SDG: 12580761

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2183-1	P1-S	Solid	04/11/22 09:40	04/11/22 14:41	S
890-2183-2	P1-.5	Solid	04/11/22 09:45	04/11/22 14:41	.5
890-2183-3	P2-S	Solid	04/11/22 10:00	04/11/22 14:41	S
890-2183-4	P2-.5	Solid	04/11/22 10:05	04/11/22 14:41	.5
890-2183-5	P3-S	Solid	04/11/22 10:10	04/11/22 14:41	S
890-2183-6	P3-.5	Solid	04/11/22 10:15	04/11/22 14:41	.5
890-2183-7	P4-S	Solid	04/11/22 10:20	04/11/22 14:41	S
890-2183-8	P4-.5	Solid	04/11/22 10:25	04/11/22 14:41	.5
890-2183-9	P5-S	Solid	04/11/22 10:30	04/11/22 14:41	S
890-2183-10	P5-.5	Solid	04/11/22 10:35	04/11/22 14:41	.5
890-2183-11	P6-S	Solid	04/11/22 10:40	04/11/22 14:41	S
890-2183-12	P6-.5	Solid	04/11/22 10:45	04/11/22 14:41	.5

Lakeland, Florida (863-646-8526)

Tampa, Florida (813-620-2000)

Xenco Job #

Page 1 Of 2

[illegible]

Service Center - San Antonio, Texas (210-509-3334)

www.xenco.com

Odessa, Texas (432-563-1800)	
Norcross, Georgia (770-449-8800)	
Xenoco Quote #	Xenoco Job #

Lakeland, Florida (863-646-8526)
Tampa, Florida (813-620-2000)

CHAIN OF CUSTODY

Page 2 Of 2

Service Center - San Antonio, Texas (210-509-3334)										www.xenco.com										Xenco Quote #										Xenco Job #									
Client / Reporting Information Company Name / Branch: GHD/Midland Company Address: 2135 S. Loop 250 West Midland TX										Project Information Project Name/Number: Romeo Federal 22 Battery / 12580761 Project Location: Eddy County, New Mexico Invoice To: Centennial Resource Development, Inc / Nikki Mishler PO Number: NA										Analytical Information										Matrix Codes S = Soil/Sed/Solid GW = Ground Water DW = Drinking Water P = Product SW = Surface water SL = Sludge OW = Ocean/Sea Water W = Wipe O = Oil WW = Waste Water A = Air									
Field ID / Point of Collection No. 1 P6-S 2 P6-S 3 4 5 6 7 8 9 10										Collection Sample Depth 1 Date 04/22/14 Time 1040 Matrix S # of bottles 1 HCl 1 NaOH/Zn Acetate 1 HNO3 1 H2SO4 1 NaOH 1 NaHSO4 1 MEQH 1 NONE 1										TPH By 8015 Mod (GRO, DRO & MRO) 1 BTEX 8021 B 1 Chloride 600 1										Field Comments									
Turnaround Time (Business days) ☐ Same Day TAT ☒ 5 Day TAT ☐ Next Day EMERGENCY ☐ 7 Day TAT ☐ 2 Day EMERGENCY ☐ Contract TAT ☐ 3 Day EMERGENCY										Data Deliverable Information ☐ Level II Std QC ☐ Level III Std QC+ Forms ☐ Level 3 (CLP Forms) ☐ TRRP Checklist										Report MDLs and J values. ☐ Level IV (Full Data Pkg /raw data) ☐ TRRP Level IV ☐ UST / RG -411 ☐ TRRP Checklist										No SSOW / Direct Bill to EOG									
TAT Starts Day received by Lab, if received by 5:00 pm Relinquished by Sampler: [Signature] Relinquished by: [Signature] Relinquished by: [Signature]										SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY Date Time: 04/22/14 Received By: [Signature] Date Time: 04/22/14 Received By: [Signature]										Date Time: 04/22/14 Received By: [Signature] Date Time: 04/22/14 Received By: [Signature]										Date Time: 04/22/14 Received By: [Signature] Date Time: 04/22/14 Received By: [Signature]									
Relinquished by: 5										Date Time: 5										Received By: 5										Preserved where applicable On Ice ☒ Cooler Temp. 210.0/25.8 Thermo. Corr. Factor									

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 890-2183-1

SDG Number: 12580761

Login Number: 2183**List Number: 1****Creator: Clifton, Cloe****List Source: Eurofins Carlsbad**

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

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 890-2183-1

SDG Number: 12580761

Login Number: 2183**List Number: 2****Creator: Carlisle, Spring****List Source: Eurofins Midland****List Creation: 04/12/22 06:10 PM**

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	



Environment Testing America

ANALYTICAL REPORT

Eurofins Carlsbad
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Laboratory Job ID: 890-2186-1

Laboratory Sample Delivery Group: 12580761
Client Project/Site: Romeo Federal 22 Battery

For:

GHD Services Inc.
2135 South Loop 250 West
Midland, Texas 79703

Attn: Becky Haskell

A handwritten signature in cursive script, appearing to read "Debbie Simmons".

Authorized for release by:
4/14/2022 5:36:40 PM

Debbie Simmons, Project Manager
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Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Laboratory Job ID: 890-2186-1
SDG: 12580761

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Definitions/Glossary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2186-1
SDG: 12580761

Qualifiers

GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

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Case Narrative

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2186-1
SDG: 12580761

Job ID: 890-2186-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2186-1

Comments

No additional comments.

Receipt

The samples were received on 4/12/2022 1:10 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 24.8° C.

GC VOA

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

GC Semi VOA

Method 8015B NM: Surrogate recovery for the following sample was outside control limits: (LCS 880-23451/2-A). Evidence of matrix interferences is not obvious.

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

General Chemistry

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

Organic Prep

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

VOA Prep

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

Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2186-1
SDG: 12580761

Client Sample ID: P7-S

Lab Sample ID: 890-2186-1

Date Collected: 04/12/22 11:30

Matrix: Solid

Date Received: 04/12/22 13:10

Sample Depth: SURFACE

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000615	J	0.00200	0.000386	mg/Kg	-	04/13/22 13:29	04/13/22 19:49	1
Toluene	0.000579	J	0.00200	0.000457	mg/Kg	-	04/13/22 13:29	04/13/22 19:49	1
Ethylbenzene	<0.00200	U	0.00200	0.000566	mg/Kg	-	04/13/22 13:29	04/13/22 19:49	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	0.00101	mg/Kg	-	04/13/22 13:29	04/13/22 19:49	1
o-Xylene	<0.00200	U	0.00200	0.000345	mg/Kg	-	04/13/22 13:29	04/13/22 19:49	1
Xylenes, Total	<0.00401	U	0.00401	0.00101	mg/Kg	-	04/13/22 13:29	04/13/22 19:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130	04/13/22 13:29	04/13/22 19:49	1
1,4-Difluorobenzene (Surr)	98		70 - 130	04/13/22 13:29	04/13/22 19:49	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00119	J	0.00401	0.00101	mg/Kg	-		04/14/22 12:45	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	37.8	J	49.9	15.0	mg/Kg	-		04/14/22 14:43	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	16.0	J	49.9	15.0	mg/Kg	-	04/13/22 11:15	04/14/22 02:17	1
Diesel Range Organics (Over C10-C28)	21.8	J B	49.9	15.0	mg/Kg	-	04/13/22 11:15	04/14/22 02:17	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg	-	04/13/22 11:15	04/14/22 02:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	04/13/22 11:15	04/14/22 02:17	1
o-Terphenyl	107		70 - 130	04/13/22 11:15	04/14/22 02:17	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.94	J	4.95	0.850	mg/Kg	-		04/13/22 15:36	1

Client Sample ID: P7-.5

Lab Sample ID: 890-2186-2

Date Collected: 04/12/22 11:35

Matrix: Solid

Date Received: 04/12/22 13:10

Sample Depth: .5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00136	J	0.00200	0.000384	mg/Kg	-	04/13/22 13:29	04/13/22 20:09	1
Toluene	0.00281		0.00200	0.000455	mg/Kg	-	04/13/22 13:29	04/13/22 20:09	1
Ethylbenzene	0.00152	J	0.00200	0.000564	mg/Kg	-	04/13/22 13:29	04/13/22 20:09	1
m-Xylene & p-Xylene	0.00223	J	0.00399	0.00101	mg/Kg	-	04/13/22 13:29	04/13/22 20:09	1
o-Xylene	0.00188	J	0.00200	0.000343	mg/Kg	-	04/13/22 13:29	04/13/22 20:09	1
Xylenes, Total	0.00411		0.00399	0.00101	mg/Kg	-	04/13/22 13:29	04/13/22 20:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	74		70 - 130	04/13/22 13:29	04/13/22 20:09	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2186-1
SDG: 12580761

Client Sample ID: P7-.5

Lab Sample ID: 890-2186-2

Date Collected: 04/12/22 11:35

Matrix: Solid

Date Received: 04/12/22 13:10

Sample Depth: .5

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	109		70 - 130	04/13/22 13:29	04/13/22 20:09	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00980		0.00399	0.00101	mg/Kg	-		04/14/22 12:45	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	49.1	J	50.0	15.0	mg/Kg	-		04/14/22 14:43	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	25.5	J	50.0	15.0	mg/Kg	-	04/13/22 11:15	04/14/22 02:38	1
Diesel Range Organics (Over C10-C28)	23.6	J B	50.0	15.0	mg/Kg	-	04/13/22 11:15	04/14/22 02:38	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg	-	04/13/22 11:15	04/14/22 02:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130				04/13/22 11:15	04/14/22 02:38	1
o-Terphenyl	105		70 - 130				04/13/22 11:15	04/14/22 02:38	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.34	J	4.97	0.853	mg/Kg	-		04/13/22 17:37	1

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Surrogate Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2186-1
SDG: 12580761

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-2186-1	P7-S	91	98
890-2186-1 MS	P7-S	99	101
890-2186-1 MSD	P7-S	91	91
890-2186-2	P7-.5	74	109
LCS 880-23478/1-A	Lab Control Sample	110	101
LCSD 880-23478/2-A	Lab Control Sample Dup	94	104
MB 880-23441/8	Method Blank	95	102
MB 880-23478/5-A	Method Blank	95	101
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-2186-1	P7-S	95	107
890-2186-2	P7-.5	95	105
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO2 (70-130)	OTPH2 (70-130)
LCS 880-23451/2-A	Lab Control Sample	110	134 S1+
LCSD 880-23451/3-A	Lab Control Sample Dup	104	126
MB 880-23451/1-A	Method Blank	91	111
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2186-1
SDG: 12580761

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-23441/8

Matrix: Solid

Analysis Batch: 23441

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg			04/13/22 15:03	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg			04/13/22 15:03	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg			04/13/22 15:03	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg			04/13/22 15:03	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg			04/13/22 15:03	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg			04/13/22 15:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130		04/13/22 15:03	1
1,4-Difluorobenzene (Surr)	102		70 - 130		04/13/22 15:03	1

Lab Sample ID: MB 880-23478/5-A

Matrix: Solid

Analysis Batch: 23441

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 23478

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		04/13/22 13:29	04/13/22 19:20	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		04/13/22 13:29	04/13/22 19:20	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		04/13/22 13:29	04/13/22 19:20	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		04/13/22 13:29	04/13/22 19:20	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		04/13/22 13:29	04/13/22 19:20	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		04/13/22 13:29	04/13/22 19:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	04/13/22 13:29	04/13/22 19:20	1
1,4-Difluorobenzene (Surr)	101		70 - 130	04/13/22 13:29	04/13/22 19:20	1

Lab Sample ID: LCS 880-23478/1-A

Matrix: Solid

Analysis Batch: 23441

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 23478

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08528		mg/Kg		85	70 - 130
Toluene	0.100	0.1092		mg/Kg		109	70 - 130
Ethylbenzene	0.100	0.1184		mg/Kg		118	70 - 130
m-Xylene & p-Xylene	0.200	0.2408		mg/Kg		120	70 - 130
o-Xylene	0.100	0.1208		mg/Kg		121	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: LCSD 880-23478/2-A

Matrix: Solid

Analysis Batch: 23441

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 23478

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08434		mg/Kg		84	70 - 130	1	35

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2186-1
SDG: 12580761

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-23478/2-A

Matrix: Solid

Analysis Batch: 23441

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 23478

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.09580		mg/Kg		96	70 - 130	13	35
Ethylbenzene	0.100	0.1006		mg/Kg		101	70 - 130	16	35
m-Xylene & p-Xylene	0.200	0.1993		mg/Kg		100	70 - 130	19	35
o-Xylene	0.100	0.09842		mg/Kg		98	70 - 130	20	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: 890-2186-1 MS

Matrix: Solid

Analysis Batch: 23441

Client Sample ID: P7-S

Prep Type: Total/NA

Prep Batch: 23478

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.000615	J	0.101	0.1147		mg/Kg		113	70 - 130
Toluene	0.000579	J	0.101	0.1285		mg/Kg		127	70 - 130
Ethylbenzene	<0.00200	U	0.101	0.1161		mg/Kg		115	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.202	0.2426		mg/Kg		120	70 - 130
o-Xylene	<0.00200	U	0.101	0.1125		mg/Kg		112	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 890-2186-1 MSD

Matrix: Solid

Analysis Batch: 23441

Client Sample ID: P7-S

Prep Type: Total/NA

Prep Batch: 23478

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.000615	J	0.0998	0.1040		mg/Kg		104	70 - 130	10	35
Toluene	0.000579	J	0.0998	0.1194		mg/Kg		119	70 - 130	7	35
Ethylbenzene	<0.00200	U	0.0998	0.1117		mg/Kg		112	70 - 130	4	35
m-Xylene & p-Xylene	<0.00401	U	0.200	0.2219		mg/Kg		111	70 - 130	9	35
o-Xylene	<0.00200	U	0.0998	0.1023		mg/Kg		103	70 - 130	10	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	91		70 - 130
1,4-Difluorobenzene (Surr)	91		70 - 130

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-23451/1-A

Matrix: Solid

Analysis Batch: 23429

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 23451

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		04/13/22 11:15	04/13/22 19:46	1

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2186-1
SDG: 12580761

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-23451/1-A

Matrix: Solid

Analysis Batch: 23429

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 23451

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	18.47	J	50.0	15.0	mg/Kg		04/13/22 11:15	04/13/22 19:46	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		04/13/22 11:15	04/13/22 19:46	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130				04/13/22 11:15	04/13/22 19:46	1
o-Terphenyl	111		70 - 130				04/13/22 11:15	04/13/22 19:46	1

Lab Sample ID: LCS 880-23451/2-A

Matrix: Solid

Analysis Batch: 23429

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 23451

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	957.4		mg/Kg		96	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	1094		mg/Kg		109	70 - 130		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
1-Chlorooctane	110		70 - 130						
o-Terphenyl	134	S1+	70 - 130						

Lab Sample ID: LCSD 880-23451/3-A

Matrix: Solid

Analysis Batch: 23429

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 23451

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1046		mg/Kg		105	70 - 130	9	20
Diesel Range Organics (Over C10-C28)	1000	933.8		mg/Kg		93	70 - 130	16	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	104		70 - 130						
o-Terphenyl	126		70 - 130						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-23423/1-A

Matrix: Solid

Analysis Batch: 23440

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	0.858	mg/Kg			04/13/22 11:28	1

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2186-1
SDG: 12580761

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-23423/2-A

Matrix: Solid

Analysis Batch: 23440

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	237.3		mg/Kg		95	90 - 110

Lab Sample ID: LCSD 880-23423/3-A

Matrix: Solid

Analysis Batch: 23440

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	240.4		mg/Kg		96	90 - 110	1	20

QC Association Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2186-1
SDG: 12580761

GC VOA

Analysis Batch: 23441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2186-1	P7-S	Total/NA	Solid	8021B	23478
890-2186-2	P7-.5	Total/NA	Solid	8021B	23478
MB 880-23441/8	Method Blank	Total/NA	Solid	8021B	
MB 880-23478/5-A	Method Blank	Total/NA	Solid	8021B	23478
LCS 880-23478/1-A	Lab Control Sample	Total/NA	Solid	8021B	23478
LCSD 880-23478/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	23478
890-2186-1 MS	P7-S	Total/NA	Solid	8021B	23478
890-2186-1 MSD	P7-S	Total/NA	Solid	8021B	23478

Prep Batch: 23478

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2186-1	P7-S	Total/NA	Solid	5035	
890-2186-2	P7-.5	Total/NA	Solid	5035	
MB 880-23478/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-23478/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-23478/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2186-1 MS	P7-S	Total/NA	Solid	5035	
890-2186-1 MSD	P7-S	Total/NA	Solid	5035	

Analysis Batch: 23521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2186-1	P7-S	Total/NA	Solid	Total BTEX	
890-2186-2	P7-.5	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 23429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2186-1	P7-S	Total/NA	Solid	8015B NM	23451
890-2186-2	P7-.5	Total/NA	Solid	8015B NM	23451
MB 880-23451/1-A	Method Blank	Total/NA	Solid	8015B NM	23451
LCS 880-23451/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	23451
LCSD 880-23451/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	23451

Prep Batch: 23451

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2186-1	P7-S	Total/NA	Solid	8015NM Prep	
890-2186-2	P7-.5	Total/NA	Solid	8015NM Prep	
MB 880-23451/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-23451/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-23451/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 23546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2186-1	P7-S	Total/NA	Solid	8015 NM	
890-2186-2	P7-.5	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 23423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2186-1	P7-S	Soluble	Solid	DI Leach	

Eurofins Carlsbad

QC Association Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2186-1
SDG: 12580761

HPLC/IC (Continued)

Leach Batch: 23423 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2186-2	P7-.5	Soluble	Solid	DI Leach	
MB 880-23423/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-23423/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-23423/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 23440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2186-1	P7-S	Soluble	Solid	300.0	23423
890-2186-2	P7-.5	Soluble	Solid	300.0	23423
MB 880-23423/1-A	Method Blank	Soluble	Solid	300.0	23423
LCS 880-23423/2-A	Lab Control Sample	Soluble	Solid	300.0	23423
LCSD 880-23423/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	23423

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2186-1
SDG: 12580761

Client Sample ID: P7-S

Lab Sample ID: 890-2186-1

Date Collected: 04/12/22 11:30

Matrix: Solid

Date Received: 04/12/22 13:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	23478	04/13/22 13:29	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23441	04/13/22 19:49	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23521	04/14/22 12:45	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23546	04/14/22 14:43	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	23451	04/13/22 11:15	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23429	04/14/22 02:17	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	23423	04/12/22 17:14	CH	XEN MID
Soluble	Analysis	300.0		1			23440	04/13/22 15:36	SC	XEN MID

Client Sample ID: P7-5

Lab Sample ID: 890-2186-2

Date Collected: 04/12/22 11:35

Matrix: Solid

Date Received: 04/12/22 13:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	23478	04/13/22 13:29	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	23441	04/13/22 20:09	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			23521	04/14/22 12:45	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23546	04/14/22 14:43	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23451	04/13/22 11:15	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23429	04/14/22 02:38	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	23423	04/12/22 17:14	CH	XEN MID
Soluble	Analysis	300.0		1			23440	04/13/22 17:37	SC	XEN MID

Laboratory References:

XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Carlsbad

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2186-1
SDG: 12580761

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2186-1
SDG: 12580761

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2186-1
SDG: 12580761

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2186-1	P7-S	Solid	04/12/22 11:30	04/12/22 13:10	SURFACE
890-2186-2	P7-.5	Solid	04/12/22 11:35	04/12/22 13:10	.5

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Service Center - San Antonio, Texas (210-509-3334)

www.xenco.com

Odessa, Texas (432-563-1800)

Norcross, Georgia (770-449-8800)

Lakeland, Florida (863-646-8526)

Tampa, Florida (813-620-2000)

CHAIN OF CUSTODY

Page 1 Of 1

Service Center - San Antonio, Texas (210-509-3344) www.xenco.com Xenco Quote # Xenco Job # Client / Reporting Information Company Name / Branch: GHDMidland Company Address: 2135 S. Loop 260 West Midland TX Project Name/Number: Romeo Federal 22 Battery / 12580761 Project Location: Eddy County, New Mexico Invoice To: Centennial Resource Development, Inc / Nikki Mishler PO Number: NA																																																																																																																																																								
Field ID / Point of Collection Sample Depth 1 P7.5 2 P7.5 3 4 5 6 7 8 9 10 Collection <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Sample Depth</th> <th>Date</th> <th>Time</th> <th>Main</th> <th># of bottles</th> <th>HCl</th> <th>NaOH/Zn Acetate</th> <th>HNO3</th> <th>H2SO4</th> <th>NaOH</th> <th>NaHSO4</th> <th>MEOH</th> <th>NONE</th> </tr> <tr> <td>1</td> <td>04/22/13</td> <td>1135</td> <td>1</td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> </tr> <tr> <td>2</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> </tr> <tr> <td>3</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> </tr> <tr> <td>4</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> </tr> <tr> <td>5</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> </tr> <tr> <td>6</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> </tr> <tr> <td>7</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> </tr> <tr> <td>8</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> </tr> <tr> <td>9</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> </tr> <tr> <td>10</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> </tr> </table> Number of preserved bottles TPH By 8015 Mod (GRO, DRO & MRO) BTEX 8021 B Chloride 600										Sample Depth	Date	Time	Main	# of bottles	HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	1	04/22/13	1135	1	1								X	2												X	3												X	4												X	5												X	6												X	7												X	8												X	9												X	10												X
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Turnaround Time (Business days) ☐ Same Day TAT ☒ 5 Day TAT ☐ Level II Std QC ☐ Level IV (Full Data Pkg /raw data) ☐ Next Day EMERGENCY ☐ 7 Day TAT ☐ Level III Std QC+ Forms ☐ TRRP Level IV ☐ 2 Day EMERGENCY ☐ Contract TAT ☐ Level 3 (CLP Forms) ☐ UST / RG -411 ☐ 3 Day EMERGENCY ☐ TRRP Checklist																																																																																																																																																								
TAT Starts Day received by Lab, if received by 5:00 pm Report MDLs and J values. Relinquished by: Relinquished By: Date Time: Received By: Date Time: Relinquished by: Relinquished By: Date Time: Received By: Date Time: Relinquished by: Relinquished By: Date Time: Received By: Date Time: Relinquished by: Relinquished By: Date Time: Received By: Date Time:																																																																																																																																																								
Barcode: 890-2186 Chain of Custody Field Comments: Matrix Codes S = Soil/Sed/Solid GW = Ground Water DW = Drinking Water P = Product SW = Surface water SL = Sludge OW = Ocean/Sea Water W = Wipe O = Oil WW = Waste Water A = Air On Ice ☒ Cooler Temp. Thermo. Corr. Factor 71.0 0.07 -0.2 25.0 5/1/8																																																																																																																																																								

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 890-2186-1

SDG Number: 12580761

Login Number: 2186**List Number: 1****Creator: Clifton, Cloe****List Source: Eurofins Carlsbad**

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

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 890-2186-1

SDG Number: 12580761

Login Number: 2186**List Number: 2****Creator: Carlisle, Spring****List Source: Eurofins Midland****List Creation: 04/12/22 06:11 PM**

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	



Environment Testing America

ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-2206-1

Laboratory Sample Delivery Group: 12580761
Client Project/Site: Romeo Federal 22 Battery

For:

GHD Services Inc.
2135 South Loop 250 West
Midland, Texas 79703

Attn: Becky Haskell

Authorized for release by:

4/28/2022 5:05:57 PM

Chad Bechtold, Project Manager
(813)690-3563

Chad.Bechtold@et.eurofinsus.com

Designee for

Debbie Simmons, Project Manager
(832)986-6768

Debbie.Simmons@et.eurofinsus.com

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

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

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Laboratory Job ID: 890-2206-1
SDG: 12580761

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Definitions/Glossary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2206-1
SDG: 12580761

Qualifiers

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2206-1
SDG: 12580761

Job ID: 890-2206-1

Laboratory: Eurofins Carlsbad

Narrative	Job Narrative 890-2206-1
-----------	-----------------------------

Receipt

The samples were received on 4/19/2022 2:40 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 24.8°C

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2206-1
SDG: 12580761

Client Sample ID: BH-1

Lab Sample ID: 890-2206-1

Date Collected: 04/19/22 13:45

Matrix: Solid

Date Received: 04/19/22 14:40

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	0.000383	mg/Kg		04/27/22 08:40	04/28/22 00:34	1
Toluene	<0.00199	U	0.00199	0.000454	mg/Kg		04/27/22 08:40	04/28/22 00:34	1
Ethylbenzene	<0.00199	U	0.00199	0.000563	mg/Kg		04/27/22 08:40	04/28/22 00:34	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00101	mg/Kg		04/27/22 08:40	04/28/22 00:34	1
o-Xylene	<0.00199	U	0.00199	0.000343	mg/Kg		04/27/22 08:40	04/28/22 00:34	1
Xylenes, Total	<0.00398	U	0.00398	0.00101	mg/Kg		04/27/22 08:40	04/28/22 00:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	04/27/22 08:40	04/28/22 00:34	1
1,4-Difluorobenzene (Surr)	84		70 - 130	04/27/22 08:40	04/28/22 00:34	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	0.00101	mg/Kg			04/28/22 09:45	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	47.3	J	49.9	15.0	mg/Kg			04/21/22 10:45	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	15.0	mg/Kg		04/20/22 11:30	04/20/22 22:18	1
Diesel Range Organics (Over C10-C28)	47.3	J B	49.9	15.0	mg/Kg		04/20/22 11:30	04/20/22 22:18	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg		04/20/22 11:30	04/20/22 22:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130	04/20/22 11:30	04/20/22 22:18	1
o-Terphenyl	91		70 - 130	04/20/22 11:30	04/20/22 22:18	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.8		5.04	0.865	mg/Kg			04/28/22 08:44	1

Client Sample ID: BH-2

Lab Sample ID: 890-2206-2

Date Collected: 04/19/22 13:50

Matrix: Solid

Date Received: 04/19/22 14:40

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	0.000383	mg/Kg		04/27/22 08:40	04/28/22 00:59	1
Toluene	<0.00199	U	0.00199	0.000453	mg/Kg		04/27/22 08:40	04/28/22 00:59	1
Ethylbenzene	<0.00199	U	0.00199	0.000562	mg/Kg		04/27/22 08:40	04/28/22 00:59	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00100	mg/Kg		04/27/22 08:40	04/28/22 00:59	1
o-Xylene	<0.00199	U	0.00199	0.000342	mg/Kg		04/27/22 08:40	04/28/22 00:59	1
Xylenes, Total	<0.00398	U	0.00398	0.00100	mg/Kg		04/27/22 08:40	04/28/22 00:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	04/27/22 08:40	04/28/22 00:59	1
1,4-Difluorobenzene (Surr)	95		70 - 130	04/27/22 08:40	04/28/22 00:59	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2206-1
SDG: 12580761

Client Sample ID: BH-2

Lab Sample ID: 890-2206-2

Date Collected: 04/19/22 13:50

Matrix: Solid

Date Received: 04/19/22 14:40

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	0.00100	mg/Kg			04/28/22 09:45	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	72.0		50.0	15.0	mg/Kg			04/21/22 10:45	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		04/20/22 11:30	04/20/22 22:39	1
Diesel Range Organics (Over C10-C28)	72.0	B	50.0	15.0	mg/Kg		04/20/22 11:30	04/20/22 22:39	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		04/20/22 11:30	04/20/22 22:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	81		70 - 130				04/20/22 11:30	04/20/22 22:39	1
o-Terphenyl	87		70 - 130				04/20/22 11:30	04/20/22 22:39	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15.4		5.00	0.858	mg/Kg			04/28/22 08:50	1

Client Sample ID: BH-3

Lab Sample ID: 890-2206-3

Date Collected: 04/19/22 13:55

Matrix: Solid

Date Received: 04/19/22 14:40

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000384	mg/Kg		04/27/22 08:40	04/28/22 01:25	1
Toluene	<0.00200	U	0.00200	0.000455	mg/Kg		04/27/22 08:40	04/28/22 01:25	1
Ethylbenzene	<0.00200	U	0.00200	0.000564	mg/Kg		04/27/22 08:40	04/28/22 01:25	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	0.00101	mg/Kg		04/27/22 08:40	04/28/22 01:25	1
o-Xylene	<0.00200	U	0.00200	0.000343	mg/Kg		04/27/22 08:40	04/28/22 01:25	1
Xylenes, Total	<0.00399	U	0.00399	0.00101	mg/Kg		04/27/22 08:40	04/28/22 01:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130				04/27/22 08:40	04/28/22 01:25	1
1,4-Difluorobenzene (Surr)	91		70 - 130				04/27/22 08:40	04/28/22 01:25	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	0.00101	mg/Kg			04/28/22 09:45	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	297		50.0	15.0	mg/Kg			04/21/22 10:45	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	25.1	J	50.0	15.0	mg/Kg		04/20/22 11:30	04/20/22 23:00	1
Diesel Range Organics (Over C10-C28)	272	B	50.0	15.0	mg/Kg		04/20/22 11:30	04/20/22 23:00	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2206-1
SDG: 12580761

Client Sample ID: BH-3

Lab Sample ID: 890-2206-3

Date Collected: 04/19/22 13:55

Matrix: Solid

Date Received: 04/19/22 14:40

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		04/20/22 11:30	04/20/22 23:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130	04/20/22 11:30	04/20/22 23:00	1
o-Terphenyl	100		70 - 130	04/20/22 11:30	04/20/22 23:00	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22.8		5.00	0.858	mg/Kg			04/28/22 08:56	1

Surrogate Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2206-1
SDG: 12580761

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-2206-1	BH-1	107	84
890-2206-2	BH-2	112	95
890-2206-3	BH-3	104	91
LCS 880-24290/1-A	Lab Control Sample	101	87
LCS 880-24290/1-A	Lab Control Sample	98	93
LCSD 880-24199/2-A	Lab Control Sample Dup	117	96
MB 880-24290/5-A	Method Blank	74	85
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-2206-1	BH-1	84	91
890-2206-2	BH-2	81	87
890-2206-3	BH-3	89	100
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO2 (70-130)	OTPH2 (70-130)
LCS 880-23828/2-A	Lab Control Sample	99	117
LCSD 880-23828/3-A	Lab Control Sample Dup	109	130
MB 880-23828/1-A	Method Blank	85	102
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2206-1
SDG: 12580761

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: LCSD 880-24199/2-A

Matrix: Solid

Analysis Batch: 24286

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 24199

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08285		mg/Kg		83	70 - 130	7	35
Toluene	0.100	0.08815		mg/Kg		88	70 - 130	6	35
Ethylbenzene	0.100	0.09319		mg/Kg		93	70 - 130	8	35
m-Xylene & p-Xylene	0.200	0.1845		mg/Kg		92	70 - 130	8	35
o-Xylene	0.100	0.09748		mg/Kg		97	70 - 130	10	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	117		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: MB 880-24290/5-A

Matrix: Solid

Analysis Batch: 24286

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 24290

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000384	mg/Kg		04/27/22 08:40	04/27/22 15:31	1
Toluene	<0.00200	U	0.00200	0.000455	mg/Kg		04/27/22 08:40	04/27/22 15:31	1
Ethylbenzene	<0.00200	U	0.00200	0.000564	mg/Kg		04/27/22 08:40	04/27/22 15:31	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	0.00101	mg/Kg		04/27/22 08:40	04/27/22 15:31	1
o-Xylene	<0.00200	U	0.00200	0.000343	mg/Kg		04/27/22 08:40	04/27/22 15:31	1
Xylenes, Total	<0.00399	U	0.00399	0.00101	mg/Kg		04/27/22 08:40	04/27/22 15:31	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	74		70 - 130	04/27/22 08:40	04/27/22 15:31	1
1,4-Difluorobenzene (Surr)	85		70 - 130	04/27/22 08:40	04/27/22 15:31	1

Lab Sample ID: LCS 880-24290/1-A

Matrix: Solid

Analysis Batch: 24286

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 24290

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09029		mg/Kg		90	70 - 130
Toluene	0.100	0.08666		mg/Kg		87	70 - 130
Ethylbenzene	0.100	0.09258		mg/Kg		93	70 - 130
m-Xylene & p-Xylene	0.200	0.1822		mg/Kg		91	70 - 130
o-Xylene	0.100	0.1001		mg/Kg		100	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	93		70 - 130

Lab Sample ID: LCS 880-24290/1-A

Matrix: Solid

Analysis Batch: 24286

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 24290

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09435		mg/Kg		94	70 - 130
Toluene	0.100	0.09386		mg/Kg		94	70 - 130

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2206-1
SDG: 12580761

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 880-24290/1-A

Matrix: Solid

Analysis Batch: 24286

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 24290

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	0.100	0.09484		mg/Kg		95	70 - 130
m-Xylene & p-Xylene	0.200	0.1852		mg/Kg		93	70 - 130
o-Xylene	0.100	0.1220		mg/Kg		122	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	87		70 - 130

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-23828/1-A

Matrix: Solid

Analysis Batch: 23813

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 23828

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		04/20/22 11:30	04/20/22 19:51	1
Diesel Range Organics (Over C10-C28)	20.25	J	50.0	15.0	mg/Kg		04/20/22 11:30	04/20/22 19:51	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		04/20/22 11:30	04/20/22 19:51	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130	04/20/22 11:30	04/20/22 19:51	1
o-Terphenyl	102		70 - 130	04/20/22 11:30	04/20/22 19:51	1

Lab Sample ID: LCS 880-23828/2-A

Matrix: Solid

Analysis Batch: 23813

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 23828

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1052		mg/Kg		105	70 - 130
Diesel Range Organics (Over C10-C28)	1000	909.6		mg/Kg		91	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	99		70 - 130
o-Terphenyl	117		70 - 130

Lab Sample ID: LCSD 880-23828/3-A

Matrix: Solid

Analysis Batch: 23813

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 23828

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1088		mg/Kg		109	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	946.2		mg/Kg		95	70 - 130	4	20

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2206-1
SDG: 12580761

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 880-23828/3-A

Matrix: Solid

Analysis Batch: 23813

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 23828

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	109		70 - 130
o-Terphenyl	130		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-23842/1-A

Matrix: Solid

Analysis Batch: 24345

Client Sample ID: Method Blank

Prep Type: Soluble

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil	Fac
Chloride	<5.00	U	5.00	0.858	mg/Kg			04/28/22 06:12		1

Lab Sample ID: LCS 880-23842/2-A

Matrix: Solid

Analysis Batch: 24345

Client Sample ID: Lab Control Sample

Prep Type: Soluble

	Spike	LCS	LCS					%Rec		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits			
Chloride	250	243.6		mg/Kg		97	90 - 110			

Lab Sample ID: LCSD 880-23842/3-A

Matrix: Solid

Analysis Batch: 24345

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

			Spike	LCSD	LCSD				%Rec	RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride			250	267.2		mg/Kg		107	90 - 110	9	20

QC Association Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2206-1
SDG: 12580761

GC VOA

Prep Batch: 24199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-24199/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 24286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2206-1	BH-1	Total/NA	Solid	8021B	24290
890-2206-2	BH-2	Total/NA	Solid	8021B	24290
890-2206-3	BH-3	Total/NA	Solid	8021B	24290
MB 880-24290/5-A	Method Blank	Total/NA	Solid	8021B	24290
LCS 880-24290/1-A	Lab Control Sample	Total/NA	Solid	8021B	24290
LCS 880-24290/1-A	Lab Control Sample	Total/NA	Solid	8021B	24290
LCSD 880-24199/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	24199

Prep Batch: 24290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2206-1	BH-1	Total/NA	Solid	5035	
890-2206-2	BH-2	Total/NA	Solid	5035	
890-2206-3	BH-3	Total/NA	Solid	5035	
MB 880-24290/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-24290/1-A	Lab Control Sample	Total/NA	Solid	5035	

Analysis Batch: 24381

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2206-1	BH-1	Total/NA	Solid	Total BTEX	
890-2206-2	BH-2	Total/NA	Solid	Total BTEX	
890-2206-3	BH-3	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 23813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2206-1	BH-1	Total/NA	Solid	8015B NM	23828
890-2206-2	BH-2	Total/NA	Solid	8015B NM	23828
890-2206-3	BH-3	Total/NA	Solid	8015B NM	23828
MB 880-23828/1-A	Method Blank	Total/NA	Solid	8015B NM	23828
LCS 880-23828/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	23828
LCSD 880-23828/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	23828

Prep Batch: 23828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2206-1	BH-1	Total/NA	Solid	8015NM Prep	
890-2206-2	BH-2	Total/NA	Solid	8015NM Prep	
890-2206-3	BH-3	Total/NA	Solid	8015NM Prep	
MB 880-23828/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-23828/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-23828/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 23930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2206-1	BH-1	Total/NA	Solid	8015 NM	
890-2206-2	BH-2	Total/NA	Solid	8015 NM	
890-2206-3	BH-3	Total/NA	Solid	8015 NM	

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2206-1
SDG: 12580761

HPLC/IC

Leach Batch: 23842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2206-1	BH-1	Soluble	Solid	DI Leach	
890-2206-2	BH-2	Soluble	Solid	DI Leach	
890-2206-3	BH-3	Soluble	Solid	DI Leach	
MB 880-23842/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-23842/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-23842/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 24345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2206-1	BH-1	Soluble	Solid	300.0	23842
890-2206-2	BH-2	Soluble	Solid	300.0	23842
890-2206-3	BH-3	Soluble	Solid	300.0	23842
MB 880-23842/1-A	Method Blank	Soluble	Solid	300.0	23842
LCS 880-23842/2-A	Lab Control Sample	Soluble	Solid	300.0	23842
LCSD 880-23842/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	23842

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2206-1
SDG: 12580761

Client Sample ID: BH-1

Lab Sample ID: 890-2206-1

Date Collected: 04/19/22 13:45

Matrix: Solid

Date Received: 04/19/22 14:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	24290	04/27/22 08:40	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24286	04/28/22 00:34	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			24381	04/28/22 09:45	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23930	04/21/22 10:45	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23828	04/20/22 11:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23813	04/20/22 22:18	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	23842	04/20/22 12:42	SC	XEN MID
Soluble	Analysis	300.0		1			24345	04/28/22 08:44	CH	XEN MID

Client Sample ID: BH-2

Lab Sample ID: 890-2206-2

Date Collected: 04/19/22 13:50

Matrix: Solid

Date Received: 04/19/22 14:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	24290	04/27/22 08:40	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24286	04/28/22 00:59	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			24381	04/28/22 09:45	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23930	04/21/22 10:45	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23828	04/20/22 11:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23813	04/20/22 22:39	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	23842	04/20/22 12:42	SC	XEN MID
Soluble	Analysis	300.0		1			24345	04/28/22 08:50	CH	XEN MID

Client Sample ID: BH-3

Lab Sample ID: 890-2206-3

Date Collected: 04/19/22 13:55

Matrix: Solid

Date Received: 04/19/22 14:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	24290	04/27/22 08:40	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24286	04/28/22 01:25	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			24381	04/28/22 09:45	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23930	04/21/22 10:45	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23828	04/20/22 11:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23813	04/20/22 23:00	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	23842	04/20/22 12:42	SC	XEN MID
Soluble	Analysis	300.0		1			24345	04/28/22 08:56	CH	XEN MID

Laboratory References:

XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Carlsbad

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2206-1
SDG: 12580761

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

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

Method Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2206-1
SDG: 12580761

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2206-1
SDG: 12580761

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-2206-1	BH-1	Solid	04/19/22 13:45	04/19/22 14:40
890-2206-2	BH-2	Solid	04/19/22 13:50	04/19/22 14:40
890-2206-3	BH-3	Solid	04/19/22 13:55	04/19/22 14:40

1

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12

13

14



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CHAIN OF CUSTODY

Page 1 OF 1

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Xenco Job #

Client / Reporting Information		Project Information		Analytical Information		Matrix Codes	
Company Name / Branch: GHQ/Midland		Project Name/Number: Romeo Federal 22 Battery / 12580761					
Company Address: 2135 S. Loop 280 West Midland TX		Project Location: Eddy County, New Mexico					
Email: becky.haskell@qnd.com Matthew.laughlin@qnd.com Nikki.mishler@cedevinc.com		Phone No: (432)256-7917 zach.comino@qnd.com tom.larson@qnd.com		Invoice To: Centennial Resource Development, Inc / Nikki Mishler			
Project Contact: Becky Haskell / Glenn Quinney		PO Number: NA					
Sampler's Name Zach Comino							
No.	Field ID / Point of Collection	Sample Depth	Collection Date	Time	Matrix	# of bottles	Number of preserved bottles
1	BA-1		6/12	1345	S	1	TPH By 8015 Mod (GRO, DRO & MRO)
2	BA-2		6/12	1350	L	1	BTEX 8021 B
3	BA-3		6/12	1355	L	1	Chloride 600
4							
5							
6							
7							
8							
9							
10							
Turnaround Time (Business days)		Data Deliverable Information					
☐ Same Day TAT		☒ 5-Day TAT		☐ Level II Std QC		☐ Level IV (Full Data Pkg /raw data)	
☐ Next Day EMERGENCY		☐ 7 Day TAT		☐ Level III Std QC+ Forms		☐ TRRP Level IV	
☐ 2 Day EMERGENCY		☐ Contract TAT		☐ Level 3 (CLP Forms)		☐ UST / RG -411	
☐ 3 Day EMERGENCY				☐ TRRP Checklist			
TAT Starts Day received by Lab, if received by 5:00 pm		Report MDLs and J values.					
Relinquished by Sampler: <i>[Signature]</i>		Date Time: 6/12/2022		Received By: <i>[Signature]</i>		Date Time: 6/12/2022	
Relinquished by: <i>[Signature]</i>		Date Time: 6/12/2022		Received By: <i>[Signature]</i>		Date Time: 6/12/2022	
Relinquished by:		Date Time:		Received By:		Date Time:	
5		5		4		4	
Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to XENCO Laboratories and its affiliates, subcontractors and assigns XENCO's standard terms and conditions of service unless previously negotiated under a fully executed client contract.				Opt Ice Cooler Temp. Thermo. Corr. Factor		25.0/24.8 TMM-009	

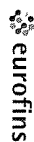


890-2206 Chain of Custody

S = Soil/Sed/Solid
GW = Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
OW = Ocean/Sea Water
W = Wipe
O = Oil
WW = Waste Water
A = Air

Eurofins Carlsbad

Chain of Custody Record



Environment Testing America

1089 N Canal St
Carlsbad NM 88220
Phone 575-988-3199 Fax: 575-988-3199

[illegible]

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 890-2206-1

SDG Number: 12580761

Login Number: 2206

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 890-2206-1

SDG Number: 12580761

Login Number: 2206

List Number: 2

Creator: Teel, Brianna

List Source: Eurofins Midland

List Creation: 04/20/22 10:37 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	



Environment Testing America

ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-2217-1

Laboratory Sample Delivery Group: 12580761

Client Project/Site: Romeo Federal 22 Battery

For:

GHD Services Inc.
2135 South Loop 250 West
Midland, Texas 79703

Attn: Becky Haskell

Authorized for release by:

4/29/2022 4:59:41 PM

Chad Bechtold, Project Manager
(813)690-3563

Chad.Bechtold@et.eurofinsus.com

Designee for

Debbie Simmons, Project Manager
(832)986-6768

Debbie.Simmons@et.eurofinsus.com

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

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

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Laboratory Job ID: 890-2217-1
SDG: 12580761

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Definitions/Glossary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

Qualifiers

GC VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

Job ID: 890-2217-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2217-1

Receipt

The samples were received on 4/20/2022 3:28 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 31.0°C

GC VOA

Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-24099 and analytical batch 880-24304 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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

GC Semi VOA

Method 8015MOD_NM: The method blank for preparation batch 880-23946 and analytical batch 880-24090 contained DRO above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-23946 and analytical batch 880-24090 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

HPLC/IC

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

Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

Client Sample ID: BH-4

Lab Sample ID: 890-2217-1

Date Collected: 04/20/22 11:00

Matrix: Solid

Date Received: 04/20/22 15:28

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	0.000383	mg/Kg		04/25/22 11:29	04/27/22 11:17	1
Toluene	<0.00199	U	0.00199	0.000454	mg/Kg		04/25/22 11:29	04/27/22 11:17	1
Ethylbenzene	<0.00199	U	0.00199	0.000563	mg/Kg		04/25/22 11:29	04/27/22 11:17	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00101	mg/Kg		04/25/22 11:29	04/27/22 11:17	1
o-Xylene	<0.00199	U	0.00199	0.000343	mg/Kg		04/25/22 11:29	04/27/22 11:17	1
Xylenes, Total	<0.00398	U	0.00398	0.00101	mg/Kg		04/25/22 11:29	04/27/22 11:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	04/25/22 11:29	04/27/22 11:17	1
1,4-Difluorobenzene (Surr)	98		70 - 130	04/25/22 11:29	04/27/22 11:17	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	0.00101	mg/Kg			04/27/22 12:38	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	706		49.9	15.0	mg/Kg			04/25/22 09:39	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	15.0	mg/Kg		04/21/22 14:00	04/23/22 12:44	1
Diesel Range Organics (Over C10-C28)	564	B F1	49.9	15.0	mg/Kg		04/21/22 14:00	04/23/22 12:44	1
Oil Range Organics (Over C28-C36)	142		49.9	15.0	mg/Kg		04/21/22 14:00	04/23/22 12:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130	04/21/22 14:00	04/23/22 12:44	1
o-Terphenyl	121		70 - 130	04/21/22 14:00	04/23/22 12:44	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21.2		5.00	0.858	mg/Kg			04/28/22 02:55	1

Client Sample ID: BH-5

Lab Sample ID: 890-2217-2

Date Collected: 04/20/22 11:05

Matrix: Solid

Date Received: 04/20/22 15:28

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	0.000383	mg/Kg		04/25/22 11:29	04/27/22 11:38	1
Toluene	<0.00199	U	0.00199	0.000453	mg/Kg		04/25/22 11:29	04/27/22 11:38	1
Ethylbenzene	<0.00199	U	0.00199	0.000562	mg/Kg		04/25/22 11:29	04/27/22 11:38	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00100	mg/Kg		04/25/22 11:29	04/27/22 11:38	1
o-Xylene	<0.00199	U	0.00199	0.000342	mg/Kg		04/25/22 11:29	04/27/22 11:38	1
Xylenes, Total	<0.00398	U	0.00398	0.00100	mg/Kg		04/25/22 11:29	04/27/22 11:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	04/25/22 11:29	04/27/22 11:38	1
1,4-Difluorobenzene (Surr)	95		70 - 130	04/25/22 11:29	04/27/22 11:38	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

Client Sample ID: BH-5

Lab Sample ID: 890-2217-2

Date Collected: 04/20/22 11:05

Matrix: Solid

Date Received: 04/20/22 15:28

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	0.00100	mg/Kg			04/27/22 12:38	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	453		49.9	15.0	mg/Kg			04/25/22 09:39	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	24.9	J	49.9	15.0	mg/Kg		04/21/22 14:00	04/23/22 13:49	1
Diesel Range Organics (Over C10-C28)	329	B	49.9	15.0	mg/Kg		04/21/22 14:00	04/23/22 13:49	1
Oil Range Organics (Over C28-C36)	98.7		49.9	15.0	mg/Kg		04/21/22 14:00	04/23/22 13:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130				04/21/22 14:00	04/23/22 13:49	1
o-Terphenyl	116		70 - 130				04/21/22 14:00	04/23/22 13:49	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20.3		4.98	0.855	mg/Kg			04/28/22 03:14	1

Client Sample ID: BH-6

Lab Sample ID: 890-2217-3

Date Collected: 04/20/22 11:10

Matrix: Solid

Date Received: 04/20/22 15:28

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U **	0.00201	0.000387	mg/Kg		04/23/22 12:31	04/27/22 20:42	1
Toluene	<0.00201	U **	0.00201	0.000459	mg/Kg		04/23/22 12:31	04/27/22 20:42	1
Ethylbenzene	<0.00201	U **	0.00201	0.000568	mg/Kg		04/23/22 12:31	04/27/22 20:42	1
m-Xylene & p-Xylene	<0.00402	U **	0.00402	0.00102	mg/Kg		04/23/22 12:31	04/27/22 20:42	1
o-Xylene	0.000852	J **	0.00201	0.000346	mg/Kg		04/23/22 12:31	04/27/22 20:42	1
Xylenes, Total	<0.00402	U **	0.00402	0.00102	mg/Kg		04/23/22 12:31	04/27/22 20:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130				04/23/22 12:31	04/27/22 20:42	1
1,4-Difluorobenzene (Surr)	103		70 - 130				04/23/22 12:31	04/27/22 20:42	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	0.00102	mg/Kg			04/27/22 12:38	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	160		50.0	15.0	mg/Kg			04/25/22 09:39	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		04/21/22 14:00	04/23/22 14:11	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

Client Sample ID: BH-6

Lab Sample ID: 890-2217-3

Date Collected: 04/20/22 11:10

Matrix: Solid

Date Received: 04/20/22 15:28

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	105	B	50.0	15.0	mg/Kg		04/21/22 14:00	04/23/22 14:11	1
Oil Range Organics (Over C28-C36)	54.6		50.0	15.0	mg/Kg		04/21/22 14:00	04/23/22 14:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130				04/21/22 14:00	04/23/22 14:11	1
o-Terphenyl	116		70 - 130				04/21/22 14:00	04/23/22 14:11	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.9		4.99	0.857	mg/Kg			04/28/22 03:21	1

Client Sample ID: BH-7

Lab Sample ID: 890-2217-4

Date Collected: 04/20/22 11:15

Matrix: Solid

Date Received: 04/20/22 15:28

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U **	0.00200	0.000384	mg/Kg		04/23/22 12:31	04/27/22 21:02	1
Toluene	<0.00200	U **	0.00200	0.000455	mg/Kg		04/23/22 12:31	04/27/22 21:02	1
Ethylbenzene	<0.00200	U **	0.00200	0.000564	mg/Kg		04/23/22 12:31	04/27/22 21:02	1
m-Xylene & p-Xylene	<0.00399	U **	0.00399	0.00101	mg/Kg		04/23/22 12:31	04/27/22 21:02	1
o-Xylene	<0.00200	U **	0.00200	0.000343	mg/Kg		04/23/22 12:31	04/27/22 21:02	1
Xylenes, Total	<0.00399	U **	0.00399	0.00101	mg/Kg		04/23/22 12:31	04/27/22 21:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130				04/23/22 12:31	04/27/22 21:02	1
1,4-Difluorobenzene (Surr)	104		70 - 130				04/23/22 12:31	04/27/22 21:02	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	0.00101	mg/Kg			04/27/22 12:38	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	144		50.0	15.0	mg/Kg			04/25/22 09:39	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		04/21/22 14:00	04/23/22 14:32	1
Diesel Range Organics (Over C10-C28)	91.0	B	50.0	15.0	mg/Kg		04/21/22 14:00	04/23/22 14:32	1
Oil Range Organics (Over C28-C36)	53.4		50.0	15.0	mg/Kg		04/21/22 14:00	04/23/22 14:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130				04/21/22 14:00	04/23/22 14:32	1
o-Terphenyl	92		70 - 130				04/21/22 14:00	04/23/22 14:32	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

Client Sample ID: BH-7

Lab Sample ID: 890-2217-4

Date Collected: 04/20/22 11:15

Matrix: Solid

Date Received: 04/20/22 15:28

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14.1		5.05	0.867	mg/Kg			04/28/22 03:27	1

Client Sample ID: BH-8

Lab Sample ID: 890-2217-5

Date Collected: 04/20/22 11:20

Matrix: Solid

Date Received: 04/20/22 15:28

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U **	0.00199	0.000383	mg/Kg		04/23/22 12:31	04/27/22 21:23	1
Toluene	<0.00199	U **	0.00199	0.000454	mg/Kg		04/23/22 12:31	04/27/22 21:23	1
Ethylbenzene	<0.00199	U **	0.00199	0.000563	mg/Kg		04/23/22 12:31	04/27/22 21:23	1
m-Xylene & p-Xylene	<0.00398	U **	0.00398	0.00101	mg/Kg		04/23/22 12:31	04/27/22 21:23	1
o-Xylene	<0.00199	U **	0.00199	0.000343	mg/Kg		04/23/22 12:31	04/27/22 21:23	1
Xylenes, Total	<0.00398	U **	0.00398	0.00101	mg/Kg		04/23/22 12:31	04/27/22 21:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130				04/23/22 12:31	04/27/22 21:23	1
1,4-Difluorobenzene (Surr)	104		70 - 130				04/23/22 12:31	04/27/22 21:23	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	0.00101	mg/Kg			04/27/22 12:38	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	46.6	J	50.0	15.0	mg/Kg			04/25/22 09:39	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	28.1	J	50.0	15.0	mg/Kg		04/21/22 14:00	04/23/22 14:54	1
Diesel Range Organics (Over C10-C28)	18.5	J B	50.0	15.0	mg/Kg		04/21/22 14:00	04/23/22 14:54	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		04/21/22 14:00	04/23/22 14:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130				04/21/22 14:00	04/23/22 14:54	1
o-Terphenyl	114		70 - 130				04/21/22 14:00	04/23/22 14:54	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.79		4.95	0.850	mg/Kg			04/28/22 03:33	1

Client Sample ID: BH-9

Lab Sample ID: 890-2217-6

Date Collected: 04/20/22 11:25

Matrix: Solid

Date Received: 04/20/22 15:28

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U **	0.00199	0.000383	mg/Kg		04/23/22 12:31	04/27/22 21:43	1
Toluene	<0.00199	U **	0.00199	0.000453	mg/Kg		04/23/22 12:31	04/27/22 21:43	1
Ethylbenzene	<0.00199	U **	0.00199	0.000562	mg/Kg		04/23/22 12:31	04/27/22 21:43	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

Client Sample ID: BH-9

Lab Sample ID: 890-2217-6

Date Collected: 04/20/22 11:25

Matrix: Solid

Date Received: 04/20/22 15:28

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<0.00398	U **	0.00398	0.00100	mg/Kg		04/23/22 12:31	04/27/22 21:43	1
o-Xylene	0.00171	J **	0.00199	0.000342	mg/Kg		04/23/22 12:31	04/27/22 21:43	1
Xylenes, Total	0.00171	J **	0.00398	0.00100	mg/Kg		04/23/22 12:31	04/27/22 21:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130				04/23/22 12:31	04/27/22 21:43	1
1,4-Difluorobenzene (Surr)	101		70 - 130				04/23/22 12:31	04/27/22 21:43	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00171	J	0.00398	0.00100	mg/Kg			04/27/22 12:38	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	166		49.9	15.0	mg/Kg			04/25/22 09:39	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	22.3	J	49.9	15.0	mg/Kg		04/21/22 14:00	04/23/22 15:15	1
Diesel Range Organics (Over C10-C28)	99.2	B	49.9	15.0	mg/Kg		04/21/22 14:00	04/23/22 15:15	1
Oil Range Organics (Over C28-C36)	44.8	J	49.9	15.0	mg/Kg		04/21/22 14:00	04/23/22 15:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130				04/21/22 14:00	04/23/22 15:15	1
o-Terphenyl	91		70 - 130				04/21/22 14:00	04/23/22 15:15	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	30.5		5.04	0.865	mg/Kg			04/28/22 03:52	1

Client Sample ID: BH-10

Lab Sample ID: 890-2217-7

Date Collected: 04/20/22 11:30

Matrix: Solid

Date Received: 04/20/22 15:28

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U **	0.00200	0.000384	mg/Kg		04/23/22 12:31	04/27/22 22:04	1
Toluene	<0.00200	U **	0.00200	0.000455	mg/Kg		04/23/22 12:31	04/27/22 22:04	1
Ethylbenzene	<0.00200	U **	0.00200	0.000564	mg/Kg		04/23/22 12:31	04/27/22 22:04	1
m-Xylene & p-Xylene	<0.00399	U **	0.00399	0.00101	mg/Kg		04/23/22 12:31	04/27/22 22:04	1
o-Xylene	<0.00200	U **	0.00200	0.000343	mg/Kg		04/23/22 12:31	04/27/22 22:04	1
Xylenes, Total	<0.00399	U **	0.00399	0.00101	mg/Kg		04/23/22 12:31	04/27/22 22:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130				04/23/22 12:31	04/27/22 22:04	1
1,4-Difluorobenzene (Surr)	103		70 - 130				04/23/22 12:31	04/27/22 22:04	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	0.00101	mg/Kg			04/27/22 12:38	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

Client Sample ID: BH-10

Lab Sample ID: 890-2217-7

Date Collected: 04/20/22 11:30

Matrix: Solid

Date Received: 04/20/22 15:28

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	297		49.8	14.9	mg/Kg			04/25/22 09:39	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	15.4	J	49.8	14.9	mg/Kg		04/21/22 14:00	04/23/22 15:37	1
Diesel Range Organics (Over C10-C28)	214	B	49.8	14.9	mg/Kg		04/21/22 14:00	04/23/22 15:37	1
Oil Range Organics (Over C28-C36)	67.3		49.8	14.9	mg/Kg		04/21/22 14:00	04/23/22 15:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130				04/21/22 14:00	04/23/22 15:37	1
o-Terphenyl	109		70 - 130				04/21/22 14:00	04/23/22 15:37	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.8		4.99	0.857	mg/Kg			04/28/22 03:59	1

Client Sample ID: BH-11

Lab Sample ID: 890-2217-8

Date Collected: 04/20/22 11:35

Matrix: Solid

Date Received: 04/20/22 15:28

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U **	0.00199	0.000383	mg/Kg		04/23/22 12:31	04/27/22 22:24	1
Toluene	<0.00199	U **	0.00199	0.000454	mg/Kg		04/23/22 12:31	04/27/22 22:24	1
Ethylbenzene	<0.00199	U **	0.00199	0.000563	mg/Kg		04/23/22 12:31	04/27/22 22:24	1
m-Xylene & p-Xylene	<0.00398	U **	0.00398	0.00101	mg/Kg		04/23/22 12:31	04/27/22 22:24	1
o-Xylene	<0.00199	U **	0.00199	0.000343	mg/Kg		04/23/22 12:31	04/27/22 22:24	1
Xylenes, Total	<0.00398	U **	0.00398	0.00101	mg/Kg		04/23/22 12:31	04/27/22 22:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130				04/23/22 12:31	04/27/22 22:24	1
1,4-Difluorobenzene (Surr)	103		70 - 130				04/23/22 12:31	04/27/22 22:24	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	0.00101	mg/Kg			04/27/22 12:38	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	202		50.0	15.0	mg/Kg			04/25/22 09:39	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	17.1	J	50.0	15.0	mg/Kg		04/21/22 14:00	04/23/22 15:59	1
Diesel Range Organics (Over C10-C28)	137	B	50.0	15.0	mg/Kg		04/21/22 14:00	04/23/22 15:59	1
Oil Range Organics (Over C28-C36)	47.8	J	50.0	15.0	mg/Kg		04/21/22 14:00	04/23/22 15:59	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

Client Sample ID: BH-11

Lab Sample ID: 890-2217-8

Date Collected: 04/20/22 11:35

Matrix: Solid

Date Received: 04/20/22 15:28

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	04/21/22 14:00	04/23/22 15:59	1
o-Terphenyl	108		70 - 130	04/21/22 14:00	04/23/22 15:59	1

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.4		5.04	0.865	mg/Kg			04/28/22 04:05	1

Client Sample ID: BH-12

Lab Sample ID: 890-2217-9

Date Collected: 04/20/22 11:40

Matrix: Solid

Date Received: 04/20/22 15:28

Method: 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U **	0.00200	0.000386	mg/Kg		04/23/22 12:31	04/27/22 22:44	1
Toluene	<0.00200	U **	0.00200	0.000457	mg/Kg		04/23/22 12:31	04/27/22 22:44	1
Ethylbenzene	<0.00200	U **	0.00200	0.000566	mg/Kg		04/23/22 12:31	04/27/22 22:44	1
m-Xylene & p-Xylene	<0.00401	U **	0.00401	0.00101	mg/Kg		04/23/22 12:31	04/27/22 22:44	1
o-Xylene	<0.00200	U **	0.00200	0.000345	mg/Kg		04/23/22 12:31	04/27/22 22:44	1
Xylenes, Total	<0.00401	U **	0.00401	0.00101	mg/Kg		04/23/22 12:31	04/27/22 22:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	04/23/22 12:31	04/27/22 22:44	1
1,4-Difluorobenzene (Surr)	94		70 - 130	04/23/22 12:31	04/27/22 22:44	1

Method: Total BTEX - Total BTEX Calculation									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	0.00101	mg/Kg			04/27/22 12:38	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	284		50.0	15.0	mg/Kg			04/25/22 09:39	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	18.7	J	50.0	15.0	mg/Kg		04/21/22 14:00	04/23/22 16:20	1
Diesel Range Organics (Over C10-C28)	200	B	50.0	15.0	mg/Kg		04/21/22 14:00	04/23/22 16:20	1
Oil Range Organics (Over C28-C36)	64.8		50.0	15.0	mg/Kg		04/21/22 14:00	04/23/22 16:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	121		70 - 130	04/21/22 14:00	04/23/22 16:20	1
o-Terphenyl	122		70 - 130	04/21/22 14:00	04/23/22 16:20	1

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.1		4.99	0.857	mg/Kg			04/28/22 04:11	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

Client Sample ID: BH-13

Lab Sample ID: 890-2217-10

Date Collected: 04/20/22 11:45

Matrix: Solid

Date Received: 04/20/22 15:28

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	0.000383	mg/Kg		04/25/22 15:01	04/29/22 07:25	1
Toluene	<0.00199	U	0.00199	0.000454	mg/Kg		04/25/22 15:01	04/29/22 07:25	1
Ethylbenzene	<0.00199	U	0.00199	0.000563	mg/Kg		04/25/22 15:01	04/29/22 07:25	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00101	mg/Kg		04/25/22 15:01	04/29/22 07:25	1
o-Xylene	0.0179		0.00199	0.000343	mg/Kg		04/25/22 15:01	04/29/22 07:25	1
Xylenes, Total	0.0179		0.00398	0.00101	mg/Kg		04/25/22 15:01	04/29/22 07:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	04/25/22 15:01	04/29/22 07:25	1
1,4-Difluorobenzene (Surr)	83		70 - 130	04/25/22 15:01	04/29/22 07:25	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0179		0.00398	0.00101	mg/Kg			04/27/22 12:38	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	172		50.0	15.0	mg/Kg			04/25/22 09:39	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	15.8	J	50.0	15.0	mg/Kg		04/21/22 14:00	04/23/22 16:42	1
Diesel Range Organics (Over C10-C28)	112	B	50.0	15.0	mg/Kg		04/21/22 14:00	04/23/22 16:42	1
Oil Range Organics (Over C28-C36)	43.7	J	50.0	15.0	mg/Kg		04/21/22 14:00	04/23/22 16:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	04/21/22 14:00	04/23/22 16:42	1
o-Terphenyl	109		70 - 130	04/21/22 14:00	04/23/22 16:42	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16.4		4.98	0.855	mg/Kg			04/28/22 04:18	1

Client Sample ID: BH-14

Lab Sample ID: 890-2217-11

Date Collected: 04/20/22 11:50

Matrix: Solid

Date Received: 04/20/22 15:28

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000384	mg/Kg		04/25/22 15:01	04/29/22 07:46	1
Toluene	<0.00200	U	0.00200	0.000455	mg/Kg		04/25/22 15:01	04/29/22 07:46	1
Ethylbenzene	<0.00200	U	0.00200	0.000564	mg/Kg		04/25/22 15:01	04/29/22 07:46	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	0.00101	mg/Kg		04/25/22 15:01	04/29/22 07:46	1
o-Xylene	0.00245		0.00200	0.000343	mg/Kg		04/25/22 15:01	04/29/22 07:46	1
Xylenes, Total	0.00245	J	0.00399	0.00101	mg/Kg		04/25/22 15:01	04/29/22 07:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	04/25/22 15:01	04/29/22 07:46	1
1,4-Difluorobenzene (Surr)	91		70 - 130	04/25/22 15:01	04/29/22 07:46	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

Client Sample ID: BH-14

Lab Sample ID: 890-2217-11

Date Collected: 04/20/22 11:50

Matrix: Solid

Date Received: 04/20/22 15:28

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00245	J	0.00399	0.00101	mg/Kg			04/27/22 12:38	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	230		49.9	15.0	mg/Kg			04/25/22 09:39	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	15.0	mg/Kg		04/21/22 14:00	04/23/22 17:25	1
Diesel Range Organics (Over C10-C28)	182	B	49.9	15.0	mg/Kg		04/21/22 14:00	04/23/22 17:25	1
Oil Range Organics (Over C28-C36)	47.9	J	49.9	15.0	mg/Kg		04/21/22 14:00	04/23/22 17:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130				04/21/22 14:00	04/23/22 17:25	1
o-Terphenyl	99		70 - 130				04/21/22 14:00	04/23/22 17:25	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14.8		4.95	0.850	mg/Kg			04/28/22 04:24	1

Client Sample ID: BH-15

Lab Sample ID: 890-2217-12

Date Collected: 04/20/22 11:55

Matrix: Solid

Date Received: 04/20/22 15:28

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	0.000383	mg/Kg		04/25/22 15:01	04/29/22 09:29	1
Toluene	<0.00199	U	0.00199	0.000453	mg/Kg		04/25/22 15:01	04/29/22 09:29	1
Ethylbenzene	<0.00199	U	0.00199	0.000562	mg/Kg		04/25/22 15:01	04/29/22 09:29	1
m-Xylene & p-Xylene	0.00192	J	0.00398	0.00100	mg/Kg		04/25/22 15:01	04/29/22 09:29	1
o-Xylene	0.000987	J	0.00199	0.000342	mg/Kg		04/25/22 15:01	04/29/22 09:29	1
Xylenes, Total	0.00291	J	0.00398	0.00100	mg/Kg		04/25/22 15:01	04/29/22 09:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130				04/25/22 15:01	04/29/22 09:29	1
1,4-Difluorobenzene (Surr)	100		70 - 130				04/25/22 15:01	04/29/22 09:29	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00291	J	0.00398	0.00100	mg/Kg			04/27/22 12:38	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	521		49.9	15.0	mg/Kg			04/25/22 09:39	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	15.0	mg/Kg		04/21/22 14:00	04/23/22 17:46	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

Client Sample ID: BH-15

Lab Sample ID: 890-2217-12

Date Collected: 04/20/22 11:55

Matrix: Solid

Date Received: 04/20/22 15:28

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	459	B	49.9	15.0	mg/Kg		04/21/22 14:00	04/23/22 17:46	1
Oil Range Organics (Over C28-C36)	62.2		49.9	15.0	mg/Kg		04/21/22 14:00	04/23/22 17:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130				04/21/22 14:00	04/23/22 17:46	1
o-Terphenyl	93		70 - 130				04/21/22 14:00	04/23/22 17:46	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	34.7		4.98	0.855	mg/Kg			04/28/22 04:43	1

Client Sample ID: BH-20

Lab Sample ID: 890-2217-13

Date Collected: 04/20/22 12:00

Matrix: Solid

Date Received: 04/20/22 15:28

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		04/25/22 15:01	04/29/22 09:49	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		04/25/22 15:01	04/29/22 09:49	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		04/25/22 15:01	04/29/22 09:49	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		04/25/22 15:01	04/29/22 09:49	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		04/25/22 15:01	04/29/22 09:49	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		04/25/22 15:01	04/29/22 09:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130				04/25/22 15:01	04/29/22 09:49	1
1,4-Difluorobenzene (Surr)	96		70 - 130				04/25/22 15:01	04/29/22 09:49	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	0.00101	mg/Kg			04/27/22 12:38	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	60.2		50.0	15.0	mg/Kg			04/25/22 09:39	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	26.5	J	50.0	15.0	mg/Kg		04/21/22 14:00	04/23/22 18:07	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		04/21/22 14:00	04/23/22 18:07	1
Oil Range Organics (Over C28-C36)	33.7	J	50.0	15.0	mg/Kg		04/21/22 14:00	04/23/22 18:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130				04/21/22 14:00	04/23/22 18:07	1
o-Terphenyl	109		70 - 130				04/21/22 14:00	04/23/22 18:07	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

Client Sample ID: BH-20

Lab Sample ID: 890-2217-13

Date Collected: 04/20/22 12:00

Matrix: Solid

Date Received: 04/20/22 15:28

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.92	J	4.95	0.850	mg/Kg			04/28/22 04:49	1

Client Sample ID: BH-21

Lab Sample ID: 890-2217-14

Date Collected: 04/20/22 12:05

Matrix: Solid

Date Received: 04/20/22 15:28

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000386	mg/Kg		04/25/22 15:01	04/29/22 10:10	1
Toluene	<0.00200	U	0.00200	0.000457	mg/Kg		04/25/22 15:01	04/29/22 10:10	1
Ethylbenzene	<0.00200	U	0.00200	0.000566	mg/Kg		04/25/22 15:01	04/29/22 10:10	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	0.00101	mg/Kg		04/25/22 15:01	04/29/22 10:10	1
o-Xylene	0.000833	J	0.00200	0.000345	mg/Kg		04/25/22 15:01	04/29/22 10:10	1
Xylenes, Total	<0.00401	U	0.00401	0.00101	mg/Kg		04/25/22 15:01	04/29/22 10:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130				04/25/22 15:01	04/29/22 10:10	1
1,4-Difluorobenzene (Surr)	81		70 - 130				04/25/22 15:01	04/29/22 10:10	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	0.00101	mg/Kg			04/27/22 12:38	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	195		49.9	15.0	mg/Kg			04/25/22 09:39	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	20.1	J	49.9	15.0	mg/Kg		04/21/22 14:00	04/23/22 18:29	1
Diesel Range Organics (Over C10-C28)	139	B	49.9	15.0	mg/Kg		04/21/22 14:00	04/23/22 18:29	1
Oil Range Organics (Over C28-C36)	35.4	J	49.9	15.0	mg/Kg		04/21/22 14:00	04/23/22 18:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130				04/21/22 14:00	04/23/22 18:29	1
o-Terphenyl	102		70 - 130				04/21/22 14:00	04/23/22 18:29	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.70		5.01	0.860	mg/Kg			04/28/22 05:08	1

Client Sample ID: BH-22

Lab Sample ID: 890-2217-15

Date Collected: 04/20/22 12:10

Matrix: Solid

Date Received: 04/20/22 15:28

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	0.000387	mg/Kg		04/25/22 15:01	04/29/22 10:30	1
Toluene	<0.00201	U	0.00201	0.000459	mg/Kg		04/25/22 15:01	04/29/22 10:30	1
Ethylbenzene	<0.00201	U	0.00201	0.000568	mg/Kg		04/25/22 15:01	04/29/22 10:30	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

Client Sample ID: BH-22

Lab Sample ID: 890-2217-15

Date Collected: 04/20/22 12:10

Matrix: Solid

Date Received: 04/20/22 15:28

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<0.00402	U	0.00402	0.00102	mg/Kg		04/25/22 15:01	04/29/22 10:30	1
o-Xylene	<0.00201	U	0.00201	0.000346	mg/Kg		04/25/22 15:01	04/29/22 10:30	1
Xylenes, Total	<0.00402	U	0.00402	0.00102	mg/Kg		04/25/22 15:01	04/29/22 10:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130				04/25/22 15:01	04/29/22 10:30	1
1,4-Difluorobenzene (Surr)	96		70 - 130				04/25/22 15:01	04/29/22 10:30	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	0.00102	mg/Kg			04/27/22 12:38	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	170		50.0	15.0	mg/Kg			04/25/22 09:39	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	25.6	J	50.0	15.0	mg/Kg		04/21/22 14:00	04/23/22 18:50	1
Diesel Range Organics (Over C10-C28)	110	B	50.0	15.0	mg/Kg		04/21/22 14:00	04/23/22 18:50	1
Oil Range Organics (Over C28-C36)	34.4	J	50.0	15.0	mg/Kg		04/21/22 14:00	04/23/22 18:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130				04/21/22 14:00	04/23/22 18:50	1
o-Terphenyl	113		70 - 130				04/21/22 14:00	04/23/22 18:50	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.8		4.97	0.853	mg/Kg			04/28/22 05:15	1

Client Sample ID: BH-23

Lab Sample ID: 890-2217-16

Date Collected: 04/20/22 12:15

Matrix: Solid

Date Received: 04/20/22 15:28

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000384	mg/Kg		04/25/22 15:01	04/29/22 10:51	1
Toluene	0.00188	J	0.00200	0.000455	mg/Kg		04/25/22 15:01	04/29/22 10:51	1
Ethylbenzene	0.00136	J	0.00200	0.000564	mg/Kg		04/25/22 15:01	04/29/22 10:51	1
m-Xylene & p-Xylene	0.00920		0.00399	0.00101	mg/Kg		04/25/22 15:01	04/29/22 10:51	1
o-Xylene	0.00421		0.00200	0.000343	mg/Kg		04/25/22 15:01	04/29/22 10:51	1
Xylenes, Total	0.0134		0.00399	0.00101	mg/Kg		04/25/22 15:01	04/29/22 10:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130				04/25/22 15:01	04/29/22 10:51	1
1,4-Difluorobenzene (Surr)	97		70 - 130				04/25/22 15:01	04/29/22 10:51	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0167		0.00399	0.00101	mg/Kg			04/27/22 12:38	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

Client Sample ID: BH-23

Lab Sample ID: 890-2217-16

Date Collected: 04/20/22 12:15

Matrix: Solid

Date Received: 04/20/22 15:28

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	837		50.0	15.0	mg/Kg			04/25/22 09:39	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		04/21/22 14:00	04/23/22 19:11	1
Diesel Range Organics (Over C10-C28)	709	B	50.0	15.0	mg/Kg		04/21/22 14:00	04/23/22 19:11	1
Oil Range Organics (Over C28-C36)	128		50.0	15.0	mg/Kg		04/21/22 14:00	04/23/22 19:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130				04/21/22 14:00	04/23/22 19:11	1
o-Terphenyl	107		70 - 130				04/21/22 14:00	04/23/22 19:11	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	28.6		5.05	0.867	mg/Kg			04/28/22 05:21	1

Client Sample ID: BH-25

Lab Sample ID: 890-2217-17

Date Collected: 04/20/22 12:20

Matrix: Solid

Date Received: 04/20/22 15:28

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	0.000387	mg/Kg		04/25/22 15:01	04/29/22 11:11	1
Toluene	<0.00201	U	0.00201	0.000458	mg/Kg		04/25/22 15:01	04/29/22 11:11	1
Ethylbenzene	<0.00201	U	0.00201	0.000567	mg/Kg		04/25/22 15:01	04/29/22 11:11	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	0.00101	mg/Kg		04/25/22 15:01	04/29/22 11:11	1
o-Xylene	<0.00201	U	0.00201	0.000345	mg/Kg		04/25/22 15:01	04/29/22 11:11	1
Xylenes, Total	<0.00402	U	0.00402	0.00101	mg/Kg		04/25/22 15:01	04/29/22 11:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130				04/25/22 15:01	04/29/22 11:11	1
1,4-Difluorobenzene (Surr)	92		70 - 130				04/25/22 15:01	04/29/22 11:11	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	0.00101	mg/Kg			04/27/22 12:38	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	103		49.9	15.0	mg/Kg			04/25/22 09:39	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	20.1	J	49.9	15.0	mg/Kg		04/21/22 14:00	04/23/22 19:32	1
Diesel Range Organics (Over C10-C28)	37.1	J B	49.9	15.0	mg/Kg		04/21/22 14:00	04/23/22 19:32	1
Oil Range Organics (Over C28-C36)	45.3	J	49.9	15.0	mg/Kg		04/21/22 14:00	04/23/22 19:32	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

Client Sample ID: BH-25

Lab Sample ID: 890-2217-17

Date Collected: 04/20/22 12:20

Matrix: Solid

Date Received: 04/20/22 15:28

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	04/21/22 14:00	04/23/22 19:32	1
o-Terphenyl	97		70 - 130	04/21/22 14:00	04/23/22 19:32	1

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.4		4.99	0.857	mg/Kg			04/28/22 05:27	1

Client Sample ID: BH-26

Lab Sample ID: 890-2217-18

Date Collected: 04/20/22 12:25

Matrix: Solid

Date Received: 04/20/22 15:28

Method: 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000386	mg/Kg		04/25/22 15:01	04/29/22 11:32	1
Toluene	<0.00200	U	0.00200	0.000457	mg/Kg		04/25/22 15:01	04/29/22 11:32	1
Ethylbenzene	<0.00200	U	0.00200	0.000566	mg/Kg		04/25/22 15:01	04/29/22 11:32	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	0.00101	mg/Kg		04/25/22 15:01	04/29/22 11:32	1
o-Xylene	<0.00200	U	0.00200	0.000345	mg/Kg		04/25/22 15:01	04/29/22 11:32	1
Xylenes, Total	<0.00401	U	0.00401	0.00101	mg/Kg		04/25/22 15:01	04/29/22 11:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	04/25/22 15:01	04/29/22 11:32	1
1,4-Difluorobenzene (Surr)	95		70 - 130	04/25/22 15:01	04/29/22 11:32	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	0.00101	mg/Kg			04/27/22 12:38	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	198		49.9	15.0	mg/Kg			04/25/22 09:39	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	19.1	J	49.9	15.0	mg/Kg		04/21/22 14:00	04/23/22 19:54	1
Diesel Range Organics (Over C10-C28)	135	B	49.9	15.0	mg/Kg		04/21/22 14:00	04/23/22 19:54	1
Oil Range Organics (Over C28-C36)	43.7	J	49.9	15.0	mg/Kg		04/21/22 14:00	04/23/22 19:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 130	04/21/22 14:00	04/23/22 19:54	1
o-Terphenyl	111		70 - 130	04/21/22 14:00	04/23/22 19:54	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14.2		4.98	0.855	mg/Kg			04/28/22 05:34	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

Client Sample ID: BH-28

Lab Sample ID: 890-2217-19

Date Collected: 04/20/22 12:30

Matrix: Solid

Date Received: 04/20/22 15:28

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000384	mg/Kg		04/25/22 15:01	04/29/22 11:52	1
Toluene	0.00236		0.00200	0.000455	mg/Kg		04/25/22 15:01	04/29/22 11:52	1
Ethylbenzene	<0.00200	U	0.00200	0.000564	mg/Kg		04/25/22 15:01	04/29/22 11:52	1
m-Xylene & p-Xylene	0.00288	J	0.00399	0.00101	mg/Kg		04/25/22 15:01	04/29/22 11:52	1
o-Xylene	0.00103	J	0.00200	0.000343	mg/Kg		04/25/22 15:01	04/29/22 11:52	1
Xylenes, Total	0.00391	J	0.00399	0.00101	mg/Kg		04/25/22 15:01	04/29/22 11:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	04/25/22 15:01	04/29/22 11:52	1
1,4-Difluorobenzene (Surr)	96		70 - 130	04/25/22 15:01	04/29/22 11:52	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00627		0.00399	0.00101	mg/Kg			04/27/22 12:38	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	150		50.0	15.0	mg/Kg			04/25/22 09:39	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	25.9	J	50.0	15.0	mg/Kg		04/21/22 14:00	04/23/22 20:15	1
Diesel Range Organics (Over C10-C28)	84.6	B	50.0	15.0	mg/Kg		04/21/22 14:00	04/23/22 20:15	1
Oil Range Organics (Over C28-C36)	39.0	J	50.0	15.0	mg/Kg		04/21/22 14:00	04/23/22 20:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	04/21/22 14:00	04/23/22 20:15	1
o-Terphenyl	108		70 - 130	04/21/22 14:00	04/23/22 20:15	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13.4		4.95	0.850	mg/Kg			04/28/22 05:40	1

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Surrogate Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	BFB1	DFBZ1				
		(70-130)	(70-130)				
890-2217-1	BH-4	106	98				
890-2217-2	BH-5	104	95				
890-2217-3	BH-6	104	103				
890-2217-4	BH-7	103	104				
890-2217-5	BH-8	103	104				
890-2217-6	BH-9	100	101				
890-2217-7	BH-10	99	103				
890-2217-8	BH-11	103	103				
890-2217-9	BH-12	89	94				
890-2217-10	BH-13	102	83				
890-2217-11	BH-14	107	91				
890-2217-12	BH-15	115	100				
890-2217-13	BH-20	105	96				
890-2217-14	BH-21	105	81				
890-2217-15	BH-22	110	96				
890-2217-16	BH-23	109	97				
890-2217-17	BH-25	105	92				
890-2217-18	BH-26	103	95				
890-2217-19	BH-28	107	96				
LCS 880-24099/1-A	Lab Control Sample	100	103				
LCS 880-24169/1-A	Lab Control Sample	101	99				
LCS 880-24201/1-A	Lab Control Sample	100	98				
LCSD 880-24099/2-A	Lab Control Sample Dup	95	104				
LCSD 880-24169/2-A	Lab Control Sample Dup	104	100				
LCSD 880-24201/2-A	Lab Control Sample Dup	101	99				
MB 880-24099/5-A	Method Blank	97	102				
MB 880-24101/5-A	Method Blank	104	93				
MB 880-24169/5-A	Method Blank	106	93				
MB 880-24201/5-A	Method Blank	105	95				
MB 880-24268/5-A	Method Blank	90	91				
Surrogate Legend							
BFB = 4-Bromofluorobenzene (Surr)							
DFBZ = 1,4-Difluorobenzene (Surr)							

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	1CO1	OTPH1				
		(70-130)	(70-130)				
890-2217-1	BH-4	119	121				
890-2217-1 MS	BH-4	92	85				
890-2217-1 MSD	BH-4	94	86				
890-2217-2	BH-5	117	116				
890-2217-3	BH-6	116	116				
890-2217-4	BH-7	93	92				
890-2217-5	BH-8	117	114				
890-2217-6	BH-9	91	91				
890-2217-7	BH-10	111	109				

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Surrogate Summary

Client: GHD Services Inc.

Job ID: 890-2217-1

Project/Site: Romeo Federal 22 Battery

SDG: 12580761

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)**Matrix: Solid****Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-2217-8	BH-11	109	108
890-2217-9	BH-12	121	122
890-2217-10	BH-13	110	109
890-2217-11	BH-14	101	99
890-2217-12	BH-15	93	93
890-2217-13	BH-20	109	109
890-2217-14	BH-21	105	102
890-2217-15	BH-22	115	113
890-2217-16	BH-23	106	107
890-2217-17	BH-25	97	97
890-2217-18	BH-26	114	111
890-2217-19	BH-28	109	108
LCS 880-23946/2-A	Lab Control Sample	110	103
LCSD 880-23946/3-A	Lab Control Sample Dup	111	107
MB 880-23946/1-A	Method Blank	99	107

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-24099/5-A

Matrix: Solid

Analysis Batch: 24304

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 24099

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		04/23/22 12:31	04/27/22 14:18	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		04/23/22 12:31	04/27/22 14:18	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		04/23/22 12:31	04/27/22 14:18	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		04/23/22 12:31	04/27/22 14:18	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		04/23/22 12:31	04/27/22 14:18	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		04/23/22 12:31	04/27/22 14:18	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	04/23/22 12:31	04/27/22 14:18	1
1,4-Difluorobenzene (Surr)	102		70 - 130	04/23/22 12:31	04/27/22 14:18	1

Lab Sample ID: LCS 880-24099/1-A

Matrix: Solid

Analysis Batch: 24304

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 24099

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1350	*+	mg/Kg		135	70 - 130
Toluene	0.100	0.1526	*+	mg/Kg		153	70 - 130
Ethylbenzene	0.100	0.1429	*+	mg/Kg		143	70 - 130
m-Xylene & p-Xylene	0.200	0.2927	*+	mg/Kg		146	70 - 130
o-Xylene	0.100	0.1348	*+	mg/Kg		135	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: LCSD 880-24099/2-A

Matrix: Solid

Analysis Batch: 24304

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 24099

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1185		mg/Kg		119	70 - 130	13	35
Toluene	0.100	0.1276		mg/Kg		128	70 - 130	18	35
Ethylbenzene	0.100	0.1177		mg/Kg		118	70 - 130	19	35
m-Xylene & p-Xylene	0.200	0.2405		mg/Kg		120	70 - 130	20	35
o-Xylene	0.100	0.1119		mg/Kg		112	70 - 130	19	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: MB 880-24101/5-A

Matrix: Solid

Analysis Batch: 24221

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 24101

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000384	mg/Kg		04/23/22 12:34	04/26/22 19:13	1
Toluene	<0.00200	U	0.00200	0.000455	mg/Kg		04/23/22 12:34	04/26/22 19:13	1

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 880-24101/5-A

Matrix: Solid

Analysis Batch: 24221

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 24101

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.00200	U	0.00200	0.000564	mg/Kg		04/23/22 12:34	04/26/22 19:13	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	0.00101	mg/Kg		04/23/22 12:34	04/26/22 19:13	1
o-Xylene	<0.00200	U	0.00200	0.000343	mg/Kg		04/23/22 12:34	04/26/22 19:13	1
Xylenes, Total	<0.00399	U	0.00399	0.00101	mg/Kg		04/23/22 12:34	04/26/22 19:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	04/23/22 12:34	04/26/22 19:13	1
1,4-Difluorobenzene (Surr)	93		70 - 130	04/23/22 12:34	04/26/22 19:13	1

Lab Sample ID: MB 880-24169/5-A

Matrix: Solid

Analysis Batch: 24221

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 24169

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		04/25/22 11:29	04/27/22 06:29	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		04/25/22 11:29	04/27/22 06:29	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		04/25/22 11:29	04/27/22 06:29	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		04/25/22 11:29	04/27/22 06:29	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		04/25/22 11:29	04/27/22 06:29	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		04/25/22 11:29	04/27/22 06:29	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	04/25/22 11:29	04/27/22 06:29	1
1,4-Difluorobenzene (Surr)	93		70 - 130	04/25/22 11:29	04/27/22 06:29	1

Lab Sample ID: LCS 880-24169/1-A

Matrix: Solid

Analysis Batch: 24221

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 24169

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09876		mg/Kg		99	70 - 130
Toluene	0.100	0.09878		mg/Kg		99	70 - 130
Ethylbenzene	0.100	0.09946		mg/Kg		99	70 - 130
m-Xylene & p-Xylene	0.200	0.2038		mg/Kg		102	70 - 130
o-Xylene	0.100	0.1035		mg/Kg		103	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: LCSD 880-24169/2-A

Matrix: Solid

Analysis Batch: 24221

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 24169

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08596		mg/Kg		86	70 - 130	14	35
Toluene	0.100	0.08781		mg/Kg		88	70 - 130	12	35
Ethylbenzene	0.100	0.09054		mg/Kg		91	70 - 130	9	35

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-24169/2-A

Matrix: Solid

Analysis Batch: 24221

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 24169

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
m-Xylene & p-Xylene	0.200	0.1870		mg/Kg		94	70 - 130	9	35
o-Xylene	0.100	0.09620		mg/Kg		96	70 - 130	7	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: MB 880-24201/5-A

Matrix: Solid

Analysis Batch: 24380

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 24201

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		04/25/22 15:01	04/29/22 04:40	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		04/25/22 15:01	04/29/22 04:40	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		04/25/22 15:01	04/29/22 04:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		04/25/22 15:01	04/29/22 04:40	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		04/25/22 15:01	04/29/22 04:40	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		04/25/22 15:01	04/29/22 04:40	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	04/25/22 15:01	04/29/22 04:40	1
1,4-Difluorobenzene (Surr)	95		70 - 130	04/25/22 15:01	04/29/22 04:40	1

Lab Sample ID: LCS 880-24201/1-A

Matrix: Solid

Analysis Batch: 24380

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 24201

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08999		mg/Kg		90	70 - 130
Toluene	0.100	0.08943		mg/Kg		89	70 - 130
Ethylbenzene	0.100	0.08916		mg/Kg		89	70 - 130
m-Xylene & p-Xylene	0.200	0.1811		mg/Kg		91	70 - 130
o-Xylene	0.100	0.09261		mg/Kg		93	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: LCSD 880-24201/2-A

Matrix: Solid

Analysis Batch: 24380

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 24201

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09563		mg/Kg		96	70 - 130	6	35
Toluene	0.100	0.09619		mg/Kg		96	70 - 130	7	35
Ethylbenzene	0.100	0.09690		mg/Kg		97	70 - 130	8	35
m-Xylene & p-Xylene	0.200	0.1976		mg/Kg		99	70 - 130	9	35
o-Xylene	0.100	0.1025		mg/Kg		102	70 - 130	10	35

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: MB 880-24268/5-A

Matrix: Solid

Analysis Batch: 24380

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 24268

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		04/26/22 15:59	04/28/22 18:04	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		04/26/22 15:59	04/28/22 18:04	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		04/26/22 15:59	04/28/22 18:04	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		04/26/22 15:59	04/28/22 18:04	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		04/26/22 15:59	04/28/22 18:04	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		04/26/22 15:59	04/28/22 18:04	1

	MB	MB							
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
4-Bromofluorobenzene (Surr)	90		70 - 130	04/26/22 15:59	04/28/22 18:04	1			
1,4-Difluorobenzene (Surr)	91		70 - 130	04/26/22 15:59	04/28/22 18:04	1			

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-23946/1-A

Matrix: Solid

Analysis Batch: 24090

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 23946

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		04/21/22 14:00	04/23/22 11:40	1
Diesel Range Organics (Over C10-C28)	18.06	J	50.0	15.0	mg/Kg		04/21/22 14:00	04/23/22 11:40	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		04/21/22 14:00	04/23/22 11:40	1

	MB	MB							
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
1-Chlorooctane	99		70 - 130	04/21/22 14:00	04/23/22 11:40	1			
o-Terphenyl	107		70 - 130	04/21/22 14:00	04/23/22 11:40	1			

Lab Sample ID: LCS 880-23946/2-A

Matrix: Solid

Analysis Batch: 24090

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 23946

			Spike	LCS	LCS			%Rec	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics (GRO)-C6-C10			1000	877.3		mg/Kg		88	70 - 130
Diesel Range Organics (Over C10-C28)			1000	1063		mg/Kg		106	70 - 130

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	110		70 - 130
o-Terphenyl	103		70 - 130

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 880-23946/3-A

Matrix: Solid

Analysis Batch: 24090

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 23946

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	811.8		mg/Kg		81	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	1000	1007		mg/Kg		101	70 - 130	5	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	111		70 - 130						
o-Terphenyl	107		70 - 130						

Lab Sample ID: 890-2217-1 MS

Matrix: Solid

Analysis Batch: 24090

Client Sample ID: BH-4

Prep Type: Total/NA

Prep Batch: 23946

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	820.7		mg/Kg		82	70 - 130		
Diesel Range Organics (Over C10-C28)	564	B F1	999	1221	F1	mg/Kg		66	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1-Chlorooctane	92		70 - 130								
o-Terphenyl	85		70 - 130								

Lab Sample ID: 890-2217-1 MSD

Matrix: Solid

Analysis Batch: 24090

Client Sample ID: BH-4

Prep Type: Total/NA

Prep Batch: 23946

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	868.4		mg/Kg		87	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	564	B F1	999	1236	F1	mg/Kg		67	70 - 130	1	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	94		70 - 130								
o-Terphenyl	86		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-23909/1-A

Matrix: Solid

Analysis Batch: 24344

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	0.858	mg/Kg			04/28/22 02:36	1

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-23909/2-A

Matrix: Solid

Analysis Batch: 24344

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	246.8		mg/Kg		99	90 - 110		

Lab Sample ID: LCSD 880-23909/3-A

Matrix: Solid

Analysis Batch: 24344

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	227.8		mg/Kg		91	90 - 110	8	20

Lab Sample ID: 890-2217-1 MS

Matrix: Solid

Analysis Batch: 24344

Client Sample ID: BH-4

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	21.2		250	291.5		mg/Kg		108	90 - 110		

Lab Sample ID: 890-2217-1 MSD

Matrix: Solid

Analysis Batch: 24344

Client Sample ID: BH-4

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	21.2		250	259.6		mg/Kg		95	90 - 110	12	20

Lab Sample ID: 890-2217-11 MS

Matrix: Solid

Analysis Batch: 24344

Client Sample ID: BH-14

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	14.8		248	279.8		mg/Kg		107	90 - 110		

Lab Sample ID: 890-2217-11 MSD

Matrix: Solid

Analysis Batch: 24344

Client Sample ID: BH-14

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	14.8		248	257.9		mg/Kg		98	90 - 110	8	20

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

GC VOA

Prep Batch: 24099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2217-3	BH-6	Total/NA	Solid	5035	
890-2217-4	BH-7	Total/NA	Solid	5035	
890-2217-5	BH-8	Total/NA	Solid	5035	
890-2217-6	BH-9	Total/NA	Solid	5035	
890-2217-7	BH-10	Total/NA	Solid	5035	
890-2217-8	BH-11	Total/NA	Solid	5035	
890-2217-9	BH-12	Total/NA	Solid	5035	
MB 880-24099/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-24099/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-24099/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Prep Batch: 24101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-24101/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 24169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2217-1	BH-4	Total/NA	Solid	5035	
890-2217-2	BH-5	Total/NA	Solid	5035	
MB 880-24169/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-24169/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-24169/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Prep Batch: 24201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2217-10	BH-13	Total/NA	Solid	5035	
890-2217-11	BH-14	Total/NA	Solid	5035	
890-2217-12	BH-15	Total/NA	Solid	5035	
890-2217-13	BH-20	Total/NA	Solid	5035	
890-2217-14	BH-21	Total/NA	Solid	5035	
890-2217-15	BH-22	Total/NA	Solid	5035	
890-2217-16	BH-23	Total/NA	Solid	5035	
890-2217-17	BH-25	Total/NA	Solid	5035	
890-2217-18	BH-26	Total/NA	Solid	5035	
890-2217-19	BH-28	Total/NA	Solid	5035	
MB 880-24201/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-24201/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-24201/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 24221

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2217-1	BH-4	Total/NA	Solid	8021B	24169
890-2217-2	BH-5	Total/NA	Solid	8021B	24169
MB 880-24101/5-A	Method Blank	Total/NA	Solid	8021B	24101
MB 880-24169/5-A	Method Blank	Total/NA	Solid	8021B	24169
LCS 880-24169/1-A	Lab Control Sample	Total/NA	Solid	8021B	24169
LCSD 880-24169/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	24169

Prep Batch: 24268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-24268/5-A	Method Blank	Total/NA	Solid	5035	

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

GC VOA

Analysis Batch: 24304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2217-3	BH-6	Total/NA	Solid	8021B	24099
890-2217-4	BH-7	Total/NA	Solid	8021B	24099
890-2217-5	BH-8	Total/NA	Solid	8021B	24099
890-2217-6	BH-9	Total/NA	Solid	8021B	24099
890-2217-7	BH-10	Total/NA	Solid	8021B	24099
890-2217-8	BH-11	Total/NA	Solid	8021B	24099
890-2217-9	BH-12	Total/NA	Solid	8021B	24099
MB 880-24099/5-A	Method Blank	Total/NA	Solid	8021B	24099
LCS 880-24099/1-A	Lab Control Sample	Total/NA	Solid	8021B	24099
LCSD 880-24099/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	24099

Analysis Batch: 24326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2217-1	BH-4	Total/NA	Solid	Total BTEX	
890-2217-2	BH-5	Total/NA	Solid	Total BTEX	
890-2217-3	BH-6	Total/NA	Solid	Total BTEX	
890-2217-4	BH-7	Total/NA	Solid	Total BTEX	
890-2217-5	BH-8	Total/NA	Solid	Total BTEX	
890-2217-6	BH-9	Total/NA	Solid	Total BTEX	
890-2217-7	BH-10	Total/NA	Solid	Total BTEX	
890-2217-8	BH-11	Total/NA	Solid	Total BTEX	
890-2217-9	BH-12	Total/NA	Solid	Total BTEX	
890-2217-10	BH-13	Total/NA	Solid	Total BTEX	
890-2217-11	BH-14	Total/NA	Solid	Total BTEX	
890-2217-12	BH-15	Total/NA	Solid	Total BTEX	
890-2217-13	BH-20	Total/NA	Solid	Total BTEX	
890-2217-14	BH-21	Total/NA	Solid	Total BTEX	
890-2217-15	BH-22	Total/NA	Solid	Total BTEX	
890-2217-16	BH-23	Total/NA	Solid	Total BTEX	
890-2217-17	BH-25	Total/NA	Solid	Total BTEX	
890-2217-18	BH-26	Total/NA	Solid	Total BTEX	
890-2217-19	BH-28	Total/NA	Solid	Total BTEX	

Analysis Batch: 24380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2217-10	BH-13	Total/NA	Solid	8021B	24201
890-2217-11	BH-14	Total/NA	Solid	8021B	24201
890-2217-12	BH-15	Total/NA	Solid	8021B	24201
890-2217-13	BH-20	Total/NA	Solid	8021B	24201
890-2217-14	BH-21	Total/NA	Solid	8021B	24201
890-2217-15	BH-22	Total/NA	Solid	8021B	24201
890-2217-16	BH-23	Total/NA	Solid	8021B	24201
890-2217-17	BH-25	Total/NA	Solid	8021B	24201
890-2217-18	BH-26	Total/NA	Solid	8021B	24201
890-2217-19	BH-28	Total/NA	Solid	8021B	24201
MB 880-24201/5-A	Method Blank	Total/NA	Solid	8021B	24201
MB 880-24268/5-A	Method Blank	Total/NA	Solid	8021B	24268
LCS 880-24201/1-A	Lab Control Sample	Total/NA	Solid	8021B	24201
LCSD 880-24201/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	24201

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

GC Semi VOA

Prep Batch: 23946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2217-1	BH-4	Total/NA	Solid	8015NM Prep	
890-2217-2	BH-5	Total/NA	Solid	8015NM Prep	
890-2217-3	BH-6	Total/NA	Solid	8015NM Prep	
890-2217-4	BH-7	Total/NA	Solid	8015NM Prep	
890-2217-5	BH-8	Total/NA	Solid	8015NM Prep	
890-2217-6	BH-9	Total/NA	Solid	8015NM Prep	
890-2217-7	BH-10	Total/NA	Solid	8015NM Prep	
890-2217-8	BH-11	Total/NA	Solid	8015NM Prep	
890-2217-9	BH-12	Total/NA	Solid	8015NM Prep	
890-2217-10	BH-13	Total/NA	Solid	8015NM Prep	
890-2217-11	BH-14	Total/NA	Solid	8015NM Prep	
890-2217-12	BH-15	Total/NA	Solid	8015NM Prep	
890-2217-13	BH-20	Total/NA	Solid	8015NM Prep	
890-2217-14	BH-21	Total/NA	Solid	8015NM Prep	
890-2217-15	BH-22	Total/NA	Solid	8015NM Prep	
890-2217-16	BH-23	Total/NA	Solid	8015NM Prep	
890-2217-17	BH-25	Total/NA	Solid	8015NM Prep	
890-2217-18	BH-26	Total/NA	Solid	8015NM Prep	
890-2217-19	BH-28	Total/NA	Solid	8015NM Prep	
MB 880-23946/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-23946/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-23946/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2217-1 MS	BH-4	Total/NA	Solid	8015NM Prep	
890-2217-1 MSD	BH-4	Total/NA	Solid	8015NM Prep	

Analysis Batch: 24090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2217-1	BH-4	Total/NA	Solid	8015B NM	23946
890-2217-2	BH-5	Total/NA	Solid	8015B NM	23946
890-2217-3	BH-6	Total/NA	Solid	8015B NM	23946
890-2217-4	BH-7	Total/NA	Solid	8015B NM	23946
890-2217-5	BH-8	Total/NA	Solid	8015B NM	23946
890-2217-6	BH-9	Total/NA	Solid	8015B NM	23946
890-2217-7	BH-10	Total/NA	Solid	8015B NM	23946
890-2217-8	BH-11	Total/NA	Solid	8015B NM	23946
890-2217-9	BH-12	Total/NA	Solid	8015B NM	23946
890-2217-10	BH-13	Total/NA	Solid	8015B NM	23946
890-2217-11	BH-14	Total/NA	Solid	8015B NM	23946
890-2217-12	BH-15	Total/NA	Solid	8015B NM	23946
890-2217-13	BH-20	Total/NA	Solid	8015B NM	23946
890-2217-14	BH-21	Total/NA	Solid	8015B NM	23946
890-2217-15	BH-22	Total/NA	Solid	8015B NM	23946
890-2217-16	BH-23	Total/NA	Solid	8015B NM	23946
890-2217-17	BH-25	Total/NA	Solid	8015B NM	23946
890-2217-18	BH-26	Total/NA	Solid	8015B NM	23946
890-2217-19	BH-28	Total/NA	Solid	8015B NM	23946
MB 880-23946/1-A	Method Blank	Total/NA	Solid	8015B NM	23946
LCS 880-23946/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	23946
LCSD 880-23946/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	23946
890-2217-1 MS	BH-4	Total/NA	Solid	8015B NM	23946
890-2217-1 MSD	BH-4	Total/NA	Solid	8015B NM	23946

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

GC Semi VOA

Analysis Batch: 24131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2217-1	BH-4	Total/NA	Solid	8015 NM	
890-2217-2	BH-5	Total/NA	Solid	8015 NM	
890-2217-3	BH-6	Total/NA	Solid	8015 NM	
890-2217-4	BH-7	Total/NA	Solid	8015 NM	
890-2217-5	BH-8	Total/NA	Solid	8015 NM	
890-2217-6	BH-9	Total/NA	Solid	8015 NM	
890-2217-7	BH-10	Total/NA	Solid	8015 NM	
890-2217-8	BH-11	Total/NA	Solid	8015 NM	
890-2217-9	BH-12	Total/NA	Solid	8015 NM	
890-2217-10	BH-13	Total/NA	Solid	8015 NM	
890-2217-11	BH-14	Total/NA	Solid	8015 NM	
890-2217-12	BH-15	Total/NA	Solid	8015 NM	
890-2217-13	BH-20	Total/NA	Solid	8015 NM	
890-2217-14	BH-21	Total/NA	Solid	8015 NM	
890-2217-15	BH-22	Total/NA	Solid	8015 NM	
890-2217-16	BH-23	Total/NA	Solid	8015 NM	
890-2217-17	BH-25	Total/NA	Solid	8015 NM	
890-2217-18	BH-26	Total/NA	Solid	8015 NM	
890-2217-19	BH-28	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 23909

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2217-1	BH-4	Soluble	Solid	DI Leach	
890-2217-2	BH-5	Soluble	Solid	DI Leach	
890-2217-3	BH-6	Soluble	Solid	DI Leach	
890-2217-4	BH-7	Soluble	Solid	DI Leach	
890-2217-5	BH-8	Soluble	Solid	DI Leach	
890-2217-6	BH-9	Soluble	Solid	DI Leach	
890-2217-7	BH-10	Soluble	Solid	DI Leach	
890-2217-8	BH-11	Soluble	Solid	DI Leach	
890-2217-9	BH-12	Soluble	Solid	DI Leach	
890-2217-10	BH-13	Soluble	Solid	DI Leach	
890-2217-11	BH-14	Soluble	Solid	DI Leach	
890-2217-12	BH-15	Soluble	Solid	DI Leach	
890-2217-13	BH-20	Soluble	Solid	DI Leach	
890-2217-14	BH-21	Soluble	Solid	DI Leach	
890-2217-15	BH-22	Soluble	Solid	DI Leach	
890-2217-16	BH-23	Soluble	Solid	DI Leach	
890-2217-17	BH-25	Soluble	Solid	DI Leach	
890-2217-18	BH-26	Soluble	Solid	DI Leach	
890-2217-19	BH-28	Soluble	Solid	DI Leach	
MB 880-23909/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-23909/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-23909/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2217-1 MS	BH-4	Soluble	Solid	DI Leach	
890-2217-1 MSD	BH-4	Soluble	Solid	DI Leach	
890-2217-11 MS	BH-14	Soluble	Solid	DI Leach	
890-2217-11 MSD	BH-14	Soluble	Solid	DI Leach	

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

HPLC/IC

Analysis Batch: 24344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2217-1	BH-4	Soluble	Solid	300.0	23909
890-2217-2	BH-5	Soluble	Solid	300.0	23909
890-2217-3	BH-6	Soluble	Solid	300.0	23909
890-2217-4	BH-7	Soluble	Solid	300.0	23909
890-2217-5	BH-8	Soluble	Solid	300.0	23909
890-2217-6	BH-9	Soluble	Solid	300.0	23909
890-2217-7	BH-10	Soluble	Solid	300.0	23909
890-2217-8	BH-11	Soluble	Solid	300.0	23909
890-2217-9	BH-12	Soluble	Solid	300.0	23909
890-2217-10	BH-13	Soluble	Solid	300.0	23909
890-2217-11	BH-14	Soluble	Solid	300.0	23909
890-2217-12	BH-15	Soluble	Solid	300.0	23909
890-2217-13	BH-20	Soluble	Solid	300.0	23909
890-2217-14	BH-21	Soluble	Solid	300.0	23909
890-2217-15	BH-22	Soluble	Solid	300.0	23909
890-2217-16	BH-23	Soluble	Solid	300.0	23909
890-2217-17	BH-25	Soluble	Solid	300.0	23909
890-2217-18	BH-26	Soluble	Solid	300.0	23909
890-2217-19	BH-28	Soluble	Solid	300.0	23909
MB 880-23909/1-A	Method Blank	Soluble	Solid	300.0	23909
LCS 880-23909/2-A	Lab Control Sample	Soluble	Solid	300.0	23909
LCSD 880-23909/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	23909
890-2217-1 MS	BH-4	Soluble	Solid	300.0	23909
890-2217-1 MSD	BH-4	Soluble	Solid	300.0	23909
890-2217-11 MS	BH-14	Soluble	Solid	300.0	23909
890-2217-11 MSD	BH-14	Soluble	Solid	300.0	23909

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Lab Chronicle

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

Client Sample ID: BH-4

Lab Sample ID: 890-2217-1

Date Collected: 04/20/22 11:00

Matrix: Solid

Date Received: 04/20/22 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	24169	04/25/22 11:29	MR	XEN MID
Total/NA	Analysis	8021B		1			24221	04/27/22 11:17	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24326	04/27/22 12:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24131	04/25/22 09:39	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23946	04/21/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24090	04/23/22 12:44	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	23909	04/21/22 09:44	CH	XEN MID
Soluble	Analysis	300.0		1			24344	04/28/22 02:55	CH	XEN MID

Client Sample ID: BH-5

Lab Sample ID: 890-2217-2

Date Collected: 04/20/22 11:05

Matrix: Solid

Date Received: 04/20/22 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	24169	04/25/22 11:29	MR	XEN MID
Total/NA	Analysis	8021B		1			24221	04/27/22 11:38	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24326	04/27/22 12:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24131	04/25/22 09:39	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	23946	04/21/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24090	04/23/22 13:49	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	23909	04/21/22 09:44	CH	XEN MID
Soluble	Analysis	300.0		1			24344	04/28/22 03:14	CH	XEN MID

Client Sample ID: BH-6

Lab Sample ID: 890-2217-3

Date Collected: 04/20/22 11:10

Matrix: Solid

Date Received: 04/20/22 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	24099	04/23/22 12:31	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24304	04/27/22 20:42	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24326	04/27/22 12:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24131	04/25/22 09:39	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23946	04/21/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24090	04/23/22 14:11	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	23909	04/21/22 09:44	CH	XEN MID
Soluble	Analysis	300.0		1			24344	04/28/22 03:21	CH	XEN MID

Client Sample ID: BH-7

Lab Sample ID: 890-2217-4

Date Collected: 04/20/22 11:15

Matrix: Solid

Date Received: 04/20/22 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	24099	04/23/22 12:31	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24304	04/27/22 21:02	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24326	04/27/22 12:38	AJ	XEN MID

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Lab Chronicle

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

Client Sample ID: BH-7

Lab Sample ID: 890-2217-4

Date Collected: 04/20/22 11:15

Matrix: Solid

Date Received: 04/20/22 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			24131	04/25/22 09:39	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	23946	04/21/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24090	04/23/22 14:32	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	23909	04/21/22 09:44	CH	XEN MID
Soluble	Analysis	300.0		1			24344	04/28/22 03:27	CH	XEN MID

Client Sample ID: BH-8

Lab Sample ID: 890-2217-5

Date Collected: 04/20/22 11:20

Matrix: Solid

Date Received: 04/20/22 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	24099	04/23/22 12:31	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24304	04/27/22 21:23	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24326	04/27/22 12:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24131	04/25/22 09:39	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23946	04/21/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24090	04/23/22 14:54	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	23909	04/21/22 09:44	CH	XEN MID
Soluble	Analysis	300.0		1			24344	04/28/22 03:33	CH	XEN MID

Client Sample ID: BH-9

Lab Sample ID: 890-2217-6

Date Collected: 04/20/22 11:25

Matrix: Solid

Date Received: 04/20/22 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	24099	04/23/22 12:31	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24304	04/27/22 21:43	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24326	04/27/22 12:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24131	04/25/22 09:39	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	23946	04/21/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24090	04/23/22 15:15	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	23909	04/21/22 09:44	CH	XEN MID
Soluble	Analysis	300.0		1			24344	04/28/22 03:52	CH	XEN MID

Client Sample ID: BH-10

Lab Sample ID: 890-2217-7

Date Collected: 04/20/22 11:30

Matrix: Solid

Date Received: 04/20/22 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	24099	04/23/22 12:31	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24304	04/27/22 22:04	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24326	04/27/22 12:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24131	04/25/22 09:39	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	23946	04/21/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24090	04/23/22 15:37	AJ	XEN MID

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Lab Chronicle

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

Client Sample ID: BH-10

Lab Sample ID: 890-2217-7

Date Collected: 04/20/22 11:30

Matrix: Solid

Date Received: 04/20/22 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	23909	04/21/22 09:44	CH	XEN MID
Soluble	Analysis	300.0		1			24344	04/28/22 03:59	CH	XEN MID

Client Sample ID: BH-11

Lab Sample ID: 890-2217-8

Date Collected: 04/20/22 11:35

Matrix: Solid

Date Received: 04/20/22 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	24099	04/23/22 12:31	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24304	04/27/22 22:24	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24326	04/27/22 12:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24131	04/25/22 09:39	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23946	04/21/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24090	04/23/22 15:59	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	23909	04/21/22 09:44	CH	XEN MID
Soluble	Analysis	300.0		1			24344	04/28/22 04:05	CH	XEN MID

Client Sample ID: BH-12

Lab Sample ID: 890-2217-9

Date Collected: 04/20/22 11:40

Matrix: Solid

Date Received: 04/20/22 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	24099	04/23/22 12:31	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24304	04/27/22 22:44	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24326	04/27/22 12:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24131	04/25/22 09:39	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23946	04/21/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24090	04/23/22 16:20	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	23909	04/21/22 09:44	CH	XEN MID
Soluble	Analysis	300.0		1			24344	04/28/22 04:11	CH	XEN MID

Client Sample ID: BH-13

Lab Sample ID: 890-2217-10

Date Collected: 04/20/22 11:45

Matrix: Solid

Date Received: 04/20/22 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	24201	04/25/22 15:01	MR	XEN MID
Total/NA	Analysis	8021B		1			24380	04/29/22 07:25	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24326	04/27/22 12:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24131	04/25/22 09:39	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23946	04/21/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24090	04/23/22 16:42	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	23909	04/21/22 09:44	CH	XEN MID
Soluble	Analysis	300.0		1			24344	04/28/22 04:18	CH	XEN MID

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Lab Chronicle

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

Client Sample ID: BH-14

Lab Sample ID: 890-2217-11

Date Collected: 04/20/22 11:50

Matrix: Solid

Date Received: 04/20/22 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	24201	04/25/22 15:01	MR	XEN MID
Total/NA	Analysis	8021B		1			24380	04/29/22 07:46	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24326	04/27/22 12:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24131	04/25/22 09:39	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23946	04/21/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24090	04/23/22 17:25	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	23909	04/21/22 09:44	CH	XEN MID
Soluble	Analysis	300.0		1			24344	04/28/22 04:24	CH	XEN MID

Client Sample ID: BH-15

Lab Sample ID: 890-2217-12

Date Collected: 04/20/22 11:55

Matrix: Solid

Date Received: 04/20/22 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	24201	04/25/22 15:01	MR	XEN MID
Total/NA	Analysis	8021B		1			24380	04/29/22 09:29	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24326	04/27/22 12:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24131	04/25/22 09:39	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	23946	04/21/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24090	04/23/22 17:46	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	23909	04/21/22 09:44	CH	XEN MID
Soluble	Analysis	300.0		1			24344	04/28/22 04:43	CH	XEN MID

Client Sample ID: BH-20

Lab Sample ID: 890-2217-13

Date Collected: 04/20/22 12:00

Matrix: Solid

Date Received: 04/20/22 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	24201	04/25/22 15:01	MR	XEN MID
Total/NA	Analysis	8021B		1			24380	04/29/22 09:49	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24326	04/27/22 12:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24131	04/25/22 09:39	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23946	04/21/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24090	04/23/22 18:07	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	23909	04/21/22 09:44	CH	XEN MID
Soluble	Analysis	300.0		1			24344	04/28/22 04:49	CH	XEN MID

Client Sample ID: BH-21

Lab Sample ID: 890-2217-14

Date Collected: 04/20/22 12:05

Matrix: Solid

Date Received: 04/20/22 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	24201	04/25/22 15:01	MR	XEN MID
Total/NA	Analysis	8021B		1			24380	04/29/22 10:10	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24326	04/27/22 12:38	AJ	XEN MID

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Lab Chronicle

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

Client Sample ID: BH-21

Lab Sample ID: 890-2217-14

Date Collected: 04/20/22 12:05

Matrix: Solid

Date Received: 04/20/22 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			24131	04/25/22 09:39	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23946	04/21/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24090	04/23/22 18:29	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	23909	04/21/22 09:44	CH	XEN MID
Soluble	Analysis	300.0		1			24344	04/28/22 05:08	CH	XEN MID

Client Sample ID: BH-22

Lab Sample ID: 890-2217-15

Date Collected: 04/20/22 12:10

Matrix: Solid

Date Received: 04/20/22 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	24201	04/25/22 15:01	MR	XEN MID
Total/NA	Analysis	8021B		1			24380	04/29/22 10:30	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24326	04/27/22 12:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24131	04/25/22 09:39	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	23946	04/21/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24090	04/23/22 18:50	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	23909	04/21/22 09:44	CH	XEN MID
Soluble	Analysis	300.0		1			24344	04/28/22 05:15	CH	XEN MID

Client Sample ID: BH-23

Lab Sample ID: 890-2217-16

Date Collected: 04/20/22 12:15

Matrix: Solid

Date Received: 04/20/22 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	24201	04/25/22 15:01	MR	XEN MID
Total/NA	Analysis	8021B		1			24380	04/29/22 10:51	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24326	04/27/22 12:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24131	04/25/22 09:39	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23946	04/21/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24090	04/23/22 19:11	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	23909	04/21/22 09:44	CH	XEN MID
Soluble	Analysis	300.0		1			24344	04/28/22 05:21	CH	XEN MID

Client Sample ID: BH-25

Lab Sample ID: 890-2217-17

Date Collected: 04/20/22 12:20

Matrix: Solid

Date Received: 04/20/22 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	24201	04/25/22 15:01	MR	XEN MID
Total/NA	Analysis	8021B		1			24380	04/29/22 11:11	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24326	04/27/22 12:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24131	04/25/22 09:39	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23946	04/21/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24090	04/23/22 19:32	AJ	XEN MID

Eurofins Carlsbad

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

Client Sample ID: BH-25

Lab Sample ID: 890-2217-17

Date Collected: 04/20/22 12:20

Matrix: Solid

Date Received: 04/20/22 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	23909	04/21/22 09:44	CH	XEN MID
Soluble	Analysis	300.0		1			24344	04/28/22 05:27	CH	XEN MID

Client Sample ID: BH-26

Lab Sample ID: 890-2217-18

Date Collected: 04/20/22 12:25

Matrix: Solid

Date Received: 04/20/22 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	24201	04/25/22 15:01	MR	XEN MID
Total/NA	Analysis	8021B		1			24380	04/29/22 11:32	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24326	04/27/22 12:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24131	04/25/22 09:39	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	23946	04/21/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24090	04/23/22 19:54	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	23909	04/21/22 09:44	CH	XEN MID
Soluble	Analysis	300.0		1			24344	04/28/22 05:34	CH	XEN MID

Client Sample ID: BH-28

Lab Sample ID: 890-2217-19

Date Collected: 04/20/22 12:30

Matrix: Solid

Date Received: 04/20/22 15:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	24201	04/25/22 15:01	MR	XEN MID
Total/NA	Analysis	8021B		1			24380	04/29/22 11:52	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24326	04/27/22 12:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24131	04/25/22 09:39	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23946	04/21/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24090	04/23/22 20:15	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	23909	04/21/22 09:44	CH	XEN MID
Soluble	Analysis	300.0		1			24344	04/28/22 05:40	CH	XEN MID

Laboratory References:

XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Carlsbad

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2217-1
SDG: 12580761

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-2217-1	BH-4	Solid	04/20/22 11:00	04/20/22 15:28
890-2217-2	BH-5	Solid	04/20/22 11:05	04/20/22 15:28
890-2217-3	BH-6	Solid	04/20/22 11:10	04/20/22 15:28
890-2217-4	BH-7	Solid	04/20/22 11:15	04/20/22 15:28
890-2217-5	BH-8	Solid	04/20/22 11:20	04/20/22 15:28
890-2217-6	BH-9	Solid	04/20/22 11:25	04/20/22 15:28
890-2217-7	BH-10	Solid	04/20/22 11:30	04/20/22 15:28
890-2217-8	BH-11	Solid	04/20/22 11:35	04/20/22 15:28
890-2217-9	BH-12	Solid	04/20/22 11:40	04/20/22 15:28
890-2217-10	BH-13	Solid	04/20/22 11:45	04/20/22 15:28
890-2217-11	BH-14	Solid	04/20/22 11:50	04/20/22 15:28
890-2217-12	BH-15	Solid	04/20/22 11:55	04/20/22 15:28
890-2217-13	BH-20	Solid	04/20/22 12:00	04/20/22 15:28
890-2217-14	BH-21	Solid	04/20/22 12:05	04/20/22 15:28
890-2217-15	BH-22	Solid	04/20/22 12:10	04/20/22 15:28
890-2217-16	BH-23	Solid	04/20/22 12:15	04/20/22 15:28
890-2217-17	BH-25	Solid	04/20/22 12:20	04/20/22 15:28
890-2217-18	BH-26	Solid	04/20/22 12:25	04/20/22 15:28
890-2217-19	BH-28	Solid	04/20/22 12:30	04/20/22 15:28



Setting the Standard since 1990
Stafford, Texas (281-240-4200)

Dallas Texas (214-902-0300)

Service Center - San Antonio, Texas (210-509-3334)

www.xenco.com

Odessa, Texas (432-563-1800)

Norcross, Georgia (770-449-8800)

Lakeland, Florida (863-646-8526)
Tampa, Florida (813-620-2000)

CHAIN OF CUSTODY

Page 1 of 2

Service Center - San Antonio, Texas (210-509-3334) www.xenco.com

Client / Reporting Information	Project Name/Number:	Xenco Quote #	Matrix Codes
Company Name / Branch: GHD/Midland Company Address: 2135 S. Loop 260 West Midland TX	Romeo Federal 22 Battery / 12580761		
Email: Becky Haskell@qhd.com Matthew Laughlin@qhd.com Nikki Mishler@cdevinc.com Project Contact: Becky Haskell / Glenn Quimney	Phone No: (432)260-7917 Zach.comino@qhd.com tom.larson@qhd.com Invoice To: Eddy County, New Mexico Centennial Resource Development, Inc / Nikki Mishler	Xenco Job #	
Sampler's Name Zach Comino	PO Number: NA	Analytical Information	

S = Soil/Sed/Solid
GW = Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
OW = Ocean/Sea Water
W = Waste Water
O = Oil
WW= Waste Water
A = Air

Field Comments

890-2217 Chain of Custody

No.	Field ID / Point of Collection	Sample Depth	Collection Date	Time	Marks	# of bottles	HCl	NaOH/Zn Acetate	HNO ₃	H ₂ SO ₄	NaOH	NaHSO ₄	MeOH	NONE	TPH By 8015 Mod (GRO, DRO & MRO)	BTEX 8021 B	Chloride 600
1	BH-4		4/20/22	1100	S	1									x	x	x
2	BH-5			1105											x	x	x
3	BH-6			1110											x	x	x
4	BH-7			1115											x	x	x
5	BH-8			1120											x	x	x
6	BH-9			1125											x	x	x
7	BH-10			1130											x	x	x
8	BH-11			1135											x	x	x
9	BH-12			1140											x	x	x
10	BH-13			1145											x	x	x

Data Deliverable Information

Turnaround Time (Business days)		Level II Std QC		Level IV (Full Data Pig /raw data)
☐ Same Day TAT	☒ 5 Day TAT			
☐ Next Day EMERGENCY	☐ 7 Day TAT		Level III Std QC+ Forms	TRRP Level IV
☐ 2 Day EMERGENCY	☐ Contract TAT		Level 3 (CLP Forms)	UST / RG 411
☐ 3 Day EMERGENCY			TRRP Checklist	

TAT Starts Day received by Lab, if received by 5:00 pm

Report MDLs and J values.

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

Relinquished by Sampler:

Date Time:

Received By:

Date Time:

Relinquished By:

Date Time:

Custody Seal #

Preserved where applicable

On Ice

Cooler Temp.

Thermo Corr. Factor

Signature

Relinquishment of samples constitutes a valid purchase order from client company to XENCO Laboratories and its affiliates, subcontractors and assigns XENCO'S standard terms and conditions of service unless previously negotiated under a fully executed client contract.



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 Dallas Texas (214-902-0300)
 Service Center - San Antonio, Texas (210-509-3334)

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CHAIN OF CUSTODY

Page 2 of 2

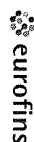
Odessa, Texas (432-563-1800)
 Norcross, Georgia (770-449-8800)
 Lakeland, Florida (863-646-8526)
 Tampa, Florida (813-620-2000)

Xenco Quote # Xenco Job #

Client / Reporting Information				Project Information				Analytical Information				Matrix Codes						
Company Name / Branch: GHDMidland				Project Name/Number: Romeo Federal 22 Battery / 12580761														
Company Address: 2135 S. Loop 250 West Midland TX				Project Location: Eddy County, New Mexico														
Email: becky.haskell@ghd.com Phone No: (432)250-7917 Matthew.laughlin@ghd.com Zach.comino@ghd.com Nikki.mishler@cdevinc.com tom.larson@ghd.com				Invoice To: Centennial Resource Development, Inc / Nikki Mishler														
Project contact: Becky Haskell / Glenn Quinney				PO Number: NA														
Sampler's Name Zach Comino																		
No.	Field ID / Point of Collection	Sample Depth	Collection Date	Time	Matrix	# of bottles	HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MeOH	NONE	TPH By 8015 Mod (GRO, DRO & MRO)	BTEX 8021 B	Chloride 600	Field Comments
1	BH-14		6/20/22	1150	S	1									X	X	X	
2	BH-15														X	X	X	
3	BH-20														X	X	X	
4	BH-21														X	X	X	
5	BH-22														X	X	X	
6	BH-23														X	X	X	
7	BH-25														X	X	X	
8	BH-26														X	X	X	
9	BH-28														X	X	X	
10															X	X	X	
Turnaround Time (Business days)				Data Deliverable Information														
☐ Same Day TAT				☒ 5 Day TAT				☐ Level II Std QC				☐ Level IV (Full Data Pkg /raw data)						
☐ Next Day EMERGENCY				☐ 7 Day TAT				☐ Level III Std QC+ Forms				☐ TRRP Level IV						
☐ 2 Day EMERGENCY				☐ Contract TAT				☐ Level 3 (CLP Forms)				☐ UST / RG -411						
☐ 3 Day EMERGENCY								☐ TRRP Checklist										
TAT Starts Day received by Lab, if received by 5:00 pm				Report MDLs and J values.														
Relinquished by Sampler: <i>Drake Hoyer</i>				Date Time: <i>6/20/22 1523</i>				Received By: <i>Joe Ay</i>				Date Time: <i>4:20:22</i>						
Relinquished by: <i>Drake Hoyer</i>				Date Time: <i>6/20/22 1523</i>				Received By: <i>Joe Ay</i>				Date Time: <i>4:20:22</i>						
Relinquished by:				Date Time:				Received By:				Date Time:						
5				5				4				4						
Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to XENCO Laboratories and its affiliates, subcontractors and assigns XENCO's standard terms and conditions of service unless previously negotiated under a fully executed client contract.																		

Eurofins Carlsbad

Chain of Custody Record



Environment Testing America

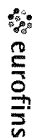
1089 N Canal St
Carlsbad, NM 88220
Phone 575-988-3199 Fax: 575-988-3199

Client Information (Sub Contract Lab)						Sampler
Shipping/Receiving						Phone
Company Eurofins Environment Testing South Cent						E-Mail: Debbie Simmons@eurofinsus.com
Address 1211 W Florida Ave						Accreditations Required (See note): NELAP - Louisiana NELAP - Texas
						COC No: 890-716 1
City Midland						State of Origin New Mexico
Due Date Requested 4/26/2022						Page Page 1 of 3
TAT Requested (days) TX 78701						Lab # 890-2217-1
PO # W/O #						Preservation Codes A HCL B NaOH C Zn Acetate D Nitric Acid E NaHSO4 F MeOH G Anionics H Ascorbic Acid I Ice J DI Water K EDTA L EDA Other T TSP Dodecahydrate U Acetone V MCAA W pH 4-5 Z other (specify)
Project Name Romeo Federal 22 Battery						Total Number of containers
SSOW#						Special Instructions/Note:
Sample Identification - Client ID (Lab ID)						
BH-4 (890-2217-1)	4/20/22	Mountain	11 00	Solid	X X X X X X X	1
BH-5 (890-2217-2)	4/20/22	Mountain	11 05	Solid	X X X X X X X	1
BH-6 (890-2217-3)	4/20/22	Mountain	11 10	Solid	X X X X X X X	1
BH-7 (890-2217-4)	4/20/22	Mountain	11 15	Solid	X X X X X X X	1
BH-8 (890-2217-5)	4/20/22	Mountain	11 20	Solid	X X X X X X X	1
BH-9 (890-2217-6)	4/20/22	Mountain	11 25	Solid	X X X X X X X	1
BH-10 (890-2217-7)	4/20/22	Mountain	11 30	Solid	X X X X X X X	1
BH-11 (890-2217-8)	4/20/22	Mountain	11 35	Solid	X X X X X X X	1
BH-12 (890-2217-9)	4/20/22	Mountain	11 40	Solid	X X X X X X X	1
Note: Since laboratory accreditations are subject to change Eurofins Environment Testing South Central LLC places the ownership of method analysis & accreditation compliance upon our subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analytes/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing South Central LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central LLC.						
Possible Hazard Identification						
Unconfirmed Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2 Special Instructions/QC Requirements						
Empty Kit Relinquished by Date Time Method of Shipment:						
Relinquished by Date Time Company Received by Date Time Company						
Relinquished by Date Time Company Received by Date Time Company						
Custody Seals Intact: Δ Yes Δ No Custody Seal No Cooler Temperature(s) °C and Other Remarks						

Eurofins Carlsbad

1089 N Canal St.
Carlsbad NM 88220
Phone: 575-988-3199 Fax 575-988-3199

Chain of Custody Record



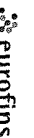
Environment Testing America

Client Information (Sub Contract Lab)							Sampler	Lab PM	Carter Tracking No(s)	COC No.	
Client Contact:						Phone	Simmons Debbie			890-716 2	
Shipping/Receiving Company:						E-Mail			State of Origin.	Page	
Eurofins Environment Testing South Centre						Debbie Simmons@eurofins.com		New Mexico	Page 2 of 3		
Address						Accreditations Required (See note): NELAP - Louisiana, NELAP - Texas		Job #:		890-2217-1	
City						Due Date Requested 4/26/2022		Analysis Requested		Preservation Codes	
Midland						TAT Requested (days):				A HCL M Hexane	
State Zip: TX, 79701										B NaOH N None	
Phone 432-704-5440(Tel)						PO #				C Zn Acetate O AsNaO2	
Email						WO #				D Nitric Acid P Na2OAS	
Project Name: Romero Federal 22 Battery						Project #: 88001187				E NaHSO4 R Na2SO3	
Site						SSOW#				F MeOH S TSP Dodecylhydrate	
										G Amchlor H Ascobic Acid U Acetone	
										I Ice J DI Water V MCAA	
										K EDTA W pH 4-5	
										L EDA Z other (Specify)	
										Other:	
Sample Identification - Client ID (Lab ID)						Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Total Number of containers	Special Instructions/Note:
BH-13 (890-2217-10)	4/20/22	11 45	Solid	X	X	X	X	X	X	1	
BH-14 (890-2217-11)	4/20/22	11 50	Solid	X	X	X	X	X	X	1	
BH-15 (890-2217-12)	4/20/22	11 55	Solid	X	X	X	X	X	X	1	
BH-20 (890-2217-13)	4/20/22	12 00	Solid	X	X	X	X	X	X	1	
BH-21 (890-2217-14)	4/20/22	12 05	Solid	X	X	X	X	X	X	1	
BH-22 (890-2217-15)	4/20/22	12 10	Solid	X	X	X	X	X	X	1	
BH-23 (890-2217-16)	4/20/22	12 15	Solid	X	X	X	X	X	X	1	
BH-25 (890-2217-17)	4/20/22	12 20	Solid	X	X	X	X	X	X	1	
BH-26 (890-2217-18)	4/20/22	12 25	Solid	X	X	X	X	X	X	1	
Note: Since laboratory accreditations are subject to change Eurofins Environment Testing South Central, LLC places the ownership of method analyte & accreditation compliance upon our subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC.											
Possible Hazard Identification											
Unconfirmed											
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2 Special Institutions/QOC Requirements											
Empty Kit Relinquished by Date Time Company Received By Date Time Company											
Relinquished by CUE GUP 4.21.22 Date Time Company Received By Date Time Company											
Relinquished by Date Time Company Received By Date Time Company											
Cooler Temperature(s) °C and Other Remarks											
Custody Seals Intact: Custody Seal No A Yes Δ No											
Return To Client Disposal By Lab Archive For Months											
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)											

Eurofine Carlebad

1089 N Canal St
Carlsbad NM 88220
Phone 575-988-3199 Fax 575-988-3199

Chain of Custody Record



Environment Testing

[illegible]

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 890-2217-1

SDG Number: 12580761

Login Number: 2217

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 890-2217-1

SDG Number: 12580761

Login Number: 2217

List Number: 2

Creator: Teel, Brianna

List Source: Eurofins Midland

List Creation: 04/21/22 01:11 PM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	



Environment Testing America

ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-2225-1

Laboratory Sample Delivery Group: 12580761

Client Project/Site: Romeo Federal 22 Battery

For:

GHD Services Inc.
2135 South Loop 250 West
Midland, Texas 79703

Attn: Becky Haskell

A handwritten signature in dark ink, reading "Chad A. Bechtold".

Authorized for release by:

4/29/2022 4:41:14 PM

Chad Bechtold, Project Manager
(813)690-3563

Chad.Bechtold@et.eurofinsus.com

Designee for

Debbie Simmons, Project Manager
(832)986-6768

Debbie.Simmons@et.eurofinsus.com

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

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

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Laboratory Job ID: 890-2225-1
SDG: 12580761

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Definitions/Glossary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2225-1
SDG: 12580761

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

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Case Narrative

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2225-1
SDG: 12580761

Job ID: 890-2225-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2225-1

Receipt

The samples were received on 4/21/2022 3:55 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 28.4°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-24268 and analytical batch 880-24380 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-24201 and analytical batch 880-24380 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-24191 and analytical batch 880-24218 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-24138 and analytical batch 880-24259 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2225-1
SDG: 12580761

Client Sample ID: BH-16

Lab Sample ID: 890-2225-1

Date Collected: 04/21/22 11:00

Matrix: Solid

Date Received: 04/21/22 15:55

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	0.000387	mg/Kg		04/26/22 15:59	04/29/22 01:37	1
Toluene	<0.00201	U	0.00201	0.000458	mg/Kg		04/26/22 15:59	04/29/22 01:37	1
Ethylbenzene	<0.00201	U	0.00201	0.000567	mg/Kg		04/26/22 15:59	04/29/22 01:37	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	0.00101	mg/Kg		04/26/22 15:59	04/29/22 01:37	1
o-Xylene	0.00160	J	0.00201	0.000345	mg/Kg		04/26/22 15:59	04/29/22 01:37	1
Xylenes, Total	0.00160	J	0.00402	0.00101	mg/Kg		04/26/22 15:59	04/29/22 01:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	04/26/22 15:59	04/29/22 01:37	1
1,4-Difluorobenzene (Surr)	95		70 - 130	04/26/22 15:59	04/29/22 01:37	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00160	J	0.00402	0.00101	mg/Kg			04/29/22 15:23	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	344		49.9	15.0	mg/Kg			04/27/22 11:07	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	16.9	J	49.9	15.0	mg/Kg		04/25/22 13:28	04/26/22 11:37	1
Diesel Range Organics (Over C10-C28)	278	F1	49.9	15.0	mg/Kg		04/25/22 13:28	04/26/22 11:37	1
Oil Range Organics (Over C28-C36)	49.2	J	49.9	15.0	mg/Kg		04/25/22 13:28	04/26/22 11:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130	04/25/22 13:28	04/26/22 11:37	1
o-Terphenyl	106		70 - 130	04/25/22 13:28	04/26/22 11:37	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	51.0	F1	5.00	0.858	mg/Kg			04/26/22 20:10	1

Client Sample ID: BH-17

Lab Sample ID: 890-2225-2

Date Collected: 04/21/22 11:05

Matrix: Solid

Date Received: 04/21/22 15:55

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U F1	0.00200	0.000386	mg/Kg		04/25/22 15:01	04/29/22 05:02	1
Toluene	0.00148	J F1	0.00200	0.000457	mg/Kg		04/25/22 15:01	04/29/22 05:02	1
Ethylbenzene	<0.00200	U F1	0.00200	0.000566	mg/Kg		04/25/22 15:01	04/29/22 05:02	1
m-Xylene & p-Xylene	0.00306	J F1	0.00401	0.00101	mg/Kg		04/25/22 15:01	04/29/22 05:02	1
o-Xylene	0.00198	J	0.00200	0.000345	mg/Kg		04/25/22 15:01	04/29/22 05:02	1
Xylenes, Total	0.00504	F1	0.00401	0.00101	mg/Kg		04/25/22 15:01	04/29/22 05:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	04/25/22 15:01	04/29/22 05:02	1
1,4-Difluorobenzene (Surr)	100		70 - 130	04/25/22 15:01	04/29/22 05:02	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2225-1
SDG: 12580761

Client Sample ID: BH-17

Lab Sample ID: 890-2225-2

Date Collected: 04/21/22 11:05

Matrix: Solid

Date Received: 04/21/22 15:55

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00652		0.00401	0.00101	mg/Kg			04/29/22 15:23	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	15.0	mg/Kg			04/27/22 11:07	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		04/25/22 13:28	04/26/22 12:39	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		04/25/22 13:28	04/26/22 12:39	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		04/25/22 13:28	04/26/22 12:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130				04/25/22 13:28	04/26/22 12:39	1
o-Terphenyl	95		70 - 130				04/25/22 13:28	04/26/22 12:39	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.20		4.95	0.850	mg/Kg			04/26/22 20:38	1

Client Sample ID: BH-18

Lab Sample ID: 890-2225-3

Date Collected: 04/21/22 11:10

Matrix: Solid

Date Received: 04/21/22 15:55

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	0.000387	mg/Kg		04/25/22 15:01	04/29/22 05:22	1
Toluene	0.00209		0.00201	0.000459	mg/Kg		04/25/22 15:01	04/29/22 05:22	1
Ethylbenzene	<0.00201	U	0.00201	0.000568	mg/Kg		04/25/22 15:01	04/29/22 05:22	1
m-Xylene & p-Xylene	0.00461		0.00402	0.00102	mg/Kg		04/25/22 15:01	04/29/22 05:22	1
o-Xylene	0.00232		0.00201	0.000346	mg/Kg		04/25/22 15:01	04/29/22 05:22	1
Xylenes, Total	0.00693		0.00402	0.00102	mg/Kg		04/25/22 15:01	04/29/22 05:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130				04/25/22 15:01	04/29/22 05:22	1
1,4-Difluorobenzene (Surr)	97		70 - 130				04/25/22 15:01	04/29/22 05:22	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00902		0.00402	0.00102	mg/Kg			04/29/22 15:23	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	15.0	mg/Kg			04/27/22 11:07	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		04/25/22 13:28	04/26/22 12:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		04/25/22 13:28	04/26/22 12:59	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2225-1
SDG: 12580761

Client Sample ID: BH-18

Lab Sample ID: 890-2225-3

Date Collected: 04/21/22 11:10

Matrix: Solid

Date Received: 04/21/22 15:55

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		04/25/22 13:28	04/26/22 12:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130				04/25/22 13:28	04/26/22 12:59	1
o-Terphenyl	108		70 - 130				04/25/22 13:28	04/26/22 12:59	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	29.8		4.99	0.857	mg/Kg			04/26/22 20:47	1

Client Sample ID: BH-19

Lab Sample ID: 890-2225-4

Date Collected: 04/21/22 11:15

Matrix: Solid

Date Received: 04/21/22 15:55

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	0.000388	mg/Kg		04/25/22 15:01	04/29/22 05:43	1
Toluene	<0.00202	U	0.00202	0.000460	mg/Kg		04/25/22 15:01	04/29/22 05:43	1
Ethylbenzene	<0.00202	U	0.00202	0.000570	mg/Kg		04/25/22 15:01	04/29/22 05:43	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	0.00102	mg/Kg		04/25/22 15:01	04/29/22 05:43	1
o-Xylene	0.0118		0.00202	0.000347	mg/Kg		04/25/22 15:01	04/29/22 05:43	1
Xylenes, Total	0.0118		0.00403	0.00102	mg/Kg		04/25/22 15:01	04/29/22 05:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130				04/25/22 15:01	04/29/22 05:43	1
1,4-Difluorobenzene (Surr)	96		70 - 130				04/25/22 15:01	04/29/22 05:43	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0118		0.00403	0.00102	mg/Kg			04/29/22 15:23	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1990		49.9	15.0	mg/Kg			04/27/22 11:07	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	38.2	J	49.9	15.0	mg/Kg		04/25/22 13:28	04/26/22 13:20	1
Diesel Range Organics (Over C10-C28)	1670		49.9	15.0	mg/Kg		04/25/22 13:28	04/26/22 13:20	1
Oil Range Organics (Over C28-C36)	285		49.9	15.0	mg/Kg		04/25/22 13:28	04/26/22 13:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130				04/25/22 13:28	04/26/22 13:20	1
o-Terphenyl	109		70 - 130				04/25/22 13:28	04/26/22 13:20	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	522		4.97	0.853	mg/Kg			04/26/22 20:57	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2225-1
SDG: 12580761

Client Sample ID: BH-24

Lab Sample ID: 890-2225-5

Date Collected: 04/21/22 11:20

Matrix: Solid

Date Received: 04/21/22 15:55

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	0.000382	mg/Kg		04/25/22 15:01	04/29/22 06:03	1
Toluene	0.000663	J	0.00198	0.000452	mg/Kg		04/25/22 15:01	04/29/22 06:03	1
Ethylbenzene	<0.00198	U	0.00198	0.000561	mg/Kg		04/25/22 15:01	04/29/22 06:03	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	0.00100	mg/Kg		04/25/22 15:01	04/29/22 06:03	1
o-Xylene	0.00237		0.00198	0.000341	mg/Kg		04/25/22 15:01	04/29/22 06:03	1
Xylenes, Total	0.00237	J	0.00397	0.00100	mg/Kg		04/25/22 15:01	04/29/22 06:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	04/25/22 15:01	04/29/22 06:03	1
1,4-Difluorobenzene (Surr)	97		70 - 130	04/25/22 15:01	04/29/22 06:03	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00303	J	0.00397	0.00100	mg/Kg			04/29/22 15:23	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	103		49.9	15.0	mg/Kg			04/27/22 11:07	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	15.0	mg/Kg		04/25/22 13:28	04/26/22 13:41	1
Diesel Range Organics (Over C10-C28)	41.8	J	49.9	15.0	mg/Kg		04/25/22 13:28	04/26/22 13:41	1
Oil Range Organics (Over C28-C36)	61.0		49.9	15.0	mg/Kg		04/25/22 13:28	04/26/22 13:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130	04/25/22 13:28	04/26/22 13:41	1
o-Terphenyl	96		70 - 130	04/25/22 13:28	04/26/22 13:41	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.0		5.00	0.858	mg/Kg			04/26/22 21:06	1

Client Sample ID: BH-27

Lab Sample ID: 890-2225-6

Date Collected: 04/21/22 11:30

Matrix: Solid

Date Received: 04/21/22 15:55

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000384	mg/Kg		04/25/22 15:01	04/29/22 06:24	1
Toluene	<0.00200	U	0.00200	0.000455	mg/Kg		04/25/22 15:01	04/29/22 06:24	1
Ethylbenzene	<0.00200	U	0.00200	0.000564	mg/Kg		04/25/22 15:01	04/29/22 06:24	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	0.00101	mg/Kg		04/25/22 15:01	04/29/22 06:24	1
o-Xylene	0.00103	J	0.00200	0.000343	mg/Kg		04/25/22 15:01	04/29/22 06:24	1
Xylenes, Total	0.00103	J	0.00399	0.00101	mg/Kg		04/25/22 15:01	04/29/22 06:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	04/25/22 15:01	04/29/22 06:24	1
1,4-Difluorobenzene (Surr)	96		70 - 130	04/25/22 15:01	04/29/22 06:24	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2225-1
SDG: 12580761

Client Sample ID: BH-27

Lab Sample ID: 890-2225-6

Date Collected: 04/21/22 11:30

Matrix: Solid

Date Received: 04/21/22 15:55

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00103	J	0.00399	0.00101	mg/Kg			04/29/22 15:23	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	53.4		50.0	15.0	mg/Kg			04/27/22 11:07	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		04/25/22 13:28	04/26/22 14:01	1
Diesel Range Organics (Over C10-C28)	53.4		50.0	15.0	mg/Kg		04/25/22 13:28	04/26/22 14:01	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		04/25/22 13:28	04/26/22 14:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130				04/25/22 13:28	04/26/22 14:01	1
o-Terphenyl	99		70 - 130				04/25/22 13:28	04/26/22 14:01	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.78	J	5.02	0.862	mg/Kg			04/26/22 21:34	1

Client Sample ID: BH-30

Lab Sample ID: 890-2225-7

Date Collected: 04/21/22 11:35

Matrix: Solid

Date Received: 04/21/22 15:55

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	0.000387	mg/Kg		04/25/22 15:01	04/29/22 06:44	1
Toluene	0.00172	J	0.00201	0.000458	mg/Kg		04/25/22 15:01	04/29/22 06:44	1
Ethylbenzene	<0.00201	U	0.00201	0.000567	mg/Kg		04/25/22 15:01	04/29/22 06:44	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	0.00101	mg/Kg		04/25/22 15:01	04/29/22 06:44	1
o-Xylene	<0.00201	U	0.00201	0.000345	mg/Kg		04/25/22 15:01	04/29/22 06:44	1
Xylenes, Total	<0.00402	U	0.00402	0.00101	mg/Kg		04/25/22 15:01	04/29/22 06:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130				04/25/22 15:01	04/29/22 06:44	1
1,4-Difluorobenzene (Surr)	98		70 - 130				04/25/22 15:01	04/29/22 06:44	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00172	J	0.00402	0.00101	mg/Kg			04/29/22 15:23	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	262		50.0	15.0	mg/Kg			04/27/22 11:07	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		04/25/22 13:28	04/26/22 14:22	1
Diesel Range Organics (Over C10-C28)	217		50.0	15.0	mg/Kg		04/25/22 13:28	04/26/22 14:22	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2225-1
SDG: 12580761

Client Sample ID: BH-30

Lab Sample ID: 890-2225-7

Date Collected: 04/21/22 11:35

Matrix: Solid

Date Received: 04/21/22 15:55

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	45.3	J	50.0	15.0	mg/Kg		04/25/22 13:28	04/26/22 14:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130				04/25/22 13:28	04/26/22 14:22	1
o-Terphenyl	94		70 - 130				04/25/22 13:28	04/26/22 14:22	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	88.4		4.99	0.857	mg/Kg			04/26/22 21:44	1

Client Sample ID: BH-31

Lab Sample ID: 890-2225-8

Date Collected: 04/21/22 11:40

Matrix: Solid

Date Received: 04/21/22 15:55

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	0.000389	mg/Kg		04/25/22 15:01	04/29/22 07:05	1
Toluene	0.00161	J	0.00202	0.000461	mg/Kg		04/25/22 15:01	04/29/22 07:05	1
Ethylbenzene	<0.00202	U	0.00202	0.000571	mg/Kg		04/25/22 15:01	04/29/22 07:05	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	0.00102	mg/Kg		04/25/22 15:01	04/29/22 07:05	1
o-Xylene	0.000981	J	0.00202	0.000347	mg/Kg		04/25/22 15:01	04/29/22 07:05	1
Xylenes, Total	<0.00404	U	0.00404	0.00102	mg/Kg		04/25/22 15:01	04/29/22 07:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130				04/25/22 15:01	04/29/22 07:05	1
1,4-Difluorobenzene (Surr)	98		70 - 130				04/25/22 15:01	04/29/22 07:05	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00259	J	0.00404	0.00102	mg/Kg			04/29/22 15:23	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	904		49.9	15.0	mg/Kg			04/27/22 11:07	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	15.0	mg/Kg		04/25/22 13:28	04/26/22 14:43	1
Diesel Range Organics (Over C10-C28)	780		49.9	15.0	mg/Kg		04/25/22 13:28	04/26/22 14:43	1
Oil Range Organics (Over C28-C36)	124		49.9	15.0	mg/Kg		04/25/22 13:28	04/26/22 14:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130				04/25/22 13:28	04/26/22 14:43	1
o-Terphenyl	112		70 - 130				04/25/22 13:28	04/26/22 14:43	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	369		4.96	0.851	mg/Kg			04/26/22 21:54	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2225-1
SDG: 12580761

Client Sample ID: BH-34

Lab Sample ID: 890-2225-9

Date Collected: 04/21/22 11:45

Matrix: Solid

Date Received: 04/21/22 15:55

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U F1	0.00200	0.000386	mg/Kg		04/26/22 15:59	04/28/22 18:25	1
Toluene	0.000955	J F1	0.00200	0.000457	mg/Kg		04/26/22 15:59	04/28/22 18:25	1
Ethylbenzene	<0.00200	U F2 F1	0.00200	0.000566	mg/Kg		04/26/22 15:59	04/28/22 18:25	1
m-Xylene & p-Xylene	<0.00401	U F2 F1	0.00401	0.00101	mg/Kg		04/26/22 15:59	04/28/22 18:25	1
o-Xylene	<0.00200	U F2 F1	0.00200	0.000345	mg/Kg		04/26/22 15:59	04/28/22 18:25	1
Xylenes, Total	<0.00401	U F2 F1	0.00401	0.00101	mg/Kg		04/26/22 15:59	04/28/22 18:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	04/26/22 15:59	04/28/22 18:25	1
1,4-Difluorobenzene (Surr)	93		70 - 130	04/26/22 15:59	04/28/22 18:25	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	0.00101	mg/Kg			04/29/22 15:23	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	711		49.9	15.0	mg/Kg			04/27/22 11:07	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	15.0	mg/Kg		04/25/22 13:28	04/26/22 15:05	1
Diesel Range Organics (Over C10-C28)	592		49.9	15.0	mg/Kg		04/25/22 13:28	04/26/22 15:05	1
Oil Range Organics (Over C28-C36)	119		49.9	15.0	mg/Kg		04/25/22 13:28	04/26/22 15:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	04/25/22 13:28	04/26/22 15:05	1
o-Terphenyl	95		70 - 130	04/25/22 13:28	04/26/22 15:05	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	143		5.05	0.867	mg/Kg			04/26/22 22:03	1

Client Sample ID: BH-35

Lab Sample ID: 890-2225-10

Date Collected: 04/21/22 11:50

Matrix: Solid

Date Received: 04/21/22 15:55

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		04/26/22 15:59	04/28/22 18:46	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		04/26/22 15:59	04/28/22 18:46	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		04/26/22 15:59	04/28/22 18:46	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		04/26/22 15:59	04/28/22 18:46	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		04/26/22 15:59	04/28/22 18:46	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		04/26/22 15:59	04/28/22 18:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	04/26/22 15:59	04/28/22 18:46	1
1,4-Difluorobenzene (Surr)	97		70 - 130	04/26/22 15:59	04/28/22 18:46	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2225-1
SDG: 12580761

Client Sample ID: BH-35

Lab Sample ID: 890-2225-10

Date Collected: 04/21/22 11:50

Matrix: Solid

Date Received: 04/21/22 15:55

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	0.00101	mg/Kg			04/29/22 15:23	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	44.5	J	50.0	15.0	mg/Kg			04/27/22 11:07	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		04/25/22 13:28	04/26/22 15:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		04/25/22 13:28	04/26/22 15:26	1
Oil Range Organics (Over C28-C36)	44.5	J	50.0	15.0	mg/Kg		04/25/22 13:28	04/26/22 15:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130				04/25/22 13:28	04/26/22 15:26	1
o-Terphenyl	97		70 - 130				04/25/22 13:28	04/26/22 15:26	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.43		4.98	0.855	mg/Kg			04/26/22 22:13	1

Client Sample ID: BH-36

Lab Sample ID: 890-2225-11

Date Collected: 04/21/22 11:55

Matrix: Solid

Date Received: 04/21/22 15:55

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000384	mg/Kg		04/26/22 15:59	04/28/22 19:07	1
Toluene	<0.00200	U	0.00200	0.000455	mg/Kg		04/26/22 15:59	04/28/22 19:07	1
Ethylbenzene	<0.00200	U	0.00200	0.000564	mg/Kg		04/26/22 15:59	04/28/22 19:07	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	0.00101	mg/Kg		04/26/22 15:59	04/28/22 19:07	1
o-Xylene	<0.00200	U	0.00200	0.000343	mg/Kg		04/26/22 15:59	04/28/22 19:07	1
Xylenes, Total	<0.00399	U	0.00399	0.00101	mg/Kg		04/26/22 15:59	04/28/22 19:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130				04/26/22 15:59	04/28/22 19:07	1
1,4-Difluorobenzene (Surr)	97		70 - 130				04/26/22 15:59	04/28/22 19:07	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	0.00101	mg/Kg			04/29/22 15:23	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	15.0	mg/Kg			04/27/22 11:07	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	15.0	mg/Kg		04/25/22 13:28	04/26/22 16:32	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2225-1
SDG: 12580761

Client Sample ID: BH-36

Lab Sample ID: 890-2225-11

Date Collected: 04/21/22 11:55

Matrix: Solid

Date Received: 04/21/22 15:55

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	15.0	mg/Kg		04/25/22 13:28	04/26/22 16:32	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg		04/25/22 13:28	04/26/22 16:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130				04/25/22 13:28	04/26/22 16:32	1
o-Terphenyl	109		70 - 130				04/25/22 13:28	04/26/22 16:32	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.35	J	5.00	0.858	mg/Kg			04/26/22 22:22	1

Client Sample ID: SW-1

Lab Sample ID: 890-2225-12

Date Collected: 04/21/22 12:00

Matrix: Solid

Date Received: 04/21/22 15:55

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	0.000383	mg/Kg		04/26/22 15:59	04/28/22 19:27	1
Toluene	0.000494	J	0.00199	0.000454	mg/Kg		04/26/22 15:59	04/28/22 19:27	1
Ethylbenzene	<0.00199	U	0.00199	0.000563	mg/Kg		04/26/22 15:59	04/28/22 19:27	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00101	mg/Kg		04/26/22 15:59	04/28/22 19:27	1
o-Xylene	0.000745	J	0.00199	0.000343	mg/Kg		04/26/22 15:59	04/28/22 19:27	1
Xylenes, Total	<0.00398	U	0.00398	0.00101	mg/Kg		04/26/22 15:59	04/28/22 19:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130				04/26/22 15:59	04/28/22 19:27	1
1,4-Difluorobenzene (Surr)	94		70 - 130				04/26/22 15:59	04/28/22 19:27	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00124	J	0.00398	0.00101	mg/Kg			04/29/22 15:23	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	309		49.9	15.0	mg/Kg			04/27/22 11:07	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	15.0	mg/Kg		04/25/22 13:28	04/26/22 16:54	1
Diesel Range Organics (Over C10-C28)	309		49.9	15.0	mg/Kg		04/25/22 13:28	04/26/22 16:54	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg		04/25/22 13:28	04/26/22 16:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130				04/25/22 13:28	04/26/22 16:54	1
o-Terphenyl	93		70 - 130				04/25/22 13:28	04/26/22 16:54	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	596		4.95	0.850	mg/Kg			04/26/22 22:51	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2225-1
SDG: 12580761

Client Sample ID: SW-2

Lab Sample ID: 890-2225-13

Date Collected: 04/21/22 12:05

Matrix: Solid

Date Received: 04/21/22 15:55

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0114		0.00199	0.000383	mg/Kg		04/26/22 15:59	04/28/22 19:48	1
Toluene	0.0396		0.00199	0.000453	mg/Kg		04/26/22 15:59	04/28/22 19:48	1
Ethylbenzene	0.0101		0.00199	0.000562	mg/Kg		04/26/22 15:59	04/28/22 19:48	1
m-Xylene & p-Xylene	0.0347		0.00398	0.00100	mg/Kg		04/26/22 15:59	04/28/22 19:48	1
o-Xylene	0.0203		0.00199	0.000342	mg/Kg		04/26/22 15:59	04/28/22 19:48	1
Xylenes, Total	0.0550		0.00398	0.00100	mg/Kg		04/26/22 15:59	04/28/22 19:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	04/26/22 15:59	04/28/22 19:48	1
1,4-Difluorobenzene (Surr)	96		70 - 130	04/26/22 15:59	04/28/22 19:48	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.116		0.00398	0.00100	mg/Kg			04/29/22 15:23	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	361		50.0	15.0	mg/Kg			04/27/22 11:07	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		04/25/22 13:28	04/26/22 17:15	1
Diesel Range Organics (Over C10-C28)	318		50.0	15.0	mg/Kg		04/25/22 13:28	04/26/22 17:15	1
Oil Range Organics (Over C28-C36)	42.6	J	50.0	15.0	mg/Kg		04/25/22 13:28	04/26/22 17:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130	04/25/22 13:28	04/26/22 17:15	1
o-Terphenyl	107		70 - 130	04/25/22 13:28	04/26/22 17:15	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	93.5		5.04	0.865	mg/Kg			04/26/22 23:01	1

Client Sample ID: SW-3

Lab Sample ID: 890-2225-14

Date Collected: 04/21/22 12:10

Matrix: Solid

Date Received: 04/21/22 15:55

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	0.000383	mg/Kg		04/26/22 15:59	04/28/22 20:08	1
Toluene	0.00559		0.00199	0.000454	mg/Kg		04/26/22 15:59	04/28/22 20:08	1
Ethylbenzene	0.0106		0.00199	0.000563	mg/Kg		04/26/22 15:59	04/28/22 20:08	1
m-Xylene & p-Xylene	0.0431		0.00398	0.00101	mg/Kg		04/26/22 15:59	04/28/22 20:08	1
o-Xylene	0.0236		0.00199	0.000343	mg/Kg		04/26/22 15:59	04/28/22 20:08	1
Xylenes, Total	0.0667		0.00398	0.00101	mg/Kg		04/26/22 15:59	04/28/22 20:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	04/26/22 15:59	04/28/22 20:08	1
1,4-Difluorobenzene (Surr)	94		70 - 130	04/26/22 15:59	04/28/22 20:08	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2225-1
SDG: 12580761

Client Sample ID: SW-3

Lab Sample ID: 890-2225-14

Date Collected: 04/21/22 12:10

Matrix: Solid

Date Received: 04/21/22 15:55

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0829		0.00398	0.00101	mg/Kg			04/29/22 15:23	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2450		50.0	15.0	mg/Kg			04/27/22 11:07	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	52.4		50.0	15.0	mg/Kg		04/25/22 13:28	04/26/22 17:36	1
Diesel Range Organics (Over C10-C28)	2060		50.0	15.0	mg/Kg		04/25/22 13:28	04/26/22 17:36	1
Oil Range Organics (Over C28-C36)	342		50.0	15.0	mg/Kg		04/25/22 13:28	04/26/22 17:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130				04/25/22 13:28	04/26/22 17:36	1
o-Terphenyl	98		70 - 130				04/25/22 13:28	04/26/22 17:36	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1120		4.98	0.855	mg/Kg			04/26/22 23:29	1

Surrogate Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2225-1
SDG: 12580761

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-2225-1	BH-16	110	95
890-2225-2	BH-17	107	100
890-2225-2 MS	BH-17	104	99
890-2225-2 MSD	BH-17	106	100
890-2225-3	BH-18	108	97
890-2225-4	BH-19	109	96
890-2225-5	BH-24	110	97
890-2225-6	BH-27	111	96
890-2225-7	BH-30	112	98
890-2225-8	BH-31	112	98
890-2225-9	BH-34	99	93
890-2225-9 MS	BH-34	107	100
890-2225-9 MSD	BH-34	106	101
890-2225-10	BH-35	104	97
890-2225-11	BH-36	103	97
890-2225-12	SW-1	107	94
890-2225-13	SW-2	112	96
890-2225-14	SW-3	113	94
LCS 880-24201/1-A	Lab Control Sample	100	98
LCS 880-24268/1-A	Lab Control Sample	107	90
LCSD 880-24201/2-A	Lab Control Sample Dup	101	99
LCSD 880-24268/2-A	Lab Control Sample Dup	102	98
MB 880-24201/5-A	Method Blank	105	95
MB 880-24268/5-A	Method Blank	90	91
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-2225-1	BH-16	105	106
890-2225-1 MS	BH-16	83	79
890-2225-1 MSD	BH-16	83	77
890-2225-2	BH-17	93	95
890-2225-3	BH-18	106	108
890-2225-4	BH-19	110	109
890-2225-5	BH-24	92	96
890-2225-6	BH-27	96	99
890-2225-7	BH-30	93	94
890-2225-8	BH-31	110	112
890-2225-9	BH-34	94	95
890-2225-10	BH-35	94	97
890-2225-11	BH-36	106	109
890-2225-12	SW-1	91	93
890-2225-13	SW-2	105	107

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Surrogate Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2225-1
SDG: 12580761

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)				
890-2225-14	SW-3	99	98				
LCS 880-24191/2-A	Lab Control Sample	89	84				
LCSD 880-24191/3-A	Lab Control Sample Dup	90	84				
MB 880-24191/1-A	Method Blank	108	112				
Surrogate Legend							
1CO = 1-Chlorooctane							
OTPH = o-Terphenyl							

QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2225-1
SDG: 12580761

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-24201/5-A

Matrix: Solid

Analysis Batch: 24380

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 24201

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		04/25/22 15:01	04/29/22 04:40	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		04/25/22 15:01	04/29/22 04:40	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		04/25/22 15:01	04/29/22 04:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		04/25/22 15:01	04/29/22 04:40	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		04/25/22 15:01	04/29/22 04:40	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		04/25/22 15:01	04/29/22 04:40	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	04/25/22 15:01	04/29/22 04:40	1
1,4-Difluorobenzene (Surr)	95		70 - 130	04/25/22 15:01	04/29/22 04:40	1

Lab Sample ID: LCS 880-24201/1-A

Matrix: Solid

Analysis Batch: 24380

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 24201

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08999		mg/Kg		90	70 - 130
Toluene	0.100	0.08943		mg/Kg		89	70 - 130
Ethylbenzene	0.100	0.08916		mg/Kg		89	70 - 130
m-Xylene & p-Xylene	0.200	0.1811		mg/Kg		91	70 - 130
o-Xylene	0.100	0.09261		mg/Kg		93	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: LCSD 880-24201/2-A

Matrix: Solid

Analysis Batch: 24380

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 24201

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.09563		mg/Kg		96	70 - 130	6	35
Toluene	0.100	0.09619		mg/Kg		96	70 - 130	7	35
Ethylbenzene	0.100	0.09690		mg/Kg		97	70 - 130	8	35
m-Xylene & p-Xylene	0.200	0.1976		mg/Kg		99	70 - 130	9	35
o-Xylene	0.100	0.1025		mg/Kg		102	70 - 130	10	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: 890-2225-2 MS

Matrix: Solid

Analysis Batch: 24380

Client Sample ID: BH-17

Prep Type: Total/NA

Prep Batch: 24201

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U F1	0.0994	0.08037		mg/Kg		81	70 - 130
Toluene	0.00148	J F1	0.0994	0.08058		mg/Kg		80	70 - 130

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2225-1
SDG: 12580761

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-2225-2 MS

Matrix: Solid

Analysis Batch: 24380

Client Sample ID: BH-17

Prep Type: Total/NA

Prep Batch: 24201

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U F1	0.0994	0.07780		mg/Kg		78	70 - 130
m-Xylene & p-Xylene	0.00306	J F1	0.199	0.1398	F1	mg/Kg		69	70 - 130
o-Xylene	0.00198	J	0.0994	0.08703		mg/Kg		86	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: 890-2225-2 MSD

Matrix: Solid

Analysis Batch: 24380

Client Sample ID: BH-17

Prep Type: Total/NA

Prep Batch: 24201

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U F1	0.0992	0.06553	F1	mg/Kg		66	70 - 130	20	35
Toluene	0.00148	J F1	0.0992	0.06660	F1	mg/Kg		66	70 - 130	19	35
Ethylbenzene	<0.00200	U F1	0.0992	0.06453	F1	mg/Kg		65	70 - 130	19	35
m-Xylene & p-Xylene	0.00306	J F1	0.198	0.1259	F1	mg/Kg		62	70 - 130	10	35
o-Xylene	0.00198	J	0.0992	0.07286		mg/Kg		71	70 - 130	18	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: MB 880-24268/5-A

Matrix: Solid

Analysis Batch: 24380

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 24268

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		04/26/22 15:59	04/28/22 18:04	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		04/26/22 15:59	04/28/22 18:04	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		04/26/22 15:59	04/28/22 18:04	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		04/26/22 15:59	04/28/22 18:04	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		04/26/22 15:59	04/28/22 18:04	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		04/26/22 15:59	04/28/22 18:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	04/26/22 15:59	04/28/22 18:04	1
1,4-Difluorobenzene (Surr)	91		70 - 130	04/26/22 15:59	04/28/22 18:04	1

Lab Sample ID: LCS 880-24268/1-A

Matrix: Solid

Analysis Batch: 24380

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 24268

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.07683		mg/Kg		77	70 - 130
Toluene	0.100	0.09592		mg/Kg		96	70 - 130
Ethylbenzene	0.100	0.1023		mg/Kg		102	70 - 130
m-Xylene & p-Xylene	0.200	0.1971		mg/Kg		99	70 - 130

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2225-1
SDG: 12580761

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 880-24268/1-A

Matrix: Solid

Analysis Batch: 24380

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 24268

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
o-Xylene	0.100	0.09834		mg/Kg		98	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	90		70 - 130

Lab Sample ID: LCSD 880-24268/2-A

Matrix: Solid

Analysis Batch: 24380

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 24268

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1019		mg/Kg		102	70 - 130	28	35
Toluene	0.100	0.1034		mg/Kg		103	70 - 130	8	35
Ethylbenzene	0.100	0.1053		mg/Kg		105	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.2154		mg/Kg		108	70 - 130	9	35
o-Xylene	0.100	0.1075		mg/Kg		108	70 - 130	9	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 890-2225-9 MS

Matrix: Solid

Analysis Batch: 24380

Client Sample ID: BH-34

Prep Type: Total/NA

Prep Batch: 24268

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U F1	0.0996	0.06381	F1	mg/Kg		64	70 - 130
Toluene	0.000955	J F1	0.0996	0.06108	F1	mg/Kg		60	70 - 130
Ethylbenzene	<0.00200	U F2 F1	0.0996	0.05273	F1	mg/Kg		53	70 - 130
m-Xylene & p-Xylene	<0.00401	U F2 F1	0.199	0.1057	F1	mg/Kg		53	70 - 130
o-Xylene	<0.00200	U F2 F1	0.0996	0.05637	F1	mg/Kg		57	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 890-2225-9 MSD

Matrix: Solid

Analysis Batch: 24380

Client Sample ID: BH-34

Prep Type: Total/NA

Prep Batch: 24268

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U F1	0.0994	0.05960	F1	mg/Kg		60	70 - 130	7	35
Toluene	0.000955	J F1	0.0994	0.04972	F1	mg/Kg		49	70 - 130	21	35
Ethylbenzene	<0.00200	U F2 F1	0.0994	0.02999	F2 F1	mg/Kg		30	70 - 130	55	35
m-Xylene & p-Xylene	<0.00401	U F2 F1	0.199	0.05793	F2 F1	mg/Kg		29	70 - 130	58	35
o-Xylene	<0.00200	U F2 F1	0.0994	0.03197	F2 F1	mg/Kg		32	70 - 130	55	35

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2225-1
SDG: 12580761

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-2225-9 MSD

Matrix: Solid

Analysis Batch: 24380

Client Sample ID: BH-34

Prep Type: Total/NA

Prep Batch: 24268

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-24191/1-A

Matrix: Solid

Analysis Batch: 24218

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 24191

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil	Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		04/25/22 13:28	04/26/22 10:35	1	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		04/25/22 13:28	04/26/22 10:35	1	
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		04/25/22 13:28	04/26/22 10:35	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil	Fac
1-Chlorooctane	108		70 - 130				04/25/22 13:28	04/26/22 10:35	1	
o-Terphenyl	112		70 - 130				04/25/22 13:28	04/26/22 10:35	1	

Lab Sample ID: LCS 880-24191/2-A

Matrix: Solid

Analysis Batch: 24218

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 24191

	Spike	LCS	LCS					%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	798.5		mg/Kg		80	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	1033		mg/Kg		103	70 - 130		
Surrogate	%Recovery	Qualifier	Limits						
1-Chlorooctane	89		70 - 130						
o-Terphenyl	84		70 - 130						

Lab Sample ID: LCSD 880-24191/3-A

Matrix: Solid

Analysis Batch: 24218

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 24191

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	740.7		mg/Kg		74	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	1000	916.5		mg/Kg		92	70 - 130	12	20
Surrogate	%Recovery	Qualifier	Limits						
1-Chlorooctane	90		70 - 130						
o-Terphenyl	84		70 - 130						

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2225-1
SDG: 12580761

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-2225-1 MS

Matrix: Solid

Analysis Batch: 24218

Client Sample ID: BH-16

Prep Type: Total/NA

Prep Batch: 24191

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	16.9	J	999	745.8		mg/Kg		73	70 - 130
Diesel Range Organics (Over C10-C28)	278	F1	999	879.0	F1	mg/Kg		60	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	83		70 - 130						
o-Terphenyl	79		70 - 130						

Lab Sample ID: 890-2225-1 MSD

Matrix: Solid

Analysis Batch: 24218

Client Sample ID: BH-16

Prep Type: Total/NA

Prep Batch: 24191

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	16.9	J	999	716.2		mg/Kg		70	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	278	F1	999	871.9	F1	mg/Kg		59	70 - 130	1	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	83		70 - 130								
o-Terphenyl	77		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-24138/1-A

Matrix: Solid

Analysis Batch: 24259

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	0.858	mg/Kg			04/26/22 19:43	1

Lab Sample ID: LCS 880-24138/2-A

Matrix: Solid

Analysis Batch: 24259

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	254.8		mg/Kg		102	90 - 110

Lab Sample ID: LCSD 880-24138/3-A

Matrix: Solid

Analysis Batch: 24259

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	260.4		mg/Kg		104	90 - 110	2	20

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2225-1
SDG: 12580761

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-2225-1 MS

Matrix: Solid

Analysis Batch: 24259

Client Sample ID: BH-16

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	51.0	F1	250	271.9	F1	mg/Kg		88	90 - 110		

Lab Sample ID: 890-2225-1 MSD

Matrix: Solid

Analysis Batch: 24259

Client Sample ID: BH-16

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	51.0	F1	250	271.0	F1	mg/Kg		88	90 - 110	0	20

Lab Sample ID: 890-2225-11 MS

Matrix: Solid

Analysis Batch: 24259

Client Sample ID: BH-36

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	4.35	J	250	266.3		mg/Kg		105	90 - 110		

Lab Sample ID: 890-2225-11 MSD

Matrix: Solid

Analysis Batch: 24259

Client Sample ID: BH-36

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	4.35	J	250	268.7		mg/Kg		106	90 - 110	1	20

QC Association Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2225-1
SDG: 12580761

GC VOA

Prep Batch: 24201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2225-2	BH-17	Total/NA	Solid	5035	
890-2225-3	BH-18	Total/NA	Solid	5035	
890-2225-4	BH-19	Total/NA	Solid	5035	
890-2225-5	BH-24	Total/NA	Solid	5035	
890-2225-6	BH-27	Total/NA	Solid	5035	
890-2225-7	BH-30	Total/NA	Solid	5035	
890-2225-8	BH-31	Total/NA	Solid	5035	
MB 880-24201/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-24201/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-24201/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2225-2 MS	BH-17	Total/NA	Solid	5035	
890-2225-2 MSD	BH-17	Total/NA	Solid	5035	

Prep Batch: 24268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2225-1	BH-16	Total/NA	Solid	5035	
890-2225-9	BH-34	Total/NA	Solid	5035	
890-2225-10	BH-35	Total/NA	Solid	5035	
890-2225-11	BH-36	Total/NA	Solid	5035	
890-2225-12	SW-1	Total/NA	Solid	5035	
890-2225-13	SW-2	Total/NA	Solid	5035	
890-2225-14	SW-3	Total/NA	Solid	5035	
MB 880-24268/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-24268/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-24268/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2225-9 MS	BH-34	Total/NA	Solid	5035	
890-2225-9 MSD	BH-34	Total/NA	Solid	5035	

Analysis Batch: 24380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2225-1	BH-16	Total/NA	Solid	8021B	24268
890-2225-2	BH-17	Total/NA	Solid	8021B	24201
890-2225-3	BH-18	Total/NA	Solid	8021B	24201
890-2225-4	BH-19	Total/NA	Solid	8021B	24201
890-2225-5	BH-24	Total/NA	Solid	8021B	24201
890-2225-6	BH-27	Total/NA	Solid	8021B	24201
890-2225-7	BH-30	Total/NA	Solid	8021B	24201
890-2225-8	BH-31	Total/NA	Solid	8021B	24201
890-2225-9	BH-34	Total/NA	Solid	8021B	24268
890-2225-10	BH-35	Total/NA	Solid	8021B	24268
890-2225-11	BH-36	Total/NA	Solid	8021B	24268
890-2225-12	SW-1	Total/NA	Solid	8021B	24268
890-2225-13	SW-2	Total/NA	Solid	8021B	24268
890-2225-14	SW-3	Total/NA	Solid	8021B	24268
MB 880-24201/5-A	Method Blank	Total/NA	Solid	8021B	24201
MB 880-24268/5-A	Method Blank	Total/NA	Solid	8021B	24268
LCS 880-24201/1-A	Lab Control Sample	Total/NA	Solid	8021B	24201
LCS 880-24268/1-A	Lab Control Sample	Total/NA	Solid	8021B	24268
LCSD 880-24201/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	24201
LCSD 880-24268/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	24268
890-2225-2 MS	BH-17	Total/NA	Solid	8021B	24201

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2225-1
SDG: 12580761

GC VOA (Continued)

Analysis Batch: 24380 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2225-2 MSD	BH-17	Total/NA	Solid	8021B	24201
890-2225-9 MS	BH-34	Total/NA	Solid	8021B	24268
890-2225-9 MSD	BH-34	Total/NA	Solid	8021B	24268

Analysis Batch: 24529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2225-1	BH-16	Total/NA	Solid	Total BTEX	
890-2225-2	BH-17	Total/NA	Solid	Total BTEX	
890-2225-3	BH-18	Total/NA	Solid	Total BTEX	
890-2225-4	BH-19	Total/NA	Solid	Total BTEX	
890-2225-5	BH-24	Total/NA	Solid	Total BTEX	
890-2225-6	BH-27	Total/NA	Solid	Total BTEX	
890-2225-7	BH-30	Total/NA	Solid	Total BTEX	
890-2225-8	BH-31	Total/NA	Solid	Total BTEX	
890-2225-9	BH-34	Total/NA	Solid	Total BTEX	
890-2225-10	BH-35	Total/NA	Solid	Total BTEX	
890-2225-11	BH-36	Total/NA	Solid	Total BTEX	
890-2225-12	SW-1	Total/NA	Solid	Total BTEX	
890-2225-13	SW-2	Total/NA	Solid	Total BTEX	
890-2225-14	SW-3	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 24191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2225-1	BH-16	Total/NA	Solid	8015NM Prep	
890-2225-2	BH-17	Total/NA	Solid	8015NM Prep	
890-2225-3	BH-18	Total/NA	Solid	8015NM Prep	
890-2225-4	BH-19	Total/NA	Solid	8015NM Prep	
890-2225-5	BH-24	Total/NA	Solid	8015NM Prep	
890-2225-6	BH-27	Total/NA	Solid	8015NM Prep	
890-2225-7	BH-30	Total/NA	Solid	8015NM Prep	
890-2225-8	BH-31	Total/NA	Solid	8015NM Prep	
890-2225-9	BH-34	Total/NA	Solid	8015NM Prep	
890-2225-10	BH-35	Total/NA	Solid	8015NM Prep	
890-2225-11	BH-36	Total/NA	Solid	8015NM Prep	
890-2225-12	SW-1	Total/NA	Solid	8015NM Prep	
890-2225-13	SW-2	Total/NA	Solid	8015NM Prep	
890-2225-14	SW-3	Total/NA	Solid	8015NM Prep	
MB 880-24191/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-24191/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-24191/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2225-1 MS	BH-16	Total/NA	Solid	8015NM Prep	
890-2225-1 MSD	BH-16	Total/NA	Solid	8015NM Prep	

Analysis Batch: 24218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2225-1	BH-16	Total/NA	Solid	8015B NM	24191
890-2225-2	BH-17	Total/NA	Solid	8015B NM	24191
890-2225-3	BH-18	Total/NA	Solid	8015B NM	24191
890-2225-4	BH-19	Total/NA	Solid	8015B NM	24191

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2225-1
SDG: 12580761

GC Semi VOA (Continued)

Analysis Batch: 24218 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2225-5	BH-24	Total/NA	Solid	8015B NM	24191
890-2225-6	BH-27	Total/NA	Solid	8015B NM	24191
890-2225-7	BH-30	Total/NA	Solid	8015B NM	24191
890-2225-8	BH-31	Total/NA	Solid	8015B NM	24191
890-2225-9	BH-34	Total/NA	Solid	8015B NM	24191
890-2225-10	BH-35	Total/NA	Solid	8015B NM	24191
890-2225-11	BH-36	Total/NA	Solid	8015B NM	24191
890-2225-12	SW-1	Total/NA	Solid	8015B NM	24191
890-2225-13	SW-2	Total/NA	Solid	8015B NM	24191
890-2225-14	SW-3	Total/NA	Solid	8015B NM	24191
MB 880-24191/1-A	Method Blank	Total/NA	Solid	8015B NM	24191
LCS 880-24191/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	24191
LCSD 880-24191/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	24191
890-2225-1 MS	BH-16	Total/NA	Solid	8015B NM	24191
890-2225-1 MSD	BH-16	Total/NA	Solid	8015B NM	24191

Analysis Batch: 24308

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2225-1	BH-16	Total/NA	Solid	8015 NM	
890-2225-2	BH-17	Total/NA	Solid	8015 NM	
890-2225-3	BH-18	Total/NA	Solid	8015 NM	
890-2225-4	BH-19	Total/NA	Solid	8015 NM	
890-2225-5	BH-24	Total/NA	Solid	8015 NM	
890-2225-6	BH-27	Total/NA	Solid	8015 NM	
890-2225-7	BH-30	Total/NA	Solid	8015 NM	
890-2225-8	BH-31	Total/NA	Solid	8015 NM	
890-2225-9	BH-34	Total/NA	Solid	8015 NM	
890-2225-10	BH-35	Total/NA	Solid	8015 NM	
890-2225-11	BH-36	Total/NA	Solid	8015 NM	
890-2225-12	SW-1	Total/NA	Solid	8015 NM	
890-2225-13	SW-2	Total/NA	Solid	8015 NM	
890-2225-14	SW-3	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 24138

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2225-1	BH-16	Soluble	Solid	DI Leach	
890-2225-2	BH-17	Soluble	Solid	DI Leach	
890-2225-3	BH-18	Soluble	Solid	DI Leach	
890-2225-4	BH-19	Soluble	Solid	DI Leach	
890-2225-5	BH-24	Soluble	Solid	DI Leach	
890-2225-6	BH-27	Soluble	Solid	DI Leach	
890-2225-7	BH-30	Soluble	Solid	DI Leach	
890-2225-8	BH-31	Soluble	Solid	DI Leach	
890-2225-9	BH-34	Soluble	Solid	DI Leach	
890-2225-10	BH-35	Soluble	Solid	DI Leach	
890-2225-11	BH-36	Soluble	Solid	DI Leach	
890-2225-12	SW-1	Soluble	Solid	DI Leach	
890-2225-13	SW-2	Soluble	Solid	DI Leach	
890-2225-14	SW-3	Soluble	Solid	DI Leach	

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2225-1
SDG: 12580761

HPLC/IC (Continued)

Leach Batch: 24138 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-24138/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-24138/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-24138/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2225-1 MS	BH-16	Soluble	Solid	DI Leach	
890-2225-1 MSD	BH-16	Soluble	Solid	DI Leach	
890-2225-11 MS	BH-36	Soluble	Solid	DI Leach	
890-2225-11 MSD	BH-36	Soluble	Solid	DI Leach	

Analysis Batch: 24259

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2225-1	BH-16	Soluble	Solid	300.0	24138
890-2225-2	BH-17	Soluble	Solid	300.0	24138
890-2225-3	BH-18	Soluble	Solid	300.0	24138
890-2225-4	BH-19	Soluble	Solid	300.0	24138
890-2225-5	BH-24	Soluble	Solid	300.0	24138
890-2225-6	BH-27	Soluble	Solid	300.0	24138
890-2225-7	BH-30	Soluble	Solid	300.0	24138
890-2225-8	BH-31	Soluble	Solid	300.0	24138
890-2225-9	BH-34	Soluble	Solid	300.0	24138
890-2225-10	BH-35	Soluble	Solid	300.0	24138
890-2225-11	BH-36	Soluble	Solid	300.0	24138
890-2225-12	SW-1	Soluble	Solid	300.0	24138
890-2225-13	SW-2	Soluble	Solid	300.0	24138
890-2225-14	SW-3	Soluble	Solid	300.0	24138
MB 880-24138/1-A	Method Blank	Soluble	Solid	300.0	24138
LCS 880-24138/2-A	Lab Control Sample	Soluble	Solid	300.0	24138
LCSD 880-24138/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	24138
890-2225-1 MS	BH-16	Soluble	Solid	300.0	24138
890-2225-1 MSD	BH-16	Soluble	Solid	300.0	24138
890-2225-11 MS	BH-36	Soluble	Solid	300.0	24138
890-2225-11 MSD	BH-36	Soluble	Solid	300.0	24138

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Lab Chronicle

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2225-1
SDG: 12580761

Client Sample ID: BH-16

Lab Sample ID: 890-2225-1

Date Collected: 04/21/22 11:00

Matrix: Solid

Date Received: 04/21/22 15:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	24268	04/26/22 15:59	MR	XEN MID
Total/NA	Analysis	8021B		1			24380	04/29/22 01:37	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24529	04/29/22 15:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24308	04/27/22 11:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	24191	04/25/22 13:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24218	04/26/22 11:37	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	24138	04/25/22 10:03	CH	XEN MID
Soluble	Analysis	300.0		1			24259	04/26/22 20:10	CH	XEN MID

Client Sample ID: BH-17

Lab Sample ID: 890-2225-2

Date Collected: 04/21/22 11:05

Matrix: Solid

Date Received: 04/21/22 15:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	24201	04/25/22 15:01	MR	XEN MID
Total/NA	Analysis	8021B		1			24380	04/29/22 05:02	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24529	04/29/22 15:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24308	04/27/22 11:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	24191	04/25/22 13:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24218	04/26/22 12:39	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	24138	04/25/22 10:03	CH	XEN MID
Soluble	Analysis	300.0		1			24259	04/26/22 20:38	CH	XEN MID

Client Sample ID: BH-18

Lab Sample ID: 890-2225-3

Date Collected: 04/21/22 11:10

Matrix: Solid

Date Received: 04/21/22 15:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	24201	04/25/22 15:01	MR	XEN MID
Total/NA	Analysis	8021B		1			24380	04/29/22 05:22	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24529	04/29/22 15:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24308	04/27/22 11:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	24191	04/25/22 13:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24218	04/26/22 12:59	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	24138	04/25/22 10:03	CH	XEN MID
Soluble	Analysis	300.0		1			24259	04/26/22 20:47	CH	XEN MID

Client Sample ID: BH-19

Lab Sample ID: 890-2225-4

Date Collected: 04/21/22 11:15

Matrix: Solid

Date Received: 04/21/22 15:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	24201	04/25/22 15:01	MR	XEN MID
Total/NA	Analysis	8021B		1			24380	04/29/22 05:43	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24529	04/29/22 15:23	AJ	XEN MID

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Lab Chronicle

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2225-1
SDG: 12580761

Client Sample ID: BH-19

Lab Sample ID: 890-2225-4

Date Collected: 04/21/22 11:15

Matrix: Solid

Date Received: 04/21/22 15:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			24308	04/27/22 11:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	24191	04/25/22 13:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24218	04/26/22 13:20	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	24138	04/25/22 10:03	CH	XEN MID
Soluble	Analysis	300.0		1			24259	04/26/22 20:57	CH	XEN MID

Client Sample ID: BH-24

Lab Sample ID: 890-2225-5

Date Collected: 04/21/22 11:20

Matrix: Solid

Date Received: 04/21/22 15:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	24201	04/25/22 15:01	MR	XEN MID
Total/NA	Analysis	8021B		1			24380	04/29/22 06:03	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24529	04/29/22 15:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24308	04/27/22 11:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	24191	04/25/22 13:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24218	04/26/22 13:41	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	24138	04/25/22 10:03	CH	XEN MID
Soluble	Analysis	300.0		1			24259	04/26/22 21:06	CH	XEN MID

Client Sample ID: BH-27

Lab Sample ID: 890-2225-6

Date Collected: 04/21/22 11:30

Matrix: Solid

Date Received: 04/21/22 15:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	24201	04/25/22 15:01	MR	XEN MID
Total/NA	Analysis	8021B		1			24380	04/29/22 06:24	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24529	04/29/22 15:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24308	04/27/22 11:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	24191	04/25/22 13:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24218	04/26/22 14:01	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	24138	04/25/22 10:03	CH	XEN MID
Soluble	Analysis	300.0		1			24259	04/26/22 21:34	CH	XEN MID

Client Sample ID: BH-30

Lab Sample ID: 890-2225-7

Date Collected: 04/21/22 11:35

Matrix: Solid

Date Received: 04/21/22 15:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	24201	04/25/22 15:01	MR	XEN MID
Total/NA	Analysis	8021B		1			24380	04/29/22 06:44	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24529	04/29/22 15:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24308	04/27/22 11:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	24191	04/25/22 13:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24218	04/26/22 14:22	AJ	XEN MID

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Lab Chronicle

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2225-1
SDG: 12580761

Client Sample ID: BH-30

Lab Sample ID: 890-2225-7

Date Collected: 04/21/22 11:35

Matrix: Solid

Date Received: 04/21/22 15:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	24138	04/25/22 10:03	CH	XEN MID
Soluble	Analysis	300.0		1			24259	04/26/22 21:44	CH	XEN MID

Client Sample ID: BH-31

Lab Sample ID: 890-2225-8

Date Collected: 04/21/22 11:40

Matrix: Solid

Date Received: 04/21/22 15:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	24201	04/25/22 15:01	MR	XEN MID
Total/NA	Analysis	8021B		1			24380	04/29/22 07:05	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24529	04/29/22 15:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24308	04/27/22 11:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	24191	04/25/22 13:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24218	04/26/22 14:43	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	24138	04/25/22 10:03	CH	XEN MID
Soluble	Analysis	300.0		1			24259	04/26/22 21:54	CH	XEN MID

Client Sample ID: BH-34

Lab Sample ID: 890-2225-9

Date Collected: 04/21/22 11:45

Matrix: Solid

Date Received: 04/21/22 15:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	24268	04/26/22 15:59	MR	XEN MID
Total/NA	Analysis	8021B		1			24380	04/28/22 18:25	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24529	04/29/22 15:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24308	04/27/22 11:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	24191	04/25/22 13:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24218	04/26/22 15:05	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	24138	04/25/22 10:03	CH	XEN MID
Soluble	Analysis	300.0		1			24259	04/26/22 22:03	CH	XEN MID

Client Sample ID: BH-35

Lab Sample ID: 890-2225-10

Date Collected: 04/21/22 11:50

Matrix: Solid

Date Received: 04/21/22 15:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	24268	04/26/22 15:59	MR	XEN MID
Total/NA	Analysis	8021B		1			24380	04/28/22 18:46	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24529	04/29/22 15:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24308	04/27/22 11:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	24191	04/25/22 13:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24218	04/26/22 15:26	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	24138	04/25/22 10:03	CH	XEN MID
Soluble	Analysis	300.0		1			24259	04/26/22 22:13	CH	XEN MID

Eurofins Carlsbad

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2225-1
SDG: 12580761

Client Sample ID: BH-36

Lab Sample ID: 890-2225-11

Date Collected: 04/21/22 11:55

Matrix: Solid

Date Received: 04/21/22 15:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	24268	04/26/22 15:59	MR	XEN MID
Total/NA	Analysis	8021B		1			24380	04/28/22 19:07	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24529	04/29/22 15:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24308	04/27/22 11:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	24191	04/25/22 13:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24218	04/26/22 16:32	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	24138	04/25/22 10:03	CH	XEN MID
Soluble	Analysis	300.0		1			24259	04/26/22 22:22	CH	XEN MID

Client Sample ID: SW-1

Lab Sample ID: 890-2225-12

Date Collected: 04/21/22 12:00

Matrix: Solid

Date Received: 04/21/22 15:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	24268	04/26/22 15:59	MR	XEN MID
Total/NA	Analysis	8021B		1			24380	04/28/22 19:27	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24529	04/29/22 15:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24308	04/27/22 11:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	24191	04/25/22 13:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24218	04/26/22 16:54	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	24138	04/25/22 10:03	CH	XEN MID
Soluble	Analysis	300.0		1			24259	04/26/22 22:51	CH	XEN MID

Client Sample ID: SW-2

Lab Sample ID: 890-2225-13

Date Collected: 04/21/22 12:05

Matrix: Solid

Date Received: 04/21/22 15:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	24268	04/26/22 15:59	MR	XEN MID
Total/NA	Analysis	8021B		1			24380	04/28/22 19:48	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24529	04/29/22 15:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24308	04/27/22 11:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	24191	04/25/22 13:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24218	04/26/22 17:15	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	24138	04/25/22 10:03	CH	XEN MID
Soluble	Analysis	300.0		1			24259	04/26/22 23:01	CH	XEN MID

Client Sample ID: SW-3

Lab Sample ID: 890-2225-14

Date Collected: 04/21/22 12:10

Matrix: Solid

Date Received: 04/21/22 15:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	24268	04/26/22 15:59	MR	XEN MID
Total/NA	Analysis	8021B		1			24380	04/28/22 20:08	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24529	04/29/22 15:23	AJ	XEN MID

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Lab Chronicle

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2225-1
SDG: 12580761

Client Sample ID: SW-3
Date Collected: 04/21/22 12:10
Date Received: 04/21/22 15:55

Lab Sample ID: 890-2225-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			24308	04/27/22 11:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	24191	04/25/22 13:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24218	04/26/22 17:36	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	24138	04/25/22 10:03	CH	XEN MID
Soluble	Analysis	300.0		1			24259	04/26/22 23:29	CH	XEN MID

Laboratory References:
XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2225-1
SDG: 12580761

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

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

Method Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2225-1
SDG: 12580761

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2225-1
SDG: 12580761

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-2225-1	BH-16	Solid	04/21/22 11:00	04/21/22 15:55
890-2225-2	BH-17	Solid	04/21/22 11:05	04/21/22 15:55
890-2225-3	BH-18	Solid	04/21/22 11:10	04/21/22 15:55
890-2225-4	BH-19	Solid	04/21/22 11:15	04/21/22 15:55
890-2225-5	BH-24	Solid	04/21/22 11:20	04/21/22 15:55
890-2225-6	BH-27	Solid	04/21/22 11:30	04/21/22 15:55
890-2225-7	BH-30	Solid	04/21/22 11:35	04/21/22 15:55
890-2225-8	BH-31	Solid	04/21/22 11:40	04/21/22 15:55
890-2225-9	BH-34	Solid	04/21/22 11:45	04/21/22 15:55
890-2225-10	BH-35	Solid	04/21/22 11:50	04/21/22 15:55
890-2225-11	BH-36	Solid	04/21/22 11:55	04/21/22 15:55
890-2225-12	SW-1	Solid	04/21/22 12:00	04/21/22 15:55
890-2225-13	SW-2	Solid	04/21/22 12:05	04/21/22 15:55
890-2225-14	SW-3	Solid	04/21/22 12:10	04/21/22 15:55

CHAIN OF CUSTODY

Page 1 Of 12

Page 1 Of 2

Lakeland, Florida (863-646-8526)

Tampa, Florida (813-620-2000)

Xenco Job #

Project Information

Project Name/Number: Bomos Enderol 22 Bathen / 132580761

Project Location:

Phone No: (432)250-7917

Zach.comino@gghd.com

m.larson@qhd.com

.....

3

S = Soil/Sed/Solid
 GW = Ground Water
 DW = Drinking Water
 P = Product
 SW = Surface water
 SL = Sludge
 OW = Ocean/Sea Water
 W = Wipe
 O = Oil
 WW = Waste Water
 A = Air

890-2225 Chain of Custody

890-2225 Chain of Custody

☐ Same Day TAT	☒ 5 Day TAT
☐ Next Day EMERGENCY	☐ 7 Day TAT
☐ 2 Day EMERGENCY	☐ Contract TAT
☐ 3 Day EMERGENCY	

☐ Level II Std QC	☐ Level IV (Full Data Pkg /raw data)
☐ Level III Std QC+ Forms	☐ TRRP Level IV
☐ Level 3 (CLP Forms)	☐ UST / RG 411
☐ TRRP Checklist	

No SSOW / Direct Bill to EOG

TAT Starts Day received by Lab, if received by 5:00 pm

Report MDLs and J values

Relinquished by Sampler

Date Time

Received By: ✓ N

Relinquished By:

Date Time

By:

Relinquished by:

Date Time:

Received By:

Relinquished By:

Date Time

By:

Relinquished by:

Date Time

Received By:

Custody Seal #

Preserved where applicable ☐

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Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to XENCO Laboratories and its affiliates, subcontractors and assigns. XENCO's standard terms and conditions of service unless previously negotiated under a fully executed client contract.

Stafford, Texas (281-240-4200)
Dallas Texas (214-902-0300)

Service Center - San Antonio, Texas (210-509-3334,

www.xenco.com

Norcross, Georgia (770-449-8800)

Lakeland, Florida (863-646-8526)

Tampa, Florida (813-620-2000)

CHAIN OF CUSTODY

Page 2 of 2

[illegible]

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 890-2225-1

SDG Number: 12580761

Login Number: 2225

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 890-2225-1

SDG Number: 12580761

Login Number: 2225

List Number: 2

Creator: Teel, Brianna

List Source: Eurofins Midland

List Creation: 04/25/22 09:26 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	



Environment Testing America

ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-2231-1
Laboratory Sample Delivery Group: 12580761
Client Project/Site: Romeo Federal 22 Battery

For:
GHD Services Inc.
2135 South Loop 250 West
Midland, Texas 79703

Attn: Becky Haskell

A handwritten signature in dark ink that reads "Chad A. Bechtold".

Authorized for release by:
4/29/2022 4:46:16 PM
Chad Bechtold, Project Manager
(813)690-3563
Chad.Bechtold@et.eurofinsus.com
Designee for
Debbie Simmons, Project Manager
(832)986-6768
Debbie.Simmons@et.eurofinsus.com

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

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

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Laboratory Job ID: 890-2231-1
SDG: 12580761

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Definitions/Glossary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2231-1
SDG: 12580761

Qualifiers

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2231-1
SDG: 12580761

Job ID: 890-2231-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2231-1

Receipt

The sample was received on 4/22/2022 1:30 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 24.0°C

GC VOA

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

GC Semi VOA

Method 8015MOD_NM: The method blank for preparation batch 880-24262 and analytical batch 880-24278 contained GRO and DRO above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCSD 880-24262/3-A) and (MB 880-24262/1-A).

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

HPLC/IC

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

Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2231-1
SDG: 12580761

Client Sample ID: BH-29

Lab Sample ID: 890-2231-1

Date Collected: 04/22/22 09:00

Matrix: Solid

Date Received: 04/22/22 13:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	0.000383	mg/Kg		04/26/22 15:59	04/29/22 01:58	1
Toluene	<0.00199	U	0.00199	0.000454	mg/Kg		04/26/22 15:59	04/29/22 01:58	1
Ethylbenzene	<0.00199	U	0.00199	0.000563	mg/Kg		04/26/22 15:59	04/29/22 01:58	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00101	mg/Kg		04/26/22 15:59	04/29/22 01:58	1
o-Xylene	<0.00199	U	0.00199	0.000343	mg/Kg		04/26/22 15:59	04/29/22 01:58	1
Xylenes, Total	<0.00398	U	0.00398	0.00101	mg/Kg		04/26/22 15:59	04/29/22 01:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	04/26/22 15:59	04/29/22 01:58	1
1,4-Difluorobenzene (Surr)	97		70 - 130	04/26/22 15:59	04/29/22 01:58	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	0.00101	mg/Kg			04/29/22 15:23	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	54.7		50.0	15.0	mg/Kg			04/28/22 09:20	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		04/26/22 14:42	04/27/22 18:49	1
Diesel Range Organics (Over C10-C28)	54.7	B	50.0	15.0	mg/Kg		04/26/22 14:42	04/27/22 18:49	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		04/26/22 14:42	04/27/22 18:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130	04/26/22 14:42	04/27/22 18:49	1
o-Terphenyl	97		70 - 130	04/26/22 14:42	04/27/22 18:49	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	92.9		4.99	0.857	mg/Kg			04/26/22 23:58	1

Eurofins Carlsbad

Surrogate Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2231-1
SDG: 12580761

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)				
890-2231-1	BH-29	106	97				
LCS 880-24268/1-A	Lab Control Sample	107	90				
LCSD 880-24268/2-A	Lab Control Sample Dup	102	98				
MB 880-24268/5-A	Method Blank	90	91				
Surrogate Legend							
BFB = 4-Bromofluorobenzene (Surr)							
DFBZ = 1,4-Difluorobenzene (Surr)							

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)				
890-2231-1	BH-29	87	97				
Surrogate Legend							
1CO = 1-Chlorooctane							
OTPH = o-Terphenyl							

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	1CO2 (70-130)	OTPH2 (70-130)				
LCS 880-24262/2-A	Lab Control Sample	105	126				
LCSD 880-24262/3-A	Lab Control Sample Dup	125	153 S1+				
MB 880-24262/1-A	Method Blank	116	145 S1+				
Surrogate Legend							
1CO = 1-Chlorooctane							
OTPH = o-Terphenyl							

QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2231-1
SDG: 12580761

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-24268/5-A

Matrix: Solid

Analysis Batch: 24380

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 24268

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		04/26/22 15:59	04/28/22 18:04	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		04/26/22 15:59	04/28/22 18:04	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		04/26/22 15:59	04/28/22 18:04	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		04/26/22 15:59	04/28/22 18:04	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		04/26/22 15:59	04/28/22 18:04	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		04/26/22 15:59	04/28/22 18:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	04/26/22 15:59	04/28/22 18:04	1
1,4-Difluorobenzene (Surr)	91		70 - 130	04/26/22 15:59	04/28/22 18:04	1

Lab Sample ID: LCS 880-24268/1-A

Matrix: Solid

Analysis Batch: 24380

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 24268

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.07683		mg/Kg		77	70 - 130
Toluene	0.100	0.09592		mg/Kg		96	70 - 130
Ethylbenzene	0.100	0.1023		mg/Kg		102	70 - 130
m-Xylene & p-Xylene	0.200	0.1971		mg/Kg		99	70 - 130
o-Xylene	0.100	0.09834		mg/Kg		98	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	90		70 - 130

Lab Sample ID: LCSD 880-24268/2-A

Matrix: Solid

Analysis Batch: 24380

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 24268

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1019		mg/Kg		102	70 - 130	28	35
Toluene	0.100	0.1034		mg/Kg		103	70 - 130	8	35
Ethylbenzene	0.100	0.1053		mg/Kg		105	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.2154		mg/Kg		108	70 - 130	9	35
o-Xylene	0.100	0.1075		mg/Kg		108	70 - 130	9	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2231-1
SDG: 12580761

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-24262/1-A

Matrix: Solid

Analysis Batch: 24278

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 24262

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	15.25	J	50.0	15.0	mg/Kg		04/26/22 14:42	04/27/22 11:32	1
Diesel Range Organics (Over C10-C28)	20.53	J	50.0	15.0	mg/Kg		04/26/22 14:42	04/27/22 11:32	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		04/26/22 14:42	04/27/22 11:32	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130				04/26/22 14:42	04/27/22 11:32	1
o-Terphenyl	145	S1+	70 - 130				04/26/22 14:42	04/27/22 11:32	1

Lab Sample ID: LCS 880-24262/2-A

Matrix: Solid

Analysis Batch: 24278

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 24262

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1162		mg/Kg		116	70 - 130
Diesel Range Organics (Over C10-C28)	1000	966.8		mg/Kg		97	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	105		70 - 130				
o-Terphenyl	126		70 - 130				

Lab Sample ID: LCSD 880-24262/3-A

Matrix: Solid

Analysis Batch: 24278

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 24262

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1044		mg/Kg		104	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	1000	1076		mg/Kg		108	70 - 130	11	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	125		70 - 130						
o-Terphenyl	153	S1+	70 - 130						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-24138/1-A

Matrix: Solid

Analysis Batch: 24259

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	0.858	mg/Kg			04/26/22 19:43	1

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2231-1
SDG: 12580761

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-24138/2-A

Matrix: Solid

Analysis Batch: 24259

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	254.8		mg/Kg		102	90 - 110

Lab Sample ID: LCSD 880-24138/3-A

Matrix: Solid

Analysis Batch: 24259

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	260.4		mg/Kg		104	90 - 110	2	20

Lab Sample ID: MB 880-24441/1-A

Matrix: Solid

Analysis Batch: 24461

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	0.858	mg/Kg			04/28/22 21:08	1

Lab Sample ID: LCS 880-24441/2-A

Matrix: Solid

Analysis Batch: 24461

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	241.3		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-24441/3-A

Matrix: Solid

Analysis Batch: 24461

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	257.6		mg/Kg		103	90 - 110	7	20

QC Association Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2231-1
SDG: 12580761

GC VOA

Prep Batch: 24268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2231-1	BH-29	Total/NA	Solid	5035	
MB 880-24268/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-24268/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-24268/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 24380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2231-1	BH-29	Total/NA	Solid	8021B	24268
MB 880-24268/5-A	Method Blank	Total/NA	Solid	8021B	24268
LCS 880-24268/1-A	Lab Control Sample	Total/NA	Solid	8021B	24268
LCSD 880-24268/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	24268

Analysis Batch: 24532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2231-1	BH-29	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 24262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2231-1	BH-29	Total/NA	Solid	8015NM Prep	
MB 880-24262/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-24262/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-24262/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 24278

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2231-1	BH-29	Total/NA	Solid	8015B NM	24262
MB 880-24262/1-A	Method Blank	Total/NA	Solid	8015B NM	24262
LCS 880-24262/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	24262
LCSD 880-24262/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	24262

Analysis Batch: 24377

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2231-1	BH-29	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 24138

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2231-1	BH-29	Soluble	Solid	DI Leach	
MB 880-24138/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-24138/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-24138/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 24259

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2231-1	BH-29	Soluble	Solid	300.0	24138
MB 880-24138/1-A	Method Blank	Soluble	Solid	300.0	24138
LCS 880-24138/2-A	Lab Control Sample	Soluble	Solid	300.0	24138
LCSD 880-24138/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	24138

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2231-1
SDG: 12580761

HPLC/IC

Leach Batch: 24441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-24441/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-24441/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-24441/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 24461

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-24441/1-A	Method Blank	Soluble	Solid	300.0	24441
LCS 880-24441/2-A	Lab Control Sample	Soluble	Solid	300.0	24441
LCSD 880-24441/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	24441

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2231-1
SDG: 12580761

Client Sample ID: BH-29
Date Collected: 04/22/22 09:00
Date Received: 04/22/22 13:30

Lab Sample ID: 890-2231-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	24268	04/26/22 15:59	MR	XEN MID
Total/NA	Analysis	8021B		1			24380	04/29/22 01:58	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24532	04/29/22 15:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24377	04/28/22 09:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	24262	04/26/22 14:42	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24278	04/27/22 18:49	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	24138	04/25/22 10:03	CH	XEN MID
Soluble	Analysis	300.0		1			24259	04/26/22 23:58	CH	XEN MID

Laboratory References:
XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2231-1
SDG: 12580761

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

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

Method Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2231-1
SDG: 12580761

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2231-1
SDG: 12580761

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-2231-1	BH-29	Solid	04/22/22 09:00	04/22/22 13:30

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



CHAIN OF CUSTODY

Page 1 Of 1

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Norcross, Georgia (770-449-8800)

Lakeland, Florida (863-646-8526)
Tampa, Florida (813-620-2000)

Client / Reporting Information				Project Information				Analytical Information				Matrix Codes			
Company Name / Branch: GH/MI/land				Project Name/Number: Romeo Federal 22 Battery / 12580761											
Company Address: 2135 S. Loop 250 West Midland TX				Project Location: Eddy County, New Mexico											
Email: becky.haskell@ghd.com Matthew.laughlin@ghd.com Nikki.mishler@cddevinc.com				Phone No: (432)250-7917 Zach.cominfo@ghd.com tom.larson@ghd.com				Invoice To: Centennial Resource Development, Inc / Nikki Mishler							
Project Contact: Becky Haskell / Glenn Quinney				PO Number: NA											
Sampler's Name: Zach Comino															
No.	Field ID / Point of Collection	Sample Depth	Collection Date	Time	Matrix	# of bottles	Number of preserved bottles				Field Comments				
1	BH-29		4/23/22	0900	S	1	HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	
2															
3															
4															
5															
6															
7															
8															
9															
10															
Turnaround Time (Business days)				Data Deliverable Information											
☐ Same Day TAT				☒ 5 Day TAT				☐ Level II Std QC				☐ Level IV (Full Data Pkg / raw data)			
☐ Next Day EMERGENCY				☐ 7 Day TAT				☐ Level III Std QC + Forms				☐ TRRP Level IV			
☐ 2 Day EMERGENCY				☐ Contract TAT				☐ Level 3 (CLP Forms)				☐ UST / RG -411			
☐ 3 Day EMERGENCY				☐ TRRP Checklist											
TAT Starts Day received by Lab, if received by 5:00 pm				Report MDLs and J values.											
Relinquished by Sampler:				SAMPLE/CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY											
Date Time: 4/23/22 1337				Received By: The City 4/20/22 1330											
Relinquished by:				Date Time: 4/23/22 1337				Relinquished By:							
3				3				4				4			
Relinquished by:				Date Time:				Custody Seal #				Preserved where applicable			
5				5				4				On Ice Cooler Temp Thermo, Corr. Factor			
Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to XENCO Laboratories and its affiliates, subcontractors and assigns XENCO's standard terms and conditions of service unless previously negotiated under a fully executed client contract.												890-2231 Chain of Custody			

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 890-2231-1

SDG Number: 12580761

Login Number: 2231

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 890-2231-1

SDG Number: 12580761

Login Number: 2231

List Number: 2

Creator: Teel, Brianna

List Source: Eurofins Midland

List Creation: 04/25/22 09:26 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	



Environment Testing America

ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-2238-1
Laboratory Sample Delivery Group: 12851651
Client Project/Site: Merchant Livestock 30

For:
GHD Services Inc.
2135 South Loop 250 West
Midland, Texas 79703

Attn: Becky Haskell

A handwritten signature in black ink, appearing to read "Debbie Simmons".

Authorized for release by:
5/10/2022 12:00:52 PM

Debbie Simmons, Project Manager
(832)986-6768
Debbie.Simmons@et.eurofinsus.com

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

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

Client: GHD Services Inc.
Project/Site: Merchant Livestock 30

Laboratory Job ID: 890-2238-1
SDG: 12851651

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Definitions/Glossary

Client: GHD Services Inc.
Project/Site: Merchant Livestock 30

Job ID: 890-2238-1
SDG: 12851651

Qualifiers

GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

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Case Narrative

Client: GHD Services Inc.
Project/Site: Merchant Livestock 30

Job ID: 890-2238-1
SDG: 12851651

Job ID: 890-2238-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2238-1

Receipt

The samples were received on 4/25/2022 4:45 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 24.6°C

GC VOA

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

GC Semi VOA

Method 8015MOD_NM: The method blank for preparation batch 880-24372 and analytical batch 880-24366 contained <AffectedAnalytes> above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-24372 and analytical batch 880-24366 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD_NM: The method blank for preparation batch 880-24356 and analytical batch 880-24366 contained <AffectedAnalytes> above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

HPLC/IC

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

Client Sample Results

Client: GHD Services Inc.
Project/Site: Merchant Livestock 30

Job ID: 890-2238-1
SDG: 12851651

Client Sample ID: BH-37

Lab Sample ID: 890-2238-1

Date Collected: 04/25/22 09:30

Matrix: Solid

Date Received: 04/25/22 16:45

Sample Depth: 37

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	0.000383	mg/Kg	-	05/07/22 12:54	05/08/22 01:29	1
Toluene	0.00188	J	0.00199	0.000453	mg/Kg	-	05/07/22 12:54	05/08/22 01:29	1
Ethylbenzene	0.00128	J	0.00199	0.000562	mg/Kg	-	05/07/22 12:54	05/08/22 01:29	1
m-Xylene & p-Xylene	0.00542		0.00398	0.00100	mg/Kg	-	05/07/22 12:54	05/08/22 01:29	1
o-Xylene	0.00183	J	0.00199	0.000342	mg/Kg	-	05/07/22 12:54	05/08/22 01:29	1
Xylenes, Total	0.00725		0.00398	0.00100	mg/Kg	-	05/07/22 12:54	05/08/22 01:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	156	S1+	70 - 130	04/29/22 14:58	05/05/22 12:20	1
1,4-Difluorobenzene (Surr)	86		70 - 130	04/29/22 14:58	05/05/22 12:20	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0104		0.00398	0.00100	mg/Kg	-		05/06/22 12:23	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	19.4	J	49.9	15.0	mg/Kg	-		04/29/22 16:37	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	15.0	mg/Kg	-	04/28/22 08:46	04/28/22 11:20	1
Diesel Range Organics (Over C10-C28)	19.4	J B F1	49.9	15.0	mg/Kg	-	04/28/22 08:46	04/28/22 11:20	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg	-	04/28/22 08:46	04/28/22 11:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	77		70 - 130	04/28/22 08:46	04/28/22 11:20	1
o-Terphenyl	84		70 - 130	04/28/22 08:46	04/28/22 11:20	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23.9		5.05	0.867	mg/Kg	-		04/29/22 10:46	1

Client Sample ID: BH-38

Lab Sample ID: 890-2238-2

Date Collected: 04/25/22 09:35

Matrix: Solid

Date Received: 04/25/22 16:45

Sample Depth: 38

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg	-	05/07/22 12:54	05/08/22 01:49	1
Toluene	0.00226		0.00200	0.000456	mg/Kg	-	05/07/22 12:54	05/08/22 01:49	1
Ethylbenzene	0.00201		0.00200	0.000565	mg/Kg	-	05/07/22 12:54	05/08/22 01:49	1
m-Xylene & p-Xylene	0.0124		0.00400	0.00101	mg/Kg	-	05/07/22 12:54	05/08/22 01:49	1
o-Xylene	0.00441		0.00200	0.000344	mg/Kg	-	05/07/22 12:54	05/08/22 01:49	1
Xylenes, Total	0.0168		0.00400	0.00101	mg/Kg	-	05/07/22 12:54	05/08/22 01:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	159	S1+	70 - 130	04/29/22 14:58	05/05/22 12:45	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Merchant Livestock 30

Job ID: 890-2238-1
SDG: 12851651

Client Sample ID: BH-38

Lab Sample ID: 890-2238-2

Date Collected: 04/25/22 09:35

Matrix: Solid

Date Received: 04/25/22 16:45

Sample Depth: 38

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	88		70 - 130	04/29/22 14:58	05/05/22 12:45	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0211		0.00400	0.00101	mg/Kg			05/06/22 12:23	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	23.6	J	50.0	15.0	mg/Kg			04/29/22 16:37	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		04/28/22 08:46	04/28/22 12:24	1
Diesel Range Organics (Over C10-C28)	23.6	J B	50.0	15.0	mg/Kg		04/28/22 08:46	04/28/22 12:24	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		04/28/22 08:46	04/28/22 12:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	79		70 - 130				04/28/22 08:46	04/28/22 12:24	1
o-Terphenyl	87		70 - 130				04/28/22 08:46	04/28/22 12:24	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.4		5.00	0.858	mg/Kg			04/29/22 10:55	1

Client Sample ID: BH-39

Lab Sample ID: 890-2238-3

Date Collected: 04/25/22 11:00

Matrix: Solid

Date Received: 04/25/22 16:45

Sample Depth: 39

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000386	mg/Kg		05/07/22 12:54	05/08/22 02:09	1
Toluene	0.000480	J	0.00200	0.000457	mg/Kg		05/07/22 12:54	05/08/22 02:09	1
Ethylbenzene	<0.00200	U	0.00200	0.000566	mg/Kg		05/07/22 12:54	05/08/22 02:09	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	0.00101	mg/Kg		05/07/22 12:54	05/08/22 02:09	1
o-Xylene	<0.00200	U	0.00200	0.000345	mg/Kg		05/07/22 12:54	05/08/22 02:09	1
Xylenes, Total	<0.00401	U	0.00401	0.00101	mg/Kg		05/07/22 12:54	05/08/22 02:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	158	S1+	70 - 130	04/29/22 14:58	05/05/22 13:11	1
1,4-Difluorobenzene (Surr)	84		70 - 130	04/29/22 14:58	05/05/22 13:11	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	0.00101	mg/Kg			05/06/22 12:23	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	35.6	J	50.0	15.0	mg/Kg			04/29/22 16:37	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Merchant Livestock 30

Job ID: 890-2238-1
SDG: 12851651

Client Sample ID: BH-39

Date Collected: 04/25/22 11:00

Date Received: 04/25/22 16:45

Sample Depth: 39

Lab Sample ID: 890-2238-3

Matrix: Solid

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg	-	04/28/22 08:46	04/28/22 12:45	1
Diesel Range Organics (Over C10-C28)	35.6	J B	50.0	15.0	mg/Kg	-	04/28/22 08:46	04/28/22 12:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg	-	04/28/22 08:46	04/28/22 12:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	79		70 - 130				04/28/22 08:46	04/28/22 12:45	1
o-Terphenyl	89		70 - 130				04/28/22 08:46	04/28/22 12:45	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21.1		4.95	0.850	mg/Kg	-		04/29/22 11:04	1

Client Sample ID: BH-40

Date Collected: 04/25/22 11:05

Date Received: 04/25/22 16:45

Sample Depth: 40

Lab Sample ID: 890-2238-4

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	0.000382	mg/Kg	-	04/29/22 14:58	05/05/22 16:52	1
Toluene	<0.00198	U	0.00198	0.000452	mg/Kg	-	04/29/22 14:58	05/05/22 16:52	1
Ethylbenzene	<0.00198	U	0.00198	0.000561	mg/Kg	-	04/29/22 14:58	05/05/22 16:52	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	0.00100	mg/Kg	-	04/29/22 14:58	05/05/22 16:52	1
o-Xylene	<0.00198	U	0.00198	0.000341	mg/Kg	-	04/29/22 14:58	05/05/22 16:52	1
Xylenes, Total	<0.00397	U	0.00397	0.00100	mg/Kg	-	04/29/22 14:58	05/05/22 16:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	160	S1+	70 - 130				04/29/22 14:58	05/05/22 16:52	1
1,4-Difluorobenzene (Surr)	87		70 - 130				04/29/22 14:58	05/05/22 16:52	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	0.00100	mg/Kg	-		05/06/22 12:23	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	47.5	J	50.0	15.0	mg/Kg	-		04/29/22 16:37	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	24.4	J	50.0	15.0	mg/Kg	-	04/28/22 08:46	04/28/22 13:06	1
Diesel Range Organics (Over C10-C28)	23.1	J B	50.0	15.0	mg/Kg	-	04/28/22 08:46	04/28/22 13:06	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg	-	04/28/22 08:46	04/28/22 13:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	80		70 - 130				04/28/22 08:46	04/28/22 13:06	1
o-Terphenyl	92		70 - 130				04/28/22 08:46	04/28/22 13:06	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Merchant Livestock 30

Job ID: 890-2238-1
SDG: 12851651

Client Sample ID: BH-40

Lab Sample ID: 890-2238-4

Date Collected: 04/25/22 11:05

Matrix: Solid

Date Received: 04/25/22 16:45

Sample Depth: 40

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.10		4.99	0.857	mg/Kg			04/29/22 11:13	1

Client Sample ID: BH-41

Lab Sample ID: 890-2238-5

Date Collected: 04/25/22 11:10

Matrix: Solid

Date Received: 04/25/22 16:45

Sample Depth: 41

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	0.000387	mg/Kg		04/29/22 14:58	05/05/22 17:18	1
Toluene	<0.00201	U	0.00201	0.000459	mg/Kg		04/29/22 14:58	05/05/22 17:18	1
Ethylbenzene	<0.00201	U	0.00201	0.000568	mg/Kg		04/29/22 14:58	05/05/22 17:18	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	0.00102	mg/Kg		04/29/22 14:58	05/05/22 17:18	1
o-Xylene	<0.00201	U	0.00201	0.000346	mg/Kg		04/29/22 14:58	05/05/22 17:18	1
Xylenes, Total	<0.00402	U	0.00402	0.00102	mg/Kg		04/29/22 14:58	05/05/22 17:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	147	S1+	70 - 130				04/29/22 14:58	05/05/22 17:18	1
1,4-Difluorobenzene (Surr)	83		70 - 130				04/29/22 14:58	05/05/22 17:18	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	0.00102	mg/Kg			05/06/22 12:23	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	22.4	J	49.9	15.0	mg/Kg			04/29/22 16:37	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	15.0	mg/Kg		04/28/22 08:46	04/28/22 13:27	1
Diesel Range Organics (Over C10-C28)	22.4	J B	49.9	15.0	mg/Kg		04/28/22 08:46	04/28/22 13:27	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg		04/28/22 08:46	04/28/22 13:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	80		70 - 130				04/28/22 08:46	04/28/22 13:27	1
o-Terphenyl	88		70 - 130				04/28/22 08:46	04/28/22 13:27	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.74	J	5.01	0.860	mg/Kg			04/29/22 11:41	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Merchant Livestock 30

Job ID: 890-2238-1
SDG: 12851651

Client Sample ID: BH-32-5

Lab Sample ID: 890-2238-6

Date Collected: 04/25/22 13:50

Matrix: Solid

Date Received: 04/25/22 16:45

Sample Depth: 5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	0.000387	mg/Kg	-	04/29/22 14:58	05/05/22 17:43	1
Toluene	<0.00201	U	0.00201	0.000458	mg/Kg	-	04/29/22 14:58	05/05/22 17:43	1
Ethylbenzene	<0.00201	U	0.00201	0.000567	mg/Kg	-	04/29/22 14:58	05/05/22 17:43	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	0.00101	mg/Kg	-	04/29/22 14:58	05/05/22 17:43	1
o-Xylene	<0.00201	U	0.00201	0.000345	mg/Kg	-	04/29/22 14:58	05/05/22 17:43	1
Xylenes, Total	<0.00402	U	0.00402	0.00101	mg/Kg	-	04/29/22 14:58	05/05/22 17:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	159	S1+	70 - 130	04/29/22 14:58	05/05/22 17:43	1
1,4-Difluorobenzene (Surr)	89		70 - 130	04/29/22 14:58	05/05/22 17:43	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	0.00101	mg/Kg	-		05/06/22 12:23	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	24.8	J	49.9	15.0	mg/Kg	-		04/29/22 16:37	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	15.0	mg/Kg	-	04/28/22 08:46	04/28/22 13:48	1
Diesel Range Organics (Over C10-C28)	24.8	J B	49.9	15.0	mg/Kg	-	04/28/22 08:46	04/28/22 13:48	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg	-	04/28/22 08:46	04/28/22 13:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	80		70 - 130	04/28/22 08:46	04/28/22 13:48	1
o-Terphenyl	93		70 - 130	04/28/22 08:46	04/28/22 13:48	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2720		24.9	4.27	mg/Kg	-		04/29/22 11:50	5

Client Sample ID: BH-32-6

Lab Sample ID: 890-2238-7

Date Collected: 04/25/22 13:55

Matrix: Solid

Date Received: 04/25/22 16:45

Sample Depth: 6

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	0.000382	mg/Kg	-	04/29/22 14:58	05/05/22 18:09	1
Toluene	<0.00198	U	0.00198	0.000452	mg/Kg	-	04/29/22 14:58	05/05/22 18:09	1
Ethylbenzene	<0.00198	U	0.00198	0.000561	mg/Kg	-	04/29/22 14:58	05/05/22 18:09	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	0.00100	mg/Kg	-	04/29/22 14:58	05/05/22 18:09	1
o-Xylene	<0.00198	U	0.00198	0.000341	mg/Kg	-	04/29/22 14:58	05/05/22 18:09	1
Xylenes, Total	<0.00397	U	0.00397	0.00100	mg/Kg	-	04/29/22 14:58	05/05/22 18:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	170	S1+	70 - 130	04/29/22 14:58	05/05/22 18:09	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Merchant Livestock 30

Job ID: 890-2238-1
SDG: 12851651

Client Sample ID: BH-32-6

Lab Sample ID: 890-2238-7

Date Collected: 04/25/22 13:55

Matrix: Solid

Date Received: 04/25/22 16:45

Sample Depth: 6

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	87		70 - 130	04/29/22 14:58	05/05/22 18:09	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	0.00100	mg/Kg			05/06/22 12:23	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	38.9	J	50.0	15.0	mg/Kg			04/29/22 16:37	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	16.4	J	50.0	15.0	mg/Kg		04/28/22 08:46	04/28/22 14:09	1
Diesel Range Organics (Over C10-C28)	22.5	J B	50.0	15.0	mg/Kg		04/28/22 08:46	04/28/22 14:09	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		04/28/22 08:46	04/28/22 14:09	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
1-Chlorooctane	93		70 - 130	04/28/22 08:46	04/28/22 14:09	1			
o-Terphenyl	108		70 - 130	04/28/22 08:46	04/28/22 14:09	1			

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1570		25.0	4.29	mg/Kg			04/29/22 12:18	5

Client Sample ID: BH-32-7

Lab Sample ID: 890-2238-8

Date Collected: 04/25/22 14:00

Matrix: Solid

Date Received: 04/25/22 16:45

Sample Depth: 7

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	0.000381	mg/Kg		04/29/22 14:58	05/05/22 18:35	1
Toluene	<0.00198	U	0.00198	0.000451	mg/Kg		04/29/22 14:58	05/05/22 18:35	1
Ethylbenzene	<0.00198	U	0.00198	0.000559	mg/Kg		04/29/22 14:58	05/05/22 18:35	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	0.00100	mg/Kg		04/29/22 14:58	05/05/22 18:35	1
o-Xylene	<0.00198	U	0.00198	0.000341	mg/Kg		04/29/22 14:58	05/05/22 18:35	1
Xylenes, Total	<0.00396	U	0.00396	0.00100	mg/Kg		04/29/22 14:58	05/05/22 18:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	174	S1+	70 - 130	04/29/22 14:58	05/05/22 18:35	1
1,4-Difluorobenzene (Surr)	86		70 - 130	04/29/22 14:58	05/05/22 18:35	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	0.00100	mg/Kg			05/06/22 12:23	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	43.6	J	49.9	15.0	mg/Kg			04/29/22 16:37	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Merchant Livestock 30

Job ID: 890-2238-1
SDG: 12851651

Client Sample ID: BH-32-7

Lab Sample ID: 890-2238-8

Date Collected: 04/25/22 14:00

Matrix: Solid

Date Received: 04/25/22 16:45

Sample Depth: 7

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	17.6	J	49.9	15.0	mg/Kg	-	04/27/22 16:45	04/29/22 03:02	1
Diesel Range Organics (Over C10-C28)	26.0	J B	49.9	15.0	mg/Kg	-	04/27/22 16:45	04/29/22 03:02	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg	-	04/27/22 16:45	04/29/22 03:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130				04/27/22 16:45	04/29/22 03:02	1
o-Terphenyl	116		70 - 130				04/27/22 16:45	04/29/22 03:02	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	722		4.95	0.850	mg/Kg	-		04/29/22 12:27	1

Client Sample ID: BH-33-4

Lab Sample ID: 890-2238-10

Date Collected: 04/25/22 15:00

Matrix: Solid

Date Received: 04/25/22 16:45

Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg	-	04/29/22 14:58	05/05/22 19:00	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg	-	04/29/22 14:58	05/05/22 19:00	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg	-	04/29/22 14:58	05/05/22 19:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg	-	04/29/22 14:58	05/05/22 19:00	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg	-	04/29/22 14:58	05/05/22 19:00	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg	-	04/29/22 14:58	05/05/22 19:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	174	S1+	70 - 130				04/29/22 14:58	05/05/22 19:00	1
1,4-Difluorobenzene (Surr)	87		70 - 130				04/29/22 14:58	05/05/22 19:00	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	0.00101	mg/Kg	-		05/06/22 12:23	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	34.7	J	50.0	15.0	mg/Kg	-		04/29/22 16:37	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg	-	04/27/22 16:45	04/29/22 03:23	1
Diesel Range Organics (Over C10-C28)	34.7	J B	50.0	15.0	mg/Kg	-	04/27/22 16:45	04/29/22 03:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg	-	04/27/22 16:45	04/29/22 03:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130				04/27/22 16:45	04/29/22 03:23	1
o-Terphenyl	118		70 - 130				04/27/22 16:45	04/29/22 03:23	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Merchant Livestock 30

Job ID: 890-2238-1
SDG: 12851651

Client Sample ID: BH-33-4

Date Collected: 04/25/22 15:00

Date Received: 04/25/22 16:45

Sample Depth: 4

Lab Sample ID: 890-2238-10

Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2290		24.8	4.25	mg/Kg			04/29/22 12:36	5

Client Sample ID: BH-33-5

Date Collected: 04/25/22 15:05

Date Received: 04/25/22 16:45

Sample Depth: 5

Lab Sample ID: 890-2238-11

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000386	mg/Kg		04/29/22 14:58	05/05/22 19:26	1
Toluene	<0.00200	U	0.00200	0.000457	mg/Kg		04/29/22 14:58	05/05/22 19:26	1
Ethylbenzene	<0.00200	U	0.00200	0.000566	mg/Kg		04/29/22 14:58	05/05/22 19:26	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	0.00101	mg/Kg		04/29/22 14:58	05/05/22 19:26	1
o-Xylene	<0.00200	U	0.00200	0.000345	mg/Kg		04/29/22 14:58	05/05/22 19:26	1
Xylenes, Total	<0.00401	U	0.00401	0.00101	mg/Kg		04/29/22 14:58	05/05/22 19:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	165	S1+	70 - 130				04/29/22 14:58	05/05/22 19:26	1
1,4-Difluorobenzene (Surr)	88		70 - 130				04/29/22 14:58	05/05/22 19:26	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	0.00101	mg/Kg			05/06/22 12:23	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	20.6	J	49.9	15.0	mg/Kg			04/29/22 16:37	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	15.0	mg/Kg		04/27/22 16:45	04/29/22 03:44	1
Diesel Range Organics (Over C10-C28)	20.6	J B	49.9	15.0	mg/Kg		04/27/22 16:45	04/29/22 03:44	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg		04/27/22 16:45	04/29/22 03:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130				04/27/22 16:45	04/29/22 03:44	1
o-Terphenyl	113		70 - 130				04/27/22 16:45	04/29/22 03:44	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1640		25.1	4.30	mg/Kg			04/29/22 12:45	5

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Merchant Livestock 30

Job ID: 890-2238-1
SDG: 12851651

Client Sample ID: BH-33-6

Lab Sample ID: 890-2238-12

Date Collected: 04/25/22 15:10

Matrix: Solid

Date Received: 04/25/22 16:45

Sample Depth: 6

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	0.000387	mg/Kg	-	04/29/22 14:58	05/05/22 19:52	1
Toluene	<0.00201	U	0.00201	0.000459	mg/Kg	-	04/29/22 14:58	05/05/22 19:52	1
Ethylbenzene	<0.00201	U	0.00201	0.000568	mg/Kg	-	04/29/22 14:58	05/05/22 19:52	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	0.00102	mg/Kg	-	04/29/22 14:58	05/05/22 19:52	1
o-Xylene	<0.00201	U	0.00201	0.000346	mg/Kg	-	04/29/22 14:58	05/05/22 19:52	1
Xylenes, Total	<0.00402	U	0.00402	0.00102	mg/Kg	-	04/29/22 14:58	05/05/22 19:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	174	S1+	70 - 130	04/29/22 14:58	05/05/22 19:52	1
1,4-Difluorobenzene (Surr)	87		70 - 130	04/29/22 14:58	05/05/22 19:52	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	0.00102	mg/Kg	-		05/06/22 12:23	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	20.5	J	50.0	15.0	mg/Kg	-		04/29/22 16:37	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg	-	04/27/22 16:45	04/29/22 04:05	1
Diesel Range Organics (Over C10-C28)	20.5	J B	50.0	15.0	mg/Kg	-	04/27/22 16:45	04/29/22 04:05	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg	-	04/27/22 16:45	04/29/22 04:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	04/27/22 16:45	04/29/22 04:05	1
o-Terphenyl	111		70 - 130	04/27/22 16:45	04/29/22 04:05	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	536		4.98	0.855	mg/Kg	-		04/29/22 12:54	1

Client Sample ID: BH-33-7

Lab Sample ID: 890-2238-13

Date Collected: 04/25/22 15:15

Matrix: Solid

Date Received: 04/25/22 16:45

Sample Depth: 7

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	0.000388	mg/Kg	-	04/29/22 14:58	05/05/22 20:17	1
Toluene	<0.00202	U	0.00202	0.000460	mg/Kg	-	04/29/22 14:58	05/05/22 20:17	1
Ethylbenzene	<0.00202	U	0.00202	0.000570	mg/Kg	-	04/29/22 14:58	05/05/22 20:17	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	0.00102	mg/Kg	-	04/29/22 14:58	05/05/22 20:17	1
o-Xylene	<0.00202	U	0.00202	0.000347	mg/Kg	-	04/29/22 14:58	05/05/22 20:17	1
Xylenes, Total	<0.00403	U	0.00403	0.00102	mg/Kg	-	04/29/22 14:58	05/05/22 20:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	158	S1+	70 - 130	04/29/22 14:58	05/05/22 20:17	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Merchant Livestock 30

Job ID: 890-2238-1
SDG: 12851651

Client Sample ID: BH-33-7

Lab Sample ID: 890-2238-13

Date Collected: 04/25/22 15:15

Matrix: Solid

Date Received: 04/25/22 16:45

Sample Depth: 7

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	84		70 - 130	04/29/22 14:58	05/05/22 20:17	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	0.00102	mg/Kg	-		05/06/22 12:23	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	22.3	J	50.0	15.0	mg/Kg	-		04/29/22 16:37	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg	-	04/27/22 16:45	04/29/22 04:25	1
Diesel Range Organics (Over C10-C28)	22.3	J B	50.0	15.0	mg/Kg	-	04/27/22 16:45	04/29/22 04:25	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg	-	04/27/22 16:45	04/29/22 04:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130				04/27/22 16:45	04/29/22 04:25	1
o-Terphenyl	106		70 - 130				04/27/22 16:45	04/29/22 04:25	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	136		5.00	0.858	mg/Kg	-		04/29/22 13:04	1

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Surrogate Summary

Client: GHD Services Inc.
Project/Site: Merchant Livestock 30

Job ID: 890-2238-1
SDG: 12851651

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1	DFBZ1
		(70-130)	(70-130)
890-2238-1	BH-37	156 S1+	86
890-2238-2	BH-38	159 S1+	88
890-2238-3	BH-39	158 S1+	84
890-2238-4	BH-40	160 S1+	87
890-2238-5	BH-41	147 S1+	83
890-2238-6	BH-32-5	159 S1+	89
890-2238-7	BH-32-6	170 S1+	87
890-2238-8	BH-32-7	174 S1+	86
890-2238-10	BH-33-4	174 S1+	87
890-2238-11	BH-33-5	165 S1+	88
890-2238-12	BH-33-6	174 S1+	87
890-2238-13	BH-33-7	158 S1+	84
LCS 880-24528/1-A	Lab Control Sample	145 S1+	84
LCS 880-25027/1-A	Lab Control Sample	107	101
LCSD 880-24528/2-A	Lab Control Sample Dup	130	89
LCSD 880-25027/2-A	Lab Control Sample Dup	105	101
MB 880-24316/5-A	Method Blank	98	82
MB 880-24528/5-A	Method Blank	101	80
MB 880-25027/5-A	Method Blank	99	97

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1	OTPH1
		(70-130)	(70-130)
890-2238-1	BH-37	77	84
890-2238-1 MS	BH-37	73	74
890-2238-1 MSD	BH-37	73	72
890-2238-2	BH-38	79	87
890-2238-3	BH-39	79	89
890-2238-4	BH-40	80	92
890-2238-5	BH-41	80	88
890-2238-6	BH-32-5	80	93
890-2238-7	BH-32-6	93	108
890-2238-8	BH-32-7	96	116
890-2238-10	BH-33-4	96	118
890-2238-11	BH-33-5	94	113
890-2238-12	BH-33-6	93	111
890-2238-13	BH-33-7	91	106

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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Surrogate Summary

Client: GHD Services Inc.
Project/Site: Merchant Livestock 30

Job ID: 890-2238-1
SDG: 12851651

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	1CO2 (70-130)	OTPH2 (70-130)
LCS 880-24356/2-A	Lab Control Sample	97	118
LCS 880-24372/2-A	Lab Control Sample	100	120
LCSD 880-24356/3-A	Lab Control Sample Dup	98	118
LCSD 880-24372/3-A	Lab Control Sample Dup	97	116
MB 880-24356/1-A	Method Blank	85	100
MB 880-24372/1-A	Method Blank	83	96

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: GHD Services Inc.
Project/Site: Merchant Livestock 30

Job ID: 890-2238-1
SDG: 12851651

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-24316/5-A

Matrix: Solid

Analysis Batch: 24806

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 24316

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		04/27/22 11:30	05/04/22 19:10	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		04/27/22 11:30	05/04/22 19:10	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		04/27/22 11:30	05/04/22 19:10	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		04/27/22 11:30	05/04/22 19:10	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		04/27/22 11:30	05/04/22 19:10	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		04/27/22 11:30	05/04/22 19:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	04/27/22 11:30	05/04/22 19:10	1
1,4-Difluorobenzene (Surr)	82		70 - 130	04/27/22 11:30	05/04/22 19:10	1

Lab Sample ID: MB 880-24528/5-A

Matrix: Solid

Analysis Batch: 24806

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 24528

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		04/29/22 14:58	05/05/22 08:31	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		04/29/22 14:58	05/05/22 08:31	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		04/29/22 14:58	05/05/22 08:31	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		04/29/22 14:58	05/05/22 08:31	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		04/29/22 14:58	05/05/22 08:31	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		04/29/22 14:58	05/05/22 08:31	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	04/29/22 14:58	05/05/22 08:31	1
1,4-Difluorobenzene (Surr)	80		70 - 130	04/29/22 14:58	05/05/22 08:31	1

Lab Sample ID: LCS 880-24528/1-A

Matrix: Solid

Analysis Batch: 24806

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 24528

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1090		mg/Kg		109	70 - 130
Toluene	0.100	0.1062		mg/Kg		106	70 - 130
Ethylbenzene	0.100	0.1186		mg/Kg		119	70 - 130
m-Xylene & p-Xylene	0.200	0.2409		mg/Kg		120	70 - 130
o-Xylene	0.100	0.1211		mg/Kg		121	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	145	S1+	70 - 130
1,4-Difluorobenzene (Surr)	84		70 - 130

Lab Sample ID: LCSD 880-24528/2-A

Matrix: Solid

Analysis Batch: 24806

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 24528

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09287		mg/Kg		93	70 - 130	16	35

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Merchant Livestock 30

Job ID: 890-2238-1
SDG: 12851651

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-24528/2-A

Matrix: Solid

Analysis Batch: 24806

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 24528

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.09327		mg/Kg		93	70 - 130	13	35
Ethylbenzene	0.100	0.1047		mg/Kg		105	70 - 130	12	35
m-Xylene & p-Xylene	0.200	0.2149		mg/Kg		107	70 - 130	11	35
o-Xylene	0.100	0.1074		mg/Kg		107	70 - 130	12	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	130		70 - 130
1,4-Difluorobenzene (Surr)	89		70 - 130

Lab Sample ID: MB 880-25027/5-A

Matrix: Solid

Analysis Batch: 25033

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25027

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	0.000383	mg/Kg		05/07/22 12:54	05/07/22 17:41	1
Toluene	<0.00199	U	0.00199	0.000454	mg/Kg		05/07/22 12:54	05/07/22 17:41	1
Ethylbenzene	<0.00199	U	0.00199	0.000563	mg/Kg		05/07/22 12:54	05/07/22 17:41	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00101	mg/Kg		05/07/22 12:54	05/07/22 17:41	1
o-Xylene	<0.00199	U	0.00199	0.000343	mg/Kg		05/07/22 12:54	05/07/22 17:41	1
Xylenes, Total	<0.00398	U	0.00398	0.00101	mg/Kg		05/07/22 12:54	05/07/22 17:41	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	05/07/22 12:54	05/07/22 17:41	1
1,4-Difluorobenzene (Surr)	97		70 - 130	05/07/22 12:54	05/07/22 17:41	1

Lab Sample ID: LCS 880-25027/1-A

Matrix: Solid

Analysis Batch: 25033

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25027

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08526		mg/Kg		85	70 - 130
Toluene	0.100	0.08467		mg/Kg		85	70 - 130
Ethylbenzene	0.100	0.08729		mg/Kg		87	70 - 130
m-Xylene & p-Xylene	0.200	0.1820		mg/Kg		91	70 - 130
o-Xylene	0.100	0.1019		mg/Kg		102	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: LCSD 880-25027/2-A

Matrix: Solid

Analysis Batch: 25033

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 25027

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08877		mg/Kg		89	70 - 130	4	35
Toluene	0.100	0.08669		mg/Kg		87	70 - 130	2	35
Ethylbenzene	0.100	0.08861		mg/Kg		89	70 - 130	2	35

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Merchant Livestock 30

Job ID: 890-2238-1
SDG: 12851651

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-25027/2-A

Matrix: Solid

Analysis Batch: 25033

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 25027

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
m-Xylene & p-Xylene	0.200	0.1830		mg/Kg		91	70 - 130	1	35
o-Xylene	0.100	0.1018		mg/Kg		102	70 - 130	0	35
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	105		70 - 130						
1,4-Difluorobenzene (Surr)	101		70 - 130						

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-24356/1-A

Matrix: Solid

Analysis Batch: 24366

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 24356

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		04/27/22 16:45	04/28/22 19:44	1
Diesel Range Organics (Over C10-C28)	19.66	J	50.0	15.0	mg/Kg		04/27/22 16:45	04/28/22 19:44	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		04/27/22 16:45	04/28/22 19:44	1
Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac			
1-Chlorooctane	85		70 - 130	04/27/22 16:45	04/28/22 19:44	1			
o-Terphenyl	100		70 - 130	04/27/22 16:45	04/28/22 19:44	1			

Lab Sample ID: LCS 880-24356/2-A

Matrix: Solid

Analysis Batch: 24366

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 24356

Analyte			Spike	LCS	LCS	Unit	D	%Rec	%Rec		
			Added	Result	Qualifier			Limits	Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1119		mg/Kg		112	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	883.8		mg/Kg		88	70 - 130		

Lab Sample ID: LCSD 880-24356/3-A

Matrix: Solid

Analysis Batch: 24366

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 24356

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1104		mg/Kg		110	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	870.0		mg/Kg		87	70 - 130	2	20

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Merchant Livestock 30

Job ID: 890-2238-1
SDG: 12851651

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 880-24356/3-A

Matrix: Solid

Analysis Batch: 24366

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 24356

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	98		70 - 130
o-Terphenyl	118		70 - 130

Lab Sample ID: MB 880-24372/1-A

Matrix: Solid

Analysis Batch: 24366

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 24372

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		04/28/22 08:46	04/28/22 10:18	1
Diesel Range Organics (Over C10-C28)	21.11	J	50.0	15.0	mg/Kg		04/28/22 08:46	04/28/22 10:18	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		04/28/22 08:46	04/28/22 10:18	1
1-Chlorooctane	83		70 - 130				04/28/22 08:46	04/28/22 10:18	1
o-Terphenyl	96		70 - 130				04/28/22 08:46	04/28/22 10:18	1

Lab Sample ID: LCS 880-24372/2-A

Matrix: Solid

Analysis Batch: 24366

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 24372

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1095		mg/Kg		109	70 - 130
Diesel Range Organics (Over C10-C28)	1000	932.5		mg/Kg		93	70 - 130
Surrogate	LCS	LCS	Limits				
Surrogate	%Recovery	Qualifier	Limits				
1-Chlorooctane	100		70 - 130				
o-Terphenyl	120		70 - 130				

Lab Sample ID: LCSD 880-24372/3-A

Matrix: Solid

Analysis Batch: 24366

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 24372

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1068		mg/Kg		107	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	857.3		mg/Kg		86	70 - 130	8	20
Surrogate	LCSD	LCSD	Limits						
Surrogate	%Recovery	Qualifier	Limits						
1-Chlorooctane	97		70 - 130						
o-Terphenyl	116		70 - 130						

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Merchant Livestock 30

Job ID: 890-2238-1
SDG: 12851651

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-2238-1 MS

Matrix: Solid

Analysis Batch: 24366

Client Sample ID: BH-37

Prep Type: Total/NA

Prep Batch: 24372

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	800.8		mg/Kg		80	70 - 130
Diesel Range Organics (Over C10-C28)	19.4	J B F1	999	718.8		mg/Kg		70	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	73		70 - 130						
o-Terphenyl	74		70 - 130						

Lab Sample ID: 890-2238-1 MSD

Matrix: Solid

Analysis Batch: 24366

Client Sample ID: BH-37

Prep Type: Total/NA

Prep Batch: 24372

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	799.4		mg/Kg		80	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	19.4	J B F1	999	701.8	F1	mg/Kg		68	70 - 130	2	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	73		70 - 130								
o-Terphenyl	72		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-24329/1-A

Matrix: Solid

Analysis Batch: 24495

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	0.858	mg/Kg			04/29/22 08:37	1

Lab Sample ID: LCS 880-24329/2-A

Matrix: Solid

Analysis Batch: 24495

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	240.8		mg/Kg		96	90 - 110

Lab Sample ID: LCSD 880-24329/3-A

Matrix: Solid

Analysis Batch: 24495

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	254.8		mg/Kg		102	90 - 110	6	20

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Merchant Livestock 30

Job ID: 890-2238-1
SDG: 12851651

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-2238-4 MS

Matrix: Solid

Analysis Batch: 24495

Client Sample ID: BH-40

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	5.10		250	241.7		mg/Kg		95	90 - 110		

Lab Sample ID: 890-2238-4 MSD

Matrix: Solid

Analysis Batch: 24495

Client Sample ID: BH-40

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	5.10		250	236.2		mg/Kg		93	90 - 110	2	20

QC Association Summary

Client: GHD Services Inc.
Project/Site: Merchant Livestock 30

Job ID: 890-2238-1
SDG: 12851651

GC VOA

Prep Batch: 24316

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-24316/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 24528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2238-1	BH-37	Total/NA	Solid	5035	
890-2238-2	BH-38	Total/NA	Solid	5035	
890-2238-3	BH-39	Total/NA	Solid	5035	
890-2238-4	BH-40	Total/NA	Solid	5035	
890-2238-5	BH-41	Total/NA	Solid	5035	
890-2238-6	BH-32-5	Total/NA	Solid	5035	
890-2238-7	BH-32-6	Total/NA	Solid	5035	
890-2238-8	BH-32-7	Total/NA	Solid	5035	
890-2238-10	BH-33-4	Total/NA	Solid	5035	
890-2238-11	BH-33-5	Total/NA	Solid	5035	
890-2238-12	BH-33-6	Total/NA	Solid	5035	
890-2238-13	BH-33-7	Total/NA	Solid	5035	
MB 880-24528/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-24528/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-24528/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 24806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2238-1	BH-37	Total/NA	Solid	8021B	24528
890-2238-2	BH-38	Total/NA	Solid	8021B	24528
890-2238-3	BH-39	Total/NA	Solid	8021B	24528
890-2238-4	BH-40	Total/NA	Solid	8021B	24528
890-2238-5	BH-41	Total/NA	Solid	8021B	24528
890-2238-6	BH-32-5	Total/NA	Solid	8021B	24528
890-2238-7	BH-32-6	Total/NA	Solid	8021B	24528
890-2238-8	BH-32-7	Total/NA	Solid	8021B	24528
890-2238-10	BH-33-4	Total/NA	Solid	8021B	24528
890-2238-11	BH-33-5	Total/NA	Solid	8021B	24528
890-2238-12	BH-33-6	Total/NA	Solid	8021B	24528
890-2238-13	BH-33-7	Total/NA	Solid	8021B	24528
MB 880-24316/5-A	Method Blank	Total/NA	Solid	8021B	24316
MB 880-24528/5-A	Method Blank	Total/NA	Solid	8021B	24528
LCS 880-24528/1-A	Lab Control Sample	Total/NA	Solid	8021B	24528
LCSD 880-24528/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	24528

Analysis Batch: 24977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2238-1	BH-37	Total/NA	Solid	Total BTEX	
890-2238-2	BH-38	Total/NA	Solid	Total BTEX	
890-2238-3	BH-39	Total/NA	Solid	Total BTEX	
890-2238-4	BH-40	Total/NA	Solid	Total BTEX	
890-2238-5	BH-41	Total/NA	Solid	Total BTEX	
890-2238-6	BH-32-5	Total/NA	Solid	Total BTEX	
890-2238-7	BH-32-6	Total/NA	Solid	Total BTEX	
890-2238-8	BH-32-7	Total/NA	Solid	Total BTEX	
890-2238-10	BH-33-4	Total/NA	Solid	Total BTEX	
890-2238-11	BH-33-5	Total/NA	Solid	Total BTEX	

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Merchant Livestock 30

Job ID: 890-2238-1
SDG: 12851651

GC VOA (Continued)

Analysis Batch: 24977 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2238-12	BH-33-6	Total/NA	Solid	Total BTEX	
890-2238-13	BH-33-7	Total/NA	Solid	Total BTEX	

Prep Batch: 25027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2238-1	BH-37	Total/NA	Solid	5035	
890-2238-2	BH-38	Total/NA	Solid	5035	
890-2238-3	BH-39	Total/NA	Solid	5035	
MB 880-25027/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-25027/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-25027/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 25033

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2238-1	BH-37	Total/NA	Solid	8021B	25027
890-2238-2	BH-38	Total/NA	Solid	8021B	25027
890-2238-3	BH-39	Total/NA	Solid	8021B	25027
MB 880-25027/5-A	Method Blank	Total/NA	Solid	8021B	25027
LCS 880-25027/1-A	Lab Control Sample	Total/NA	Solid	8021B	25027
LCSD 880-25027/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	25027

GC Semi VOA

Prep Batch: 24356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2238-8	BH-32-7	Total/NA	Solid	8015NM Prep	
890-2238-10	BH-33-4	Total/NA	Solid	8015NM Prep	
890-2238-11	BH-33-5	Total/NA	Solid	8015NM Prep	
890-2238-12	BH-33-6	Total/NA	Solid	8015NM Prep	
890-2238-13	BH-33-7	Total/NA	Solid	8015NM Prep	
MB 880-24356/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-24356/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-24356/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 24366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2238-1	BH-37	Total/NA	Solid	8015B NM	24372
890-2238-2	BH-38	Total/NA	Solid	8015B NM	24372
890-2238-3	BH-39	Total/NA	Solid	8015B NM	24372
890-2238-4	BH-40	Total/NA	Solid	8015B NM	24372
890-2238-5	BH-41	Total/NA	Solid	8015B NM	24372
890-2238-6	BH-32-5	Total/NA	Solid	8015B NM	24372
890-2238-7	BH-32-6	Total/NA	Solid	8015B NM	24372
890-2238-8	BH-32-7	Total/NA	Solid	8015B NM	24356
890-2238-10	BH-33-4	Total/NA	Solid	8015B NM	24356
890-2238-11	BH-33-5	Total/NA	Solid	8015B NM	24356
890-2238-12	BH-33-6	Total/NA	Solid	8015B NM	24356
890-2238-13	BH-33-7	Total/NA	Solid	8015B NM	24356
MB 880-24356/1-A	Method Blank	Total/NA	Solid	8015B NM	24356
MB 880-24372/1-A	Method Blank	Total/NA	Solid	8015B NM	24372
LCS 880-24356/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	24356

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Merchant Livestock 30

Job ID: 890-2238-1
SDG: 12851651

GC Semi VOA (Continued)

Analysis Batch: 24366 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-24372/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	24372
LCSD 880-24356/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	24356
LCSD 880-24372/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	24372
890-2238-1 MS	BH-37	Total/NA	Solid	8015B NM	24372
890-2238-1 MSD	BH-37	Total/NA	Solid	8015B NM	24372

Prep Batch: 24372

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2238-1	BH-37	Total/NA	Solid	8015NM Prep	
890-2238-2	BH-38	Total/NA	Solid	8015NM Prep	
890-2238-3	BH-39	Total/NA	Solid	8015NM Prep	
890-2238-4	BH-40	Total/NA	Solid	8015NM Prep	
890-2238-5	BH-41	Total/NA	Solid	8015NM Prep	
890-2238-6	BH-32-5	Total/NA	Solid	8015NM Prep	
890-2238-7	BH-32-6	Total/NA	Solid	8015NM Prep	
MB 880-24372/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-24372/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-24372/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2238-1 MS	BH-37	Total/NA	Solid	8015NM Prep	
890-2238-1 MSD	BH-37	Total/NA	Solid	8015NM Prep	

Analysis Batch: 24538

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2238-1	BH-37	Total/NA	Solid	8015 NM	
890-2238-2	BH-38	Total/NA	Solid	8015 NM	
890-2238-3	BH-39	Total/NA	Solid	8015 NM	
890-2238-4	BH-40	Total/NA	Solid	8015 NM	
890-2238-5	BH-41	Total/NA	Solid	8015 NM	
890-2238-6	BH-32-5	Total/NA	Solid	8015 NM	
890-2238-7	BH-32-6	Total/NA	Solid	8015 NM	
890-2238-8	BH-32-7	Total/NA	Solid	8015 NM	
890-2238-10	BH-33-4	Total/NA	Solid	8015 NM	
890-2238-11	BH-33-5	Total/NA	Solid	8015 NM	
890-2238-12	BH-33-6	Total/NA	Solid	8015 NM	
890-2238-13	BH-33-7	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 24329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2238-1	BH-37	Soluble	Solid	DI Leach	
890-2238-2	BH-38	Soluble	Solid	DI Leach	
890-2238-3	BH-39	Soluble	Solid	DI Leach	
890-2238-4	BH-40	Soluble	Solid	DI Leach	
890-2238-5	BH-41	Soluble	Solid	DI Leach	
890-2238-6	BH-32-5	Soluble	Solid	DI Leach	
890-2238-7	BH-32-6	Soluble	Solid	DI Leach	
890-2238-8	BH-32-7	Soluble	Solid	DI Leach	
890-2238-10	BH-33-4	Soluble	Solid	DI Leach	
890-2238-11	BH-33-5	Soluble	Solid	DI Leach	
890-2238-12	BH-33-6	Soluble	Solid	DI Leach	

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Merchant Livestock 30

Job ID: 890-2238-1
SDG: 12851651

HPLC/IC (Continued)

Leach Batch: 24329 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2238-13	BH-33-7	Soluble	Solid	DI Leach	
MB 880-24329/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-24329/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-24329/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2238-4 MS	BH-40	Soluble	Solid	DI Leach	
890-2238-4 MSD	BH-40	Soluble	Solid	DI Leach	

Analysis Batch: 24495

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2238-1	BH-37	Soluble	Solid	300.0	24329
890-2238-2	BH-38	Soluble	Solid	300.0	24329
890-2238-3	BH-39	Soluble	Solid	300.0	24329
890-2238-4	BH-40	Soluble	Solid	300.0	24329
890-2238-5	BH-41	Soluble	Solid	300.0	24329
890-2238-6	BH-32-5	Soluble	Solid	300.0	24329
890-2238-7	BH-32-6	Soluble	Solid	300.0	24329
890-2238-8	BH-32-7	Soluble	Solid	300.0	24329
890-2238-10	BH-33-4	Soluble	Solid	300.0	24329
890-2238-11	BH-33-5	Soluble	Solid	300.0	24329
890-2238-12	BH-33-6	Soluble	Solid	300.0	24329
890-2238-13	BH-33-7	Soluble	Solid	300.0	24329
MB 880-24329/1-A	Method Blank	Soluble	Solid	300.0	24329
LCS 880-24329/2-A	Lab Control Sample	Soluble	Solid	300.0	24329
LCSD 880-24329/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	24329
890-2238-4 MS	BH-40	Soluble	Solid	300.0	24329
890-2238-4 MSD	BH-40	Soluble	Solid	300.0	24329

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Merchant Livestock 30

Job ID: 890-2238-1
SDG: 12851651

Client Sample ID: BH-37

Date Collected: 04/25/22 09:30

Date Received: 04/25/22 16:45

Lab Sample ID: 890-2238-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	25027	05/07/22 12:54	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25033	05/08/22 01:29	MR	XEN MID
Total/NA	Prep	5035			5.03 g	5 mL	24528	04/29/22 14:58	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24806	05/05/22 12:20	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24977	05/06/22 12:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24538	04/29/22 16:37	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	24372	04/28/22 08:46	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24366	04/28/22 11:20	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	24329	04/27/22 12:46	SC	XEN MID
Soluble	Analysis	300.0		1			24495	04/29/22 10:46	CH	XEN MID

Client Sample ID: BH-38

Date Collected: 04/25/22 09:35

Date Received: 04/25/22 16:45

Lab Sample ID: 890-2238-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	25027	05/07/22 12:54	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25033	05/08/22 01:49	MR	XEN MID
Total/NA	Prep	5035			4.99 g	5 mL	24528	04/29/22 14:58	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24806	05/05/22 12:45	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24977	05/06/22 12:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24538	04/29/22 16:37	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	24372	04/28/22 08:46	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24366	04/28/22 12:24	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	24329	04/27/22 12:46	SC	XEN MID
Soluble	Analysis	300.0		1			24495	04/29/22 10:55	CH	XEN MID

Client Sample ID: BH-39

Date Collected: 04/25/22 11:00

Date Received: 04/25/22 16:45

Lab Sample ID: 890-2238-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	25027	05/07/22 12:54	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25033	05/08/22 02:09	MR	XEN MID
Total/NA	Prep	5035			4.96 g	5 mL	24528	04/29/22 14:58	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24806	05/05/22 13:11	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24977	05/06/22 12:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24538	04/29/22 16:37	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	24372	04/28/22 08:46	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24366	04/28/22 12:45	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	24329	04/27/22 12:46	SC	XEN MID
Soluble	Analysis	300.0		1			24495	04/29/22 11:04	CH	XEN MID

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Lab Chronicle

Client: GHD Services Inc.
Project/Site: Merchant Livestock 30

Job ID: 890-2238-1
SDG: 12851651

Client Sample ID: BH-40

Lab Sample ID: 890-2238-4

Date Collected: 04/25/22 11:05

Matrix: Solid

Date Received: 04/25/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	24528	04/29/22 14:58	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24806	05/05/22 16:52	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24977	05/06/22 12:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24538	04/29/22 16:37	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	24372	04/28/22 08:46	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24366	04/28/22 13:06	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	24329	04/27/22 12:46	SC	XEN MID
Soluble	Analysis	300.0		1			24495	04/29/22 11:13	CH	XEN MID

Client Sample ID: BH-41

Lab Sample ID: 890-2238-5

Date Collected: 04/25/22 11:10

Matrix: Solid

Date Received: 04/25/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	24528	04/29/22 14:58	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24806	05/05/22 17:18	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24977	05/06/22 12:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24538	04/29/22 16:37	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	24372	04/28/22 08:46	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24366	04/28/22 13:27	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	24329	04/27/22 12:46	SC	XEN MID
Soluble	Analysis	300.0		1			24495	04/29/22 11:41	CH	XEN MID

Client Sample ID: BH-32-5

Lab Sample ID: 890-2238-6

Date Collected: 04/25/22 13:50

Matrix: Solid

Date Received: 04/25/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	24528	04/29/22 14:58	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24806	05/05/22 17:43	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24977	05/06/22 12:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24538	04/29/22 16:37	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	24372	04/28/22 08:46	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24366	04/28/22 13:48	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	24329	04/27/22 12:46	SC	XEN MID
Soluble	Analysis	300.0		5			24495	04/29/22 11:50	CH	XEN MID

Client Sample ID: BH-32-6

Lab Sample ID: 890-2238-7

Date Collected: 04/25/22 13:55

Matrix: Solid

Date Received: 04/25/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	24528	04/29/22 14:58	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24806	05/05/22 18:09	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24977	05/06/22 12:23	AJ	XEN MID

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Lab Chronicle

Client: GHD Services Inc.
Project/Site: Merchant Livestock 30

Job ID: 890-2238-1
SDG: 12851651

Client Sample ID: BH-32-6

Date Collected: 04/25/22 13:55

Date Received: 04/25/22 16:45

Lab Sample ID: 890-2238-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			24538	04/29/22 16:37	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	24372	04/28/22 08:46	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24366	04/28/22 14:09	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	24329	04/27/22 12:46	SC	XEN MID
Soluble	Analysis	300.0		5			24495	04/29/22 12:18	CH	XEN MID

Client Sample ID: BH-32-7

Date Collected: 04/25/22 14:00

Date Received: 04/25/22 16:45

Lab Sample ID: 890-2238-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	24528	04/29/22 14:58	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24806	05/05/22 18:35	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24977	05/06/22 12:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24538	04/29/22 16:37	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	24356	04/27/22 16:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24366	04/29/22 03:02	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	24329	04/27/22 12:46	SC	XEN MID
Soluble	Analysis	300.0		1			24495	04/29/22 12:27	CH	XEN MID

Client Sample ID: BH-33-4

Date Collected: 04/25/22 15:00

Date Received: 04/25/22 16:45

Lab Sample ID: 890-2238-10

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	24528	04/29/22 14:58	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24806	05/05/22 19:00	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24977	05/06/22 12:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24538	04/29/22 16:37	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	24356	04/27/22 16:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24366	04/29/22 03:23	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	24329	04/27/22 12:46	SC	XEN MID
Soluble	Analysis	300.0		5			24495	04/29/22 12:36	CH	XEN MID

Client Sample ID: BH-33-5

Date Collected: 04/25/22 15:05

Date Received: 04/25/22 16:45

Lab Sample ID: 890-2238-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	24528	04/29/22 14:58	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24806	05/05/22 19:26	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24977	05/06/22 12:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24538	04/29/22 16:37	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	24356	04/27/22 16:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24366	04/29/22 03:44	AJ	XEN MID

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Lab Chronicle

Client: GHD Services Inc.
Project/Site: Merchant Livestock 30

Job ID: 890-2238-1
SDG: 12851651

Client Sample ID: BH-33-5

Lab Sample ID: 890-2238-11

Date Collected: 04/25/22 15:05

Matrix: Solid

Date Received: 04/25/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.99 g	50 mL	24329	04/27/22 12:46	SC	XEN MID
Soluble	Analysis	300.0		5			24495	04/29/22 12:45	CH	XEN MID

Client Sample ID: BH-33-6

Lab Sample ID: 890-2238-12

Date Collected: 04/25/22 15:10

Matrix: Solid

Date Received: 04/25/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	24528	04/29/22 14:58	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24806	05/05/22 19:52	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24977	05/06/22 12:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24538	04/29/22 16:37	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	24356	04/27/22 16:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24366	04/29/22 04:05	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	24329	04/27/22 12:46	SC	XEN MID
Soluble	Analysis	300.0		1			24495	04/29/22 12:54	CH	XEN MID

Client Sample ID: BH-33-7

Lab Sample ID: 890-2238-13

Date Collected: 04/25/22 15:15

Matrix: Solid

Date Received: 04/25/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	24528	04/29/22 14:58	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24806	05/05/22 20:17	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24977	05/06/22 12:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24538	04/29/22 16:37	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	24356	04/27/22 16:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24366	04/29/22 04:25	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	24329	04/27/22 12:46	SC	XEN MID
Soluble	Analysis	300.0		1			24495	04/29/22 13:04	CH	XEN MID

Laboratory References:

XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

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Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: Merchant Livestock 30

Job ID: 890-2238-1
SDG: 12851651

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: GHD Services Inc.
Project/Site: Merchant Livestock 30

Job ID: 890-2238-1
SDG: 12851651

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: GHD Services Inc.
Project/Site: Merchant Livestock 30

Job ID: 890-2238-1
SDG: 12851651

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2238-1	BH-37	Solid	04/25/22 09:30	04/25/22 16:45	37
890-2238-2	BH-38	Solid	04/25/22 09:35	04/25/22 16:45	38
890-2238-3	BH-39	Solid	04/25/22 11:00	04/25/22 16:45	39
890-2238-4	BH-40	Solid	04/25/22 11:05	04/25/22 16:45	40
890-2238-5	BH-41	Solid	04/25/22 11:10	04/25/22 16:45	41
890-2238-6	BH-32-5	Solid	04/25/22 13:50	04/25/22 16:45	5
890-2238-7	BH-32-6	Solid	04/25/22 13:55	04/25/22 16:45	6
890-2238-8	BH-32-7	Solid	04/25/22 14:00	04/25/22 16:45	7
890-2238-10	BH-33-4	Solid	04/25/22 15:00	04/25/22 16:45	4
890-2238-11	BH-33-5	Solid	04/25/22 15:05	04/25/22 16:45	5
890-2238-12	BH-33-6	Solid	04/25/22 15:10	04/25/22 16:45	6
890-2238-13	BH-33-7	Solid	04/25/22 15:15	04/25/22 16:45	7



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Tampa, Florida (813-620-2000)

Xenco Quote #

Xenco Job #

Client / Reporting Information Company Name / Branch: GHD/Midland Company Address: 2135 S. Loop 250 West Midland TX Email: becky.haskell@ghd.com Matthew.laughlin@ghd.com Nikki.mishler@cedevinc.com Project Contact: Becky Haskell / Glenn Quinney				Project Information Project Name/Number: Merchant Livestock 30 / 12591651 Project Location: Eddy County, New Mexico Invoice To: Centennial Resource Development, Inc / Nikki Mishler PO Number: NA				Analytical Information Matrix Codes: S = Soil/Sed/Solid GW = Ground Water DW = Drinking Water P = Product SW = Surface water SL = Sludge NW = Non-hazardous Water			
Field ID / Point of Collection No. 1 BH-37 2 BH-38 3 BH-39 4 BH-40 5 BH-41 6 BH-32-51 7 BH-32-61 8 BH-32-71 9 BH-32-81 10 BH-33-41				Collection Sample Depth: 4/25/22-0930 Date: 0935 Time: 1100 Matrix: 1105 # of bottles: 1110 HCl: 1350 NaOH/Zn Acetate: 1355 HNO3: 1400 H2SO4: 1405 NaOH: 1500 NaHSO4: 1500 MEQH: 1500 NONE: 1500				Number of preserved bottles TPH By 8015 Mod (GRO, DRO & MRO) X BTEX 8021 B X Chloride 600 X			
Turnaround Time (Business days) ☐ Same Day TAT ☒ 5 Day TAT ☐ Next Day EMERGENCY ☐ 7 Day TAT ☐ 2 Day EMERGENCY ☐ Contract TAT ☐ 3 Day EMERGENCY ☐ TRRP Checklist				Date Deliverable Information ☐ Level II Std QC ☐ Level IV (Full Data Pkg /raw data) ☐ Level III Std QC+ Forms ☐ TRRP Level IV ☐ Level 3 (CLP Forms) ☐ UST / RG -411				Report MDLs and J values. Report MDLs and J values.			
TAT Starts Day received by Lab, if received by 5:00 pm Relinquished by: Becky Haskell Relinquished by: Glenn Quinney				Report MDLs and J values. Relinquished By: Becky Haskell Relinquished By: Glenn Quinney				Report MDLs and J values. Relinquished By: Becky Haskell Relinquished By: Glenn Quinney			
Relinquished by: Date Time: 4/25/22 16:51				Relinquished by: Date Time: 4/25/22 16:45				Relinquished by: Date Time: 4/25/22 16:45			
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CHAIN OF CUSTODY

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Service Center - San Antonio, Texas (210-509-3334) www.xenco.com																																																																																																																																																																																																																																						
Client / Reporting Information Company Name / Branch: GHDMidland Company Address: 2135 S. Loop 250 West Midland TX				Project Information Project Name/Number: Merchant Livestock 30 / 12581651 Project Location: Eddy County, New Mexico Invoice To: Centennial Resource Development, Inc / Nikki Mishler Email: becky.haskell@amd.com Phone No: (432)250-7917 Matthew.laughlin@amd.com Zach.comino@amd.com Nikki.mishler@cddevinc.com tom.larson@amd.com Project Contact: Becky Haskell / Glenn Quinney PO Number: NA				Matrix Codes S = Soil/Sed/Solid GW = Ground Water DW = Drinking Water P = Product SW = Surface water SL = Sludge OW = Ocean/Sea Water W = Wipe O = Oil WM = Waste Water A = Air																																																																																																																																																																																																																														
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Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 890-2238-1

SDG Number: 12851651

Login Number: 2238**List Number: 1****Creator: Clifton, Cloe****List Source: Eurofins Carlsbad**

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

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 890-2238-1

SDG Number: 12851651

Login Number: 2238**List Number: 2****Creator: Teel, Brianna****List Source: Eurofins Midland****List Creation: 04/27/22 10:53 AM**

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
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Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	



Environment Testing America

ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-2243-1

Laboratory Sample Delivery Group: 12580761
Client Project/Site: Romeo Federal 22 Battery

For:

GHD Services Inc.
2135 South Loop 250 West
Midland, Texas 79703

Attn: Becky Haskell

A handwritten signature in black ink, appearing to read "Debbie Simmons".

Authorized for release by:
5/3/2022 5:55:24 PM

Debbie Simmons, Project Manager
(832)986-6768
Debbie.Simmons@et.eurofinsus.com

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

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

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Laboratory Job ID: 890-2243-1
SDG: 12580761

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Definitions/Glossary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2243-1
SDG: 12580761

Qualifiers

GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
⌘	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2243-1
SDG: 12580761

Job ID: 890-2243-1**Laboratory: Eurofins Carlsbad****Narrative****Job Narrative
890-2243-1****Receipt**

The sample was received on 4/26/2022 5:00 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 25.8°C

GC VOA

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

GC Semi VOA

Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-24405 and analytical batch 880-24563 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8015MOD_NM: The method blank for preparation batch 880-24405 and analytical batch 880-24563 contained <AffectedAnalytes> above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-24405 and analytical batch 880-24563 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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

HPLC/IC

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

Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2243-1
SDG: 12580761

Client Sample ID: BH-42

Lab Sample ID: 890-2243-1

Date Collected: 04/26/22 15:30

Matrix: Solid

Date Received: 04/26/22 17:00

Sample Depth: 42

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000384	mg/Kg		04/28/22 11:39	05/03/22 01:09	1
Toluene	0.00181	J	0.00200	0.000455	mg/Kg		04/28/22 11:39	05/03/22 01:09	1
Ethylbenzene	0.00184	J	0.00200	0.000564	mg/Kg		04/28/22 11:39	05/03/22 01:09	1
m-Xylene & p-Xylene	0.00573		0.00399	0.00101	mg/Kg		04/28/22 11:39	05/03/22 01:09	1
o-Xylene	0.00213		0.00200	0.000343	mg/Kg		04/28/22 11:39	05/03/22 01:09	1
Xylenes, Total	0.00786		0.00399	0.00101	mg/Kg		04/28/22 11:39	05/03/22 01:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	04/28/22 11:39	05/03/22 01:09	1
1,4-Difluorobenzene (Surr)	92		70 - 130	04/28/22 11:39	05/03/22 01:09	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0115		0.00399	0.00101	mg/Kg			05/03/22 09:46	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	71.2		50.0	15.0	mg/Kg			05/02/22 11:24	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	42.5	J *	50.0	15.0	mg/Kg		04/28/22 11:23	05/01/22 03:23	1
Diesel Range Organics (Over C10-C28)	28.7	J B	50.0	15.0	mg/Kg		04/28/22 11:23	05/01/22 03:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		04/28/22 11:23	05/01/22 03:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	78		70 - 130	04/28/22 11:23	05/01/22 03:23	1
o-Terphenyl	71		70 - 130	04/28/22 11:23	05/01/22 03:23	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.58		5.00	0.858	mg/Kg			05/01/22 14:36	1

Eurofins Carlsbad

Surrogate Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2243-1
SDG: 12580761

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-2243-1	BH-42	105	92
LCS 880-24420/1-A	Lab Control Sample	101	99
LCSD 880-24420/2-A	Lab Control Sample Dup	110	101
MB 880-24420/5-A	Method Blank	99	97
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-2243-1	BH-42	78	71
LCS 880-24405/2-A	Lab Control Sample	91	79
LCSD 880-24405/3-A	Lab Control Sample Dup	104	100
MB 880-24405/1-A	Method Blank	89	87
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2243-1
SDG: 12580761

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-24420/5-A

Matrix: Solid

Analysis Batch: 24635

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 24420

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		04/28/22 11:39	05/02/22 16:55	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		04/28/22 11:39	05/02/22 16:55	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		04/28/22 11:39	05/02/22 16:55	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		04/28/22 11:39	05/02/22 16:55	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		04/28/22 11:39	05/02/22 16:55	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		04/28/22 11:39	05/02/22 16:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	04/28/22 11:39	05/02/22 16:55	1
1,4-Difluorobenzene (Surr)	97		70 - 130	04/28/22 11:39	05/02/22 16:55	1

Lab Sample ID: LCS 880-24420/1-A

Matrix: Solid

Analysis Batch: 24635

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 24420

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08264		mg/Kg		83	70 - 130
Toluene	0.100	0.08209		mg/Kg		82	70 - 130
Ethylbenzene	0.100	0.08593		mg/Kg		86	70 - 130
m-Xylene & p-Xylene	0.200	0.1755		mg/Kg		88	70 - 130
o-Xylene	0.100	0.09610		mg/Kg		96	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: LCSD 880-24420/2-A

Matrix: Solid

Analysis Batch: 24635

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 24420

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08452		mg/Kg		85	70 - 130	2	35
Toluene	0.100	0.08772		mg/Kg		88	70 - 130	7	35
Ethylbenzene	0.100	0.09203		mg/Kg		92	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.1917		mg/Kg		96	70 - 130	9	35
o-Xylene	0.100	0.1056		mg/Kg		106	70 - 130	9	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2243-1
SDG: 12580761

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-24405/1-A

Matrix: Solid

Analysis Batch: 24563

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 24405

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		04/28/22 11:23	04/30/22 21:38	1
Diesel Range Organics (Over C10-C28)	21.24	J	50.0	15.0	mg/Kg		04/28/22 11:23	04/30/22 21:38	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		04/28/22 11:23	04/30/22 21:38	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130				04/28/22 11:23	04/30/22 21:38	1
o-Terphenyl	87		70 - 130				04/28/22 11:23	04/30/22 21:38	1

Lab Sample ID: LCS 880-24405/2-A

Matrix: Solid

Analysis Batch: 24563

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 24405

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	687.7	*-	mg/Kg		69	70 - 130
Diesel Range Organics (Over C10-C28)	1000	839.1		mg/Kg		84	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	91		70 - 130				
o-Terphenyl	79		70 - 130				

Lab Sample ID: LCSD 880-24405/3-A

Matrix: Solid

Analysis Batch: 24563

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 24405

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	598.1	*-	mg/Kg		60	70 - 130	14	20
Diesel Range Organics (Over C10-C28)	1000	903.2		mg/Kg		90	70 - 130	7	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	104		70 - 130						
o-Terphenyl	100		70 - 130						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-24408/1-A

Matrix: Solid

Analysis Batch: 24590

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	0.858	mg/Kg			05/01/22 14:10	1

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2243-1
SDG: 12580761

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-24408/2-A

Matrix: Solid

Analysis Batch: 24590

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	233.3		mg/Kg		93	90 - 110		

Lab Sample ID: LCSD 880-24408/3-A

Matrix: Solid

Analysis Batch: 24590

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	234.7		mg/Kg		94	90 - 110	1	20

Lab Sample ID: 890-2243-1 MS

Matrix: Solid

Analysis Batch: 24590

Client Sample ID: BH-42

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	8.58		250	265.5		mg/Kg		103	90 - 110		

Lab Sample ID: 890-2243-1 MSD

Matrix: Solid

Analysis Batch: 24590

Client Sample ID: BH-42

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	8.58		250	262.3		mg/Kg		101	90 - 110	1	20

QC Association Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2243-1
SDG: 12580761

GC VOA

Prep Batch: 24420

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2243-1	BH-42	Total/NA	Solid	5035	
MB 880-24420/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-24420/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-24420/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 24635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2243-1	BH-42	Total/NA	Solid	8021B	24420
MB 880-24420/5-A	Method Blank	Total/NA	Solid	8021B	24420
LCS 880-24420/1-A	Lab Control Sample	Total/NA	Solid	8021B	24420
LCSD 880-24420/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	24420

Analysis Batch: 24719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2243-1	BH-42	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 24405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2243-1	BH-42	Total/NA	Solid	8015NM Prep	
MB 880-24405/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-24405/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-24405/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 24563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2243-1	BH-42	Total/NA	Solid	8015B NM	24405
MB 880-24405/1-A	Method Blank	Total/NA	Solid	8015B NM	24405
LCS 880-24405/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	24405
LCSD 880-24405/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	24405

Analysis Batch: 24639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2243-1	BH-42	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 24408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2243-1	BH-42	Soluble	Solid	DI Leach	
MB 880-24408/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-24408/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-24408/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2243-1 MS	BH-42	Soluble	Solid	DI Leach	
890-2243-1 MSD	BH-42	Soluble	Solid	DI Leach	

Analysis Batch: 24590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2243-1	BH-42	Soluble	Solid	300.0	24408
MB 880-24408/1-A	Method Blank	Soluble	Solid	300.0	24408
LCS 880-24408/2-A	Lab Control Sample	Soluble	Solid	300.0	24408

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2243-1
SDG: 12580761

HPLC/IC (Continued)

Analysis Batch: 24590 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-24408/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	24408
890-2243-1 MS	BH-42	Soluble	Solid	300.0	24408
890-2243-1 MSD	BH-42	Soluble	Solid	300.0	24408

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2243-1
SDG: 12580761

Client Sample ID: BH-42
Date Collected: 04/26/22 15:30
Date Received: 04/26/22 17:00

Lab Sample ID: 890-2243-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	24420	04/28/22 11:39	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24635	05/03/22 01:09	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24719	05/03/22 09:46	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			24639	05/02/22 11:24	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	24405	04/28/22 11:23	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24563	05/01/22 03:23	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	24408	04/28/22 11:32	SC	XEN MID
Soluble	Analysis	300.0		1			24590	05/01/22 14:36	CH	XEN MID

Laboratory References:
XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2243-1
SDG: 12580761

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2243-1
SDG: 12580761

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Carlsbad

Sample Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2243-1
SDG: 12580761

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2243-1	BH-42	Solid	04/26/22 15:30	04/26/22 17:00	42

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



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Eurofins Carlsbad

1089 N Canal St.
Carlsbad NM 88220
Phone 575-988-3199 Fax 575-988-3199

Chain of Custody Record



Environment Testing America

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Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 890-2243-1

SDG Number: 12580761

Login Number: 2243

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 890-2243-1

SDG Number: 12580761

Login Number: 2243

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 04/28/22 10:30 AM

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



Environment Testing America

ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-2252-1

Laboratory Sample Delivery Group: 12580761
Client Project/Site: Romeo Federal 22 Battery

For:

GHD Services Inc.
2135 South Loop 250 West
Midland, Texas 79703

Attn: Becky Haskell

A handwritten signature in black ink, appearing to read "Debbie Simmons".

Authorized for release by:
5/11/2022 5:21:49 PM

Debbie Simmons, Project Manager
(832)986-6768
Debbie.Simmons@et.eurofinsus.com

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

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

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Laboratory Job ID: 890-2252-1
SDG: 12580761

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Definitions/Glossary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2252-1
SDG: 12580761

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points

Eurofins Carlsbad

Definitions/Glossary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2252-1
SDG: 12580761

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

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Case Narrative

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2252-1
SDG: 12580761

Job ID: 890-2252-1

Laboratory: Eurofins Carlsbad

Narrative

**Job Narrative
890-2252-1**

Comments

No additional comments.

Receipt

The samples were received on 4/27/2022 1:41 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 27.6° C.

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: SW-8 (890-2252-10), SW-9 (890-2252-11), SW-10 (890-2252-12), (CCV 880-25032/33), (CCV 880-25032/51), (CCV 880-25032/82), (LCS 880-25053/1-A), (LCSD 880-25053/2-A), (MB 880-25030/5-A), (MB 880-25053/5-A), (890-2252-A-10-C MS) and (890-2252-A-10-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-25053 and analytical batch 880-25032 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-25032 recovered above the upper control limit for <AffectedAnalytes>. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8021B: The result reported for <AffectedAnalytes> for the following sample may be attributed to carryover from an earlier analysis: (CCV 880-25055/33).

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

GC Semi VOA

Method 8015B NM: The method blank for preparation batch 880-24439 and analytical batch 880-24611 contained <AffectedAnalytes> above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015B NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-24439 and analytical batch 880-24611 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015B NM: The CCV was not set to inject the correct vial for 2 sequential calibrations verifications; therefore the verifications were not acceptable

(CCV 880-24611/28)

Method 8015B NM: Surrogate recovery for the following samples were outside control limits: BH-43 (890-2252-1), BH-44 (890-2252-2), BH-45 (890-2252-3), BH-47 (890-2252-5), SW-4 (890-2252-6), SW-5 (890-2252-7), SW-6 (890-2252-8), SW-7 (890-2252-9), (890-2252-A-1-C MS) and (890-2252-A-1-D MSD). Evidence of matrix interferences is not obvious.

Method 8015B NM: The wrong vials were typed into the physical sequence for CCV injection. The primary and final verifications were acceptable and based on that and all other LCS/LCSD reporting acceptable the data was qualified and reported.

(CCV 880-24609/28) and (CCV 880-24609/39)

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

General Chemistry

Case Narrative

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2252-1
SDG: 12580761

Job ID: 890-2252-1 (Continued)

Laboratory: Eurofins Carlsbad (Continued)

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

Organic Prep

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

VOA Prep

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

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2252-1
SDG: 12580761

Client Sample ID: BH-43

Lab Sample ID: 890-2252-1

Date Collected: 04/27/22 09:30

Matrix: Solid

Date Received: 04/27/22 13:41

Sample Depth: 43

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	0.000383	mg/Kg	-	05/07/22 13:16	05/09/22 13:12	1
Toluene	0.000500	J	0.00199	0.000453	mg/Kg	-	05/07/22 13:16	05/09/22 13:12	1
Ethylbenzene	<0.00199	U	0.00199	0.000562	mg/Kg	-	05/07/22 13:16	05/09/22 13:12	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00100	mg/Kg	-	05/07/22 13:16	05/09/22 13:12	1
o-Xylene	<0.00199	U	0.00199	0.000342	mg/Kg	-	05/07/22 13:16	05/09/22 13:12	1
Xylenes, Total	<0.00398	U	0.00398	0.00100	mg/Kg	-	05/07/22 13:16	05/09/22 13:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	05/07/22 13:16	05/09/22 13:12	1
1,4-Difluorobenzene (Surr)	98		70 - 130	05/07/22 13:16	05/09/22 13:12	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	0.00100	mg/Kg	-		05/09/22 11:41	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	37.9	J	50.0	15.0	mg/Kg	-		05/03/22 11:44	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	37.9	J B F1 F2	50.0	15.0	mg/Kg	-	04/28/22 14:02	05/02/22 15:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U F1	50.0	15.0	mg/Kg	-	04/28/22 14:02	05/02/22 15:04	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg	-	04/28/22 14:02	05/02/22 15:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	51	S1-	70 - 130	04/28/22 14:02	05/02/22 15:04	1
o-Terphenyl	49	S1-	70 - 130	04/28/22 14:02	05/02/22 15:04	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	220		4.98	0.855	mg/Kg	-		05/01/22 23:10	1

Client Sample ID: BH-44

Lab Sample ID: 890-2252-2

Date Collected: 04/27/22 09:35

Matrix: Solid

Date Received: 04/27/22 13:41

Sample Depth: 44

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000384	mg/Kg	-	05/07/22 13:16	05/09/22 13:32	1
Toluene	0.000564	J	0.00200	0.000455	mg/Kg	-	05/07/22 13:16	05/09/22 13:32	1
Ethylbenzene	0.000735	J	0.00200	0.000564	mg/Kg	-	05/07/22 13:16	05/09/22 13:32	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	0.00101	mg/Kg	-	05/07/22 13:16	05/09/22 13:32	1
o-Xylene	<0.00200	U	0.00200	0.000343	mg/Kg	-	05/07/22 13:16	05/09/22 13:32	1
Xylenes, Total	<0.00399	U	0.00399	0.00101	mg/Kg	-	05/07/22 13:16	05/09/22 13:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	05/07/22 13:16	05/09/22 13:32	1

Eurofins Carlsbad

Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2252-1
SDG: 12580761

Client Sample ID: BH-44

Lab Sample ID: 890-2252-2

Date Collected: 04/27/22 09:35

Matrix: Solid

Date Received: 04/27/22 13:41

Sample Depth: 44

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	100		70 - 130	05/07/22 13:16	05/09/22 13:32	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00130	J	0.00399	0.00101	mg/Kg			05/09/22 11:41	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	43.0	J	50.0	15.0	mg/Kg			05/03/22 11:44	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	18.2	J B	50.0	15.0	mg/Kg		04/28/22 14:02	05/02/22 16:09	1
Diesel Range Organics (Over C10-C28)	24.8	J	50.0	15.0	mg/Kg		04/28/22 14:02	05/02/22 16:09	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		04/28/22 14:02	05/02/22 16:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	73		70 - 130				04/28/22 14:02	05/02/22 16:09	1
o-Terphenyl	68	S1-	70 - 130				04/28/22 14:02	05/02/22 16:09	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	38.9		4.99	0.857	mg/Kg			05/01/22 23:19	1

Client Sample ID: BH-45

Lab Sample ID: 890-2252-3

Date Collected: 04/27/22 09:40

Matrix: Solid

Date Received: 04/27/22 13:41

Sample Depth: 45

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	0.000383	mg/Kg		05/07/22 13:16	05/09/22 13:52	1
Toluene	0.000559	J	0.00199	0.000453	mg/Kg		05/07/22 13:16	05/09/22 13:52	1
Ethylbenzene	0.000587	J	0.00199	0.000562	mg/Kg		05/07/22 13:16	05/09/22 13:52	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00100	mg/Kg		05/07/22 13:16	05/09/22 13:52	1
o-Xylene	<0.00199	U	0.00199	0.000342	mg/Kg		05/07/22 13:16	05/09/22 13:52	1
Xylenes, Total	<0.00398	U	0.00398	0.00100	mg/Kg		05/07/22 13:16	05/09/22 13:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	05/07/22 13:16	05/09/22 13:52	1
1,4-Difluorobenzene (Surr)	100		70 - 130	05/07/22 13:16	05/09/22 13:52	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00115	J	0.00398	0.00100	mg/Kg			05/09/22 11:41	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	45.8	J	50.0	15.0	mg/Kg			05/03/22 11:44	1

Eurofins Carlsbad

Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2252-1
SDG: 12580761

Client Sample ID: BH-45

Date Collected: 04/27/22 09:40

Date Received: 04/27/22 13:41

Sample Depth: 45

Lab Sample ID: 890-2252-3

Matrix: Solid

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	28.3	J B	50.0	15.0	mg/Kg	-	04/28/22 14:02	05/02/22 16:31	1
Diesel Range Organics (Over C10-C28)	17.5	J	50.0	15.0	mg/Kg	-	04/28/22 14:02	05/02/22 16:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg	-	04/28/22 14:02	05/02/22 16:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	61	S1-	70 - 130				04/28/22 14:02	05/02/22 16:31	1
o-Terphenyl	51	S1-	70 - 130				04/28/22 14:02	05/02/22 16:31	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.3		5.00	0.858	mg/Kg	-		05/01/22 23:27	1

Client Sample ID: BH-46

Date Collected: 04/27/22 09:45

Date Received: 04/27/22 13:41

Sample Depth: 46

Lab Sample ID: 890-2252-4

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	0.000387	mg/Kg	-	05/07/22 13:16	05/09/22 14:13	1
Toluene	<0.00201	U	0.00201	0.000458	mg/Kg	-	05/07/22 13:16	05/09/22 14:13	1
Ethylbenzene	<0.00201	U	0.00201	0.000567	mg/Kg	-	05/07/22 13:16	05/09/22 14:13	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	0.00101	mg/Kg	-	05/07/22 13:16	05/09/22 14:13	1
o-Xylene	<0.00201	U	0.00201	0.000345	mg/Kg	-	05/07/22 13:16	05/09/22 14:13	1
Xylenes, Total	<0.00402	U	0.00402	0.00101	mg/Kg	-	05/07/22 13:16	05/09/22 14:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130				05/07/22 13:16	05/09/22 14:13	1
1,4-Difluorobenzene (Surr)	101		70 - 130				05/07/22 13:16	05/09/22 14:13	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	0.00101	mg/Kg	-		05/09/22 11:41	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	52.8		50.0	15.0	mg/Kg	-		05/03/22 11:44	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg	-	04/28/22 14:02	05/02/22 16:53	1
Diesel Range Organics (Over C10-C28)	52.8		50.0	15.0	mg/Kg	-	04/28/22 14:02	05/02/22 16:53	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg	-	04/28/22 14:02	05/02/22 16:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	78		70 - 130				04/28/22 14:02	05/02/22 16:53	1
o-Terphenyl	77		70 - 130				04/28/22 14:02	05/02/22 16:53	1

Eurofins Carlsbad

Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2252-1
SDG: 12580761

Client Sample ID: BH-46

Date Collected: 04/27/22 09:45

Date Received: 04/27/22 13:41

Sample Depth: 46

Lab Sample ID: 890-2252-4

Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	294		4.96	0.851	mg/Kg			05/01/22 23:36	1

Client Sample ID: BH-47

Date Collected: 04/27/22 09:50

Date Received: 04/27/22 13:41

Sample Depth: 47

Lab Sample ID: 890-2252-5

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U F1	0.00200	0.000386	mg/Kg		05/09/22 11:01	05/10/22 00:21	1
Toluene	<0.00200	U	0.00200	0.000457	mg/Kg		05/09/22 11:01	05/10/22 00:21	1
Ethylbenzene	<0.00200	U	0.00200	0.000566	mg/Kg		05/09/22 11:01	05/10/22 00:21	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	0.00101	mg/Kg		05/09/22 11:01	05/10/22 00:21	1
o-Xylene	<0.00200	U	0.00200	0.000345	mg/Kg		05/09/22 11:01	05/10/22 00:21	1
Xylenes, Total	<0.00401	U	0.00401	0.00101	mg/Kg		05/09/22 11:01	05/10/22 00:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130				05/09/22 11:01	05/10/22 00:21	1
1,4-Difluorobenzene (Surr)	91		70 - 130				05/09/22 11:01	05/10/22 00:21	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	0.00101	mg/Kg			05/09/22 11:41	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	16.4	J	49.9	15.0	mg/Kg			05/03/22 11:44	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	16.4	J B	49.9	15.0	mg/Kg		04/28/22 14:02	05/02/22 17:14	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	15.0	mg/Kg		04/28/22 14:02	05/02/22 17:14	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg		04/28/22 14:02	05/02/22 17:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	58	S1-	70 - 130				04/28/22 14:02	05/02/22 17:14	1
o-Terphenyl	57	S1-	70 - 130				04/28/22 14:02	05/02/22 17:14	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.81		4.97	0.853	mg/Kg			05/01/22 23:45	1

Eurofins Carlsbad

Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2252-1
SDG: 12580761

Client Sample ID: SW-4

Lab Sample ID: 890-2252-6

Date Collected: 04/27/22 09:55

Matrix: Solid

Date Received: 04/27/22 13:41

Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	0.000387	mg/Kg	-	05/09/22 11:01	05/10/22 00:41	1
Toluene	<0.00201	U	0.00201	0.000458	mg/Kg	-	05/09/22 11:01	05/10/22 00:41	1
Ethylbenzene	<0.00201	U	0.00201	0.000567	mg/Kg	-	05/09/22 11:01	05/10/22 00:41	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	0.00101	mg/Kg	-	05/09/22 11:01	05/10/22 00:41	1
o-Xylene	<0.00201	U	0.00201	0.000345	mg/Kg	-	05/09/22 11:01	05/10/22 00:41	1
Xylenes, Total	<0.00402	U	0.00402	0.00101	mg/Kg	-	05/09/22 11:01	05/10/22 00:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130	05/09/22 11:01	05/10/22 00:41	1
1,4-Difluorobenzene (Surr)	92		70 - 130	05/09/22 11:01	05/10/22 00:41	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	0.00101	mg/Kg	-		05/09/22 11:41	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	39.6	J	49.9	15.0	mg/Kg	-		05/03/22 11:44	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	15.0	mg/Kg	-	04/28/22 14:02	05/02/22 17:36	1
Diesel Range Organics (Over C10-C28)	39.6	J	49.9	15.0	mg/Kg	-	04/28/22 14:02	05/02/22 17:36	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg	-	04/28/22 14:02	05/02/22 17:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	49	S1-	70 - 130	04/28/22 14:02	05/02/22 17:36	1
o-Terphenyl	40	S1-	70 - 130	04/28/22 14:02	05/02/22 17:36	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	626		4.96	0.851	mg/Kg	-		05/04/22 09:28	1

Client Sample ID: SW-5

Lab Sample ID: 890-2252-7

Date Collected: 04/27/22 10:00

Matrix: Solid

Date Received: 04/27/22 13:41

Sample Depth: 5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	0.000388	mg/Kg	-	05/09/22 11:01	05/10/22 01:01	1
Toluene	<0.00202	U	0.00202	0.000460	mg/Kg	-	05/09/22 11:01	05/10/22 01:01	1
Ethylbenzene	<0.00202	U	0.00202	0.000570	mg/Kg	-	05/09/22 11:01	05/10/22 01:01	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	0.00102	mg/Kg	-	05/09/22 11:01	05/10/22 01:01	1
o-Xylene	<0.00202	U	0.00202	0.000347	mg/Kg	-	05/09/22 11:01	05/10/22 01:01	1
Xylenes, Total	<0.00403	U	0.00403	0.00102	mg/Kg	-	05/09/22 11:01	05/10/22 01:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	05/09/22 11:01	05/10/22 01:01	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2252-1
SDG: 12580761

Client Sample ID: SW-5

Lab Sample ID: 890-2252-7

Date Collected: 04/27/22 10:00

Matrix: Solid

Date Received: 04/27/22 13:41

Sample Depth: 5

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	90		70 - 130	05/09/22 11:01	05/10/22 01:01	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	0.00102	mg/Kg			05/09/22 11:41	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	15.0	mg/Kg			05/03/22 11:44	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		04/28/22 14:02	05/02/22 17:58	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		04/28/22 14:02	05/02/22 17:58	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		04/28/22 14:02	05/02/22 17:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	45	S1-	70 - 130				04/28/22 14:02	05/02/22 17:58	1
o-Terphenyl	39	S1-	70 - 130				04/28/22 14:02	05/02/22 17:58	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.4		5.00	0.858	mg/Kg			05/04/22 09:34	1

Client Sample ID: SW-6

Lab Sample ID: 890-2252-8

Date Collected: 04/27/22 10:05

Matrix: Solid

Date Received: 04/27/22 13:41

Sample Depth: 6

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	0.000389	mg/Kg		05/09/22 11:01	05/10/22 01:22	1
Toluene	<0.00202	U	0.00202	0.000461	mg/Kg		05/09/22 11:01	05/10/22 01:22	1
Ethylbenzene	<0.00202	U	0.00202	0.000571	mg/Kg		05/09/22 11:01	05/10/22 01:22	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	0.00102	mg/Kg		05/09/22 11:01	05/10/22 01:22	1
o-Xylene	<0.00202	U	0.00202	0.000347	mg/Kg		05/09/22 11:01	05/10/22 01:22	1
Xylenes, Total	<0.00404	U	0.00404	0.00102	mg/Kg		05/09/22 11:01	05/10/22 01:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	05/09/22 11:01	05/10/22 01:22	1
1,4-Difluorobenzene (Surr)	91		70 - 130	05/09/22 11:01	05/10/22 01:22	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404	0.00102	mg/Kg			05/09/22 11:41	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	15.0	mg/Kg			05/03/22 11:44	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2252-1
SDG: 12580761

Client Sample ID: SW-6

Lab Sample ID: 890-2252-8

Date Collected: 04/27/22 10:05

Matrix: Solid

Date Received: 04/27/22 13:41

Sample Depth: 6

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg	-	04/28/22 14:02	05/02/22 18:19	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg	-	04/28/22 14:02	05/02/22 18:19	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg	-	04/28/22 14:02	05/02/22 18:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	53	S1-	70 - 130				04/28/22 14:02	05/02/22 18:19	1
o-Terphenyl	45	S1-	70 - 130				04/28/22 14:02	05/02/22 18:19	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.38	J	4.95	0.850	mg/Kg	-		05/04/22 09:41	1

Client Sample ID: SW-7

Lab Sample ID: 890-2252-9

Date Collected: 04/27/22 10:10

Matrix: Solid

Date Received: 04/27/22 13:41

Sample Depth: 7

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000384	mg/Kg	-	05/09/22 11:01	05/10/22 04:46	1
Toluene	0.000683	J	0.00200	0.000455	mg/Kg	-	05/09/22 11:01	05/10/22 04:46	1
Ethylbenzene	<0.00200	U	0.00200	0.000564	mg/Kg	-	05/09/22 11:01	05/10/22 04:46	1
m-Xylene & p-Xylene	0.00485		0.00399	0.00101	mg/Kg	-	05/09/22 11:01	05/10/22 04:46	1
o-Xylene	0.00133	J	0.00200	0.000343	mg/Kg	-	05/09/22 11:01	05/10/22 04:46	1
Xylenes, Total	0.00618		0.00399	0.00101	mg/Kg	-	05/09/22 11:01	05/10/22 04:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130				05/09/22 11:01	05/10/22 04:46	1
1,4-Difluorobenzene (Surr)	95		70 - 130				05/09/22 11:01	05/10/22 04:46	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00686		0.00399	0.00101	mg/Kg	-		05/09/22 11:41	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	15.0	mg/Kg	-		05/03/22 11:44	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	15.0	mg/Kg	-	04/28/22 14:02	05/02/22 18:41	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	15.0	mg/Kg	-	04/28/22 14:02	05/02/22 18:41	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg	-	04/28/22 14:02	05/02/22 18:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	28	S1-	70 - 130				04/28/22 14:02	05/02/22 18:41	1
o-Terphenyl	22	S1-	70 - 130				04/28/22 14:02	05/02/22 18:41	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2252-1
SDG: 12580761

Client Sample ID: SW-7

Lab Sample ID: 890-2252-9

Date Collected: 04/27/22 10:10

Matrix: Solid

Date Received: 04/27/22 13:41

Sample Depth: 7

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.8		5.04	0.865	mg/Kg			05/04/22 09:47	1

Client Sample ID: SW-8

Lab Sample ID: 890-2252-10

Date Collected: 04/27/22 10:15

Matrix: Solid

Date Received: 04/27/22 13:41

Sample Depth: 8

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U F1 F2	0.00200	0.000384	mg/Kg		05/08/22 16:37	05/08/22 23:21	1
Toluene	<0.00200	U F1 F2	0.00200	0.000455	mg/Kg		05/08/22 16:37	05/08/22 23:21	1
Ethylbenzene	<0.00200	U F1 F2	0.00200	0.000564	mg/Kg		05/08/22 16:37	05/08/22 23:21	1
m-Xylene & p-Xylene	<0.00399	U F1 F2	0.00399	0.00101	mg/Kg		05/08/22 16:37	05/08/22 23:21	1
o-Xylene	<0.00200	U F1 F2	0.00200	0.000343	mg/Kg		05/08/22 16:37	05/08/22 23:21	1
Xylenes, Total	<0.00399	U F1 F2	0.00399	0.00101	mg/Kg		05/08/22 16:37	05/08/22 23:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	207	S1+	70 - 130				05/08/22 16:37	05/08/22 23:21	1
1,4-Difluorobenzene (Surr)	89		70 - 130				05/08/22 16:37	05/08/22 23:21	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	0.00101	mg/Kg			05/09/22 11:41	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	15.0	mg/Kg			05/03/22 11:44	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	15.0	mg/Kg		04/28/22 13:59	05/02/22 22:17	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	15.0	mg/Kg		04/28/22 13:59	05/02/22 22:17	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg		04/28/22 13:59	05/02/22 22:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130				04/28/22 13:59	05/02/22 22:17	1
o-Terphenyl	96		70 - 130				04/28/22 13:59	05/02/22 22:17	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	591		4.96	0.851	mg/Kg			05/04/22 09:53	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2252-1
SDG: 12580761

Client Sample ID: SW-9

Lab Sample ID: 890-2252-11

Date Collected: 04/27/22 10:20

Matrix: Solid

Date Received: 04/27/22 13:41

Sample Depth: 9

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	0.000383	mg/Kg	-	05/08/22 16:37	05/08/22 23:46	1
Toluene	0.00349		0.00199	0.000454	mg/Kg	-	05/08/22 16:37	05/08/22 23:46	1
Ethylbenzene	<0.00199	U	0.00199	0.000563	mg/Kg	-	05/08/22 16:37	05/08/22 23:46	1
m-Xylene & p-Xylene	0.00654		0.00398	0.00101	mg/Kg	-	05/08/22 16:37	05/08/22 23:46	1
o-Xylene	0.00230		0.00199	0.000343	mg/Kg	-	05/08/22 16:37	05/08/22 23:46	1
Xylenes, Total	0.00884		0.00398	0.00101	mg/Kg	-	05/08/22 16:37	05/08/22 23:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	194	S1+	70 - 130	05/08/22 16:37	05/08/22 23:46	1
1,4-Difluorobenzene (Surr)	80		70 - 130	05/08/22 16:37	05/08/22 23:46	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0123		0.00398	0.00101	mg/Kg	-		05/09/22 11:41	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	15.0	mg/Kg	-		05/03/22 11:44	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg	-	04/28/22 13:59	05/02/22 22:39	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg	-	04/28/22 13:59	05/02/22 22:39	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg	-	04/28/22 13:59	05/02/22 22:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	04/28/22 13:59	05/02/22 22:39	1
o-Terphenyl	98		70 - 130	04/28/22 13:59	05/02/22 22:39	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.61		5.01	0.860	mg/Kg	-		05/04/22 10:00	1

Client Sample ID: SW-10

Lab Sample ID: 890-2252-12

Date Collected: 04/27/22 10:25

Matrix: Solid

Date Received: 04/27/22 13:41

Sample Depth: 10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	0.000383	mg/Kg	-	05/08/22 16:37	05/09/22 00:10	1
Toluene	<0.00199	U	0.00199	0.000453	mg/Kg	-	05/08/22 16:37	05/09/22 00:10	1
Ethylbenzene	<0.00199	U	0.00199	0.000562	mg/Kg	-	05/08/22 16:37	05/09/22 00:10	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00100	mg/Kg	-	05/08/22 16:37	05/09/22 00:10	1
o-Xylene	<0.00199	U	0.00199	0.000342	mg/Kg	-	05/08/22 16:37	05/09/22 00:10	1
Xylenes, Total	<0.00398	U	0.00398	0.00100	mg/Kg	-	05/08/22 16:37	05/09/22 00:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	172	S1+	70 - 130	05/08/22 16:37	05/09/22 00:10	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2252-1
SDG: 12580761

Client Sample ID: SW-10

Lab Sample ID: 890-2252-12

Date Collected: 04/27/22 10:25

Matrix: Solid

Date Received: 04/27/22 13:41

Sample Depth: 10

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	82		70 - 130	05/08/22 16:37	05/09/22 00:10	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	0.00100	mg/Kg	-		05/09/22 11:41	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	120		49.9	15.0	mg/Kg	-		05/03/22 11:44	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	15.0	mg/Kg	-	04/28/22 13:59	05/02/22 23:00	1
Diesel Range Organics (Over C10-C28)	120		49.9	15.0	mg/Kg		04/28/22 13:59	05/02/22 23:00	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg		04/28/22 13:59	05/02/22 23:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	79		70 - 130				04/28/22 13:59	05/02/22 23:00	1
o-Terphenyl	75		70 - 130				04/28/22 13:59	05/02/22 23:00	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.4		4.99	0.857	mg/Kg	-		05/04/22 10:06	1

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Surrogate Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2252-1
SDG: 12580761

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
890-2252-1	BH-43	109	98
890-2252-2	BH-44	112	100
890-2252-3	BH-45	111	100
890-2252-4	BH-46	112	101
890-2252-5	BH-47	122	91
890-2252-5 MS	BH-47	122	90
890-2252-5 MSD	BH-47	126	86
890-2252-6	SW-4	117	92
890-2252-7	SW-5	116	90
890-2252-8	SW-6	114	91
890-2252-9	SW-7	117	95
890-2252-10	SW-8	207 S1+	89
890-2252-10 MS	SW-8	195 S1+	80
890-2252-10 MSD	SW-8	138067 S1+	3 S1-
890-2252-11	SW-9	194 S1+	80
890-2252-12	SW-10	172 S1+	82
LCS 880-25031/1-A	Lab Control Sample	105	93
LCS 880-25053/1-A	Lab Control Sample	196 S1+	83
LCS 880-25072/1-A	Lab Control Sample	124	89
LCSD 880-25031/2-A	Lab Control Sample Dup	109	99
LCSD 880-25053/2-A	Lab Control Sample Dup	187 S1+	75
LCSD 880-25072/2-A	Lab Control Sample Dup	118	91
MB 880-25030/5-A	Method Blank	136 S1+	72
MB 880-25031/5-A	Method Blank	100	92
MB 880-25053/5-A	Method Blank	146 S1+	70
MB 880-25072/5-A	Method Blank	103	89

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-2252-1	BH-43	51 S1-	49 S1-
890-2252-1 MS	BH-43	42 S1-	37 S1-
890-2252-1 MSD	BH-43	45 S1-	40 S1-
890-2252-2	BH-44	73	68 S1-
890-2252-3	BH-45	61 S1-	51 S1-
890-2252-4	BH-46	78	77
890-2252-5	BH-47	58 S1-	57 S1-
890-2252-6	SW-4	49 S1-	40 S1-
890-2252-7	SW-5	45 S1-	39 S1-
890-2252-8	SW-6	53 S1-	45 S1-
890-2252-9	SW-7	28 S1-	22 S1-
890-2252-10	SW-8	92	96
890-2252-11	SW-9	99	98

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Surrogate Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2252-1
SDG: 12580761

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-2252-12	SW-10	79	75
LCS 880-24438/2-A	Lab Control Sample	104	108
LCS 880-24439/2-A	Lab Control Sample	105	107
LCSD 880-24438/3-A	Lab Control Sample Dup	103	108
LCSD 880-24439/3-A	Lab Control Sample Dup	108	106
MB 880-24438/1-A	Method Blank	94	107
MB 880-24439/1-A	Method Blank	96	110

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2252-1
SDG: 12580761

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-25030/5-A

Matrix: Solid

Analysis Batch: 25032

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25030

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		05/07/22 13:13	05/08/22 09:29	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		05/07/22 13:13	05/08/22 09:29	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		05/07/22 13:13	05/08/22 09:29	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		05/07/22 13:13	05/08/22 09:29	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		05/07/22 13:13	05/08/22 09:29	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		05/07/22 13:13	05/08/22 09:29	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	136	S1+	70 - 130	05/07/22 13:13	05/08/22 09:29	1
1,4-Difluorobenzene (Surr)	72		70 - 130	05/07/22 13:13	05/08/22 09:29	1

Lab Sample ID: MB 880-25031/5-A

Matrix: Solid

Analysis Batch: 25034

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25031

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		05/07/22 13:16	05/09/22 06:48	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		05/07/22 13:16	05/09/22 06:48	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		05/07/22 13:16	05/09/22 06:48	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		05/07/22 13:16	05/09/22 06:48	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		05/07/22 13:16	05/09/22 06:48	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		05/07/22 13:16	05/09/22 06:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	05/07/22 13:16	05/09/22 06:48	1
1,4-Difluorobenzene (Surr)	92		70 - 130	05/07/22 13:16	05/09/22 06:48	1

Lab Sample ID: LCS 880-25031/1-A

Matrix: Solid

Analysis Batch: 25034

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25031

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.07663		mg/Kg		77	70 - 130
Toluene	0.100	0.08342		mg/Kg		83	70 - 130
Ethylbenzene	0.100	0.08407		mg/Kg		84	70 - 130
m-Xylene & p-Xylene	0.200	0.1762		mg/Kg		88	70 - 130
o-Xylene	0.100	0.09680		mg/Kg		97	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	93		70 - 130

Lab Sample ID: LCSD 880-25031/2-A

Matrix: Solid

Analysis Batch: 25034

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 25031

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09003		mg/Kg		90	70 - 130	16	35

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2252-1
SDG: 12580761

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-25031/2-A

Matrix: Solid

Analysis Batch: 25034

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 25031

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.09126		mg/Kg		91	70 - 130	9	35
Ethylbenzene	0.100	0.09457		mg/Kg		95	70 - 130	12	35
m-Xylene & p-Xylene	0.200	0.1967		mg/Kg		98	70 - 130	11	35
o-Xylene	0.100	0.1068		mg/Kg		107	70 - 130	10	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: MB 880-25053/5-A

Matrix: Solid

Analysis Batch: 25032

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25053

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		05/08/22 16:37	05/08/22 22:56	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		05/08/22 16:37	05/08/22 22:56	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		05/08/22 16:37	05/08/22 22:56	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		05/08/22 16:37	05/08/22 22:56	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		05/08/22 16:37	05/08/22 22:56	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		05/08/22 16:37	05/08/22 22:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	146	S1+	70 - 130	05/08/22 16:37	05/08/22 22:56	1
1,4-Difluorobenzene (Surr)	70		70 - 130	05/08/22 16:37	05/08/22 22:56	1

Lab Sample ID: LCS 880-25053/1-A

Matrix: Solid

Analysis Batch: 25032

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25053

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1185		mg/Kg		119	70 - 130
Toluene	0.100	0.1101		mg/Kg		110	70 - 130
Ethylbenzene	0.100	0.1221		mg/Kg		122	70 - 130
m-Xylene & p-Xylene	0.200	0.2447		mg/Kg		122	70 - 130
o-Xylene	0.100	0.1196		mg/Kg		120	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	196	S1+	70 - 130
1,4-Difluorobenzene (Surr)	83		70 - 130

Lab Sample ID: LCSD 880-25053/2-A

Matrix: Solid

Analysis Batch: 25032

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 25053

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09209		mg/Kg		92	70 - 130	25	35
Toluene	0.100	0.08453		mg/Kg		85	70 - 130	26	35
Ethylbenzene	0.100	0.09824		mg/Kg		98	70 - 130	22	35

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2252-1
SDG: 12580761

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-25053/2-A

Matrix: Solid

Analysis Batch: 25032

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 25053

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
m-Xylene & p-Xylene	0.200	0.2001		mg/Kg		100	70 - 130	20	35
o-Xylene	0.100	0.09849		mg/Kg		98	70 - 130	19	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	187	S1+	70 - 130
1,4-Difluorobenzene (Surr)	75		70 - 130

Lab Sample ID: 890-2252-10 MS

Matrix: Solid

Analysis Batch: 25032

Client Sample ID: SW-8

Prep Type: Total/NA

Prep Batch: 25053

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U F1 F2	0.0996	0.09318		mg/Kg		94	70 - 130
Toluene	<0.00200	U F1 F2	0.0996	0.08694		mg/Kg		87	70 - 130
Ethylbenzene	<0.00200	U F1 F2	0.0996	0.09724		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	<0.00399	U F1 F2	0.199	0.1978		mg/Kg		99	70 - 130
o-Xylene	<0.00200	U F1 F2	0.0996	0.09955		mg/Kg		100	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	195	S1+	70 - 130
1,4-Difluorobenzene (Surr)	80		70 - 130

Lab Sample ID: 890-2252-10 MSD

Matrix: Solid

Analysis Batch: 25032

Client Sample ID: SW-8

Prep Type: Total/NA

Prep Batch: 25053

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U F1 F2	0.101	0.0005625	J F1 F2	mg/Kg		0.6	70 - 130	198	35
Toluene	<0.00200	U F1 F2	0.101	0.003324	F1 F2	mg/Kg		3	70 - 130	185	35
Ethylbenzene	<0.00200	U F1 F2	0.101	0.002314	F1 F2	mg/Kg		2	70 - 130	191	35
m-Xylene & p-Xylene	<0.00399	U F1 F2	0.202	0.002380	J F1 F2	mg/Kg		1	70 - 130	195	35
o-Xylene	<0.00200	U F1 F2	0.101	0.002349	F1 F2	mg/Kg		2	70 - 130	191	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	138067	S1+	70 - 130
1,4-Difluorobenzene (Surr)	3	S1-	70 - 130

Lab Sample ID: MB 880-25072/5-A

Matrix: Solid

Analysis Batch: 25055

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25072

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		05/09/22 11:01	05/09/22 23:59	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		05/09/22 11:01	05/09/22 23:59	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		05/09/22 11:01	05/09/22 23:59	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		05/09/22 11:01	05/09/22 23:59	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		05/09/22 11:01	05/09/22 23:59	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		05/09/22 11:01	05/09/22 23:59	1

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2252-1
SDG: 12580761

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	05/09/22 11:01	05/09/22 23:59	1
1,4-Difluorobenzene (Surr)	89		70 - 130	05/09/22 11:01	05/09/22 23:59	1

Lab Sample ID: LCS 880-25072/1-A

Matrix: Solid

Analysis Batch: 25055

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25072

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.07686		mg/Kg		77	70 - 130
Toluene	0.100	0.09570		mg/Kg		96	70 - 130
Ethylbenzene	0.100	0.1080		mg/Kg		108	70 - 130
m-Xylene & p-Xylene	0.200	0.2251		mg/Kg		113	70 - 130
o-Xylene	0.100	0.1157		mg/Kg		116	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	124		70 - 130
1,4-Difluorobenzene (Surr)	89		70 - 130

Lab Sample ID: LCSD 880-25072/2-A

Matrix: Solid

Analysis Batch: 25055

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 25072

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.07208		mg/Kg		72	70 - 130	6	35
Toluene	0.100	0.08611		mg/Kg		86	70 - 130	11	35
Ethylbenzene	0.100	0.09489		mg/Kg		95	70 - 130	13	35
m-Xylene & p-Xylene	0.200	0.1962		mg/Kg		98	70 - 130	14	35
o-Xylene	0.100	0.1005		mg/Kg		100	70 - 130	14	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	118		70 - 130
1,4-Difluorobenzene (Surr)	91		70 - 130

Lab Sample ID: 890-2252-5 MS

Matrix: Solid

Analysis Batch: 25055

Client Sample ID: BH-47

Prep Type: Total/NA

Prep Batch: 25072

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U F1	0.0996	0.06588	F1	mg/Kg		66	70 - 130
Toluene	<0.00200	U	0.0996	0.08075		mg/Kg		81	70 - 130
Ethylbenzene	<0.00200	U	0.0996	0.09087		mg/Kg		91	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.199	0.1902		mg/Kg		95	70 - 130
o-Xylene	<0.00200	U	0.0996	0.09879		mg/Kg		99	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	122		70 - 130
1,4-Difluorobenzene (Surr)	90		70 - 130

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2252-1
SDG: 12580761

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-2252-5 MSD

Matrix: Solid

Analysis Batch: 25055

Client Sample ID: BH-47

Prep Type: Total/NA

Prep Batch: 25072

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U F1	0.0994	0.07535		mg/Kg		76	70 - 130	13	35
Toluene	<0.00200	U	0.0994	0.09914		mg/Kg		100	70 - 130	20	35
Ethylbenzene	<0.00200	U	0.0994	0.1134		mg/Kg		114	70 - 130	22	35
m-Xylene & p-Xylene	<0.00401	U	0.199	0.2395		mg/Kg		120	70 - 130	23	35
o-Xylene	<0.00200	U	0.0994	0.1232		mg/Kg		124	70 - 130	22	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	126		70 - 130
1,4-Difluorobenzene (Surr)	86		70 - 130

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-24438/1-A

Matrix: Solid

Analysis Batch: 24609

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 24438

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		04/28/22 13:59	05/02/22 14:00	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		04/28/22 13:59	05/02/22 14:00	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		04/28/22 13:59	05/02/22 14:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	04/28/22 13:59	05/02/22 14:00	1
o-Terphenyl	107		70 - 130	04/28/22 13:59	05/02/22 14:00	1

Lab Sample ID: LCS 880-24438/2-A

Matrix: Solid

Analysis Batch: 24609

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 24438

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	908.3		mg/Kg		91	70 - 130
Diesel Range Organics (Over C10-C28)	1000	991.2		mg/Kg		99	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	108		70 - 130

Lab Sample ID: LCSD 880-24438/3-A

Matrix: Solid

Analysis Batch: 24609

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 24438

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	908.3		mg/Kg		91	70 - 130	0	20

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2252-1
SDG: 12580761

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 880-24438/3-A

Matrix: Solid

Analysis Batch: 24609

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 24438

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Diesel Range Organics (Over C10-C28)	1000	988.6		mg/Kg		99	70 - 130	0	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	108		70 - 130

Lab Sample ID: MB 880-24439/1-A

Matrix: Solid

Analysis Batch: 24611

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 24439

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	15.85	J	50.0	15.0	mg/Kg		04/28/22 14:02	05/02/22 14:00	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		04/28/22 14:02	05/02/22 14:00	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		04/28/22 14:02	05/02/22 14:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	04/28/22 14:02	05/02/22 14:00	1
o-Terphenyl	110		70 - 130	04/28/22 14:02	05/02/22 14:00	1

Lab Sample ID: LCS 880-24439/2-A

Matrix: Solid

Analysis Batch: 24611

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 24439

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1032		mg/Kg		103	70 - 130
Diesel Range Organics (Over C10-C28)	1000	952.8		mg/Kg		95	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	105		70 - 130
o-Terphenyl	107		70 - 130

Lab Sample ID: LCSD 880-24439/3-A

Matrix: Solid

Analysis Batch: 24611

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 24439

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	914.4		mg/Kg		91	70 - 130	12	20
Diesel Range Organics (Over C10-C28)	1000	948.7		mg/Kg		95	70 - 130	0	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	108		70 - 130
o-Terphenyl	106		70 - 130

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2252-1
SDG: 12580761

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-2252-1 MS

Matrix: Solid

Analysis Batch: 24611

Client Sample ID: BH-43

Prep Type: Total/NA

Prep Batch: 24439

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	37.9	J B F1 F2	1000	341.0	F1	mg/Kg		30	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U F1	1000	335.4	F1	mg/Kg		34	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	42	S1-	70 - 130						
o-Terphenyl	37	S1-	70 - 130						

Lab Sample ID: 890-2252-1 MSD

Matrix: Solid

Analysis Batch: 24611

Client Sample ID: BH-43

Prep Type: Total/NA

Prep Batch: 24439

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	37.9	J B F1 F2	998	639.8	F1 F2	mg/Kg		60	70 - 130	61	20
Diesel Range Organics (Over C10-C28)	<50.0	U F1	998	365.7	F1	mg/Kg		37	70 - 130	9	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	45	S1-	70 - 130								
o-Terphenyl	40	S1-	70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-24411/1-A

Matrix: Solid

Analysis Batch: 24591

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	0.858	mg/Kg			05/01/22 19:20	1

Lab Sample ID: LCS 880-24411/2-A

Matrix: Solid

Analysis Batch: 24591

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	235.0		mg/Kg		94	90 - 110

Lab Sample ID: LCSD 880-24411/3-A

Matrix: Solid

Analysis Batch: 24591

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	235.6		mg/Kg		94	90 - 110	0	20

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2252-1
SDG: 12580761

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 880-24421/1-A

Matrix: Solid

Analysis Batch: 24747

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	0.858	mg/Kg			05/04/22 06:47	1

Lab Sample ID: LCS 880-24421/2-A

Matrix: Solid

Analysis Batch: 24747

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	240.9		mg/Kg		96	90 - 110

Lab Sample ID: LCSD 880-24421/3-A

Matrix: Solid

Analysis Batch: 24747

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	264.2		mg/Kg		106	90 - 110	9	20

QC Association Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2252-1
SDG: 12580761

GC VOA

Prep Batch: 25030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-25030/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 25031

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2252-1	BH-43	Total/NA	Solid	5035	
890-2252-2	BH-44	Total/NA	Solid	5035	
890-2252-3	BH-45	Total/NA	Solid	5035	
890-2252-4	BH-46	Total/NA	Solid	5035	
MB 880-25031/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-25031/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-25031/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 25032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2252-10	SW-8	Total/NA	Solid	8021B	25053
890-2252-11	SW-9	Total/NA	Solid	8021B	25053
890-2252-12	SW-10	Total/NA	Solid	8021B	25053
MB 880-25030/5-A	Method Blank	Total/NA	Solid	8021B	25030
MB 880-25053/5-A	Method Blank	Total/NA	Solid	8021B	25053
LCS 880-25053/1-A	Lab Control Sample	Total/NA	Solid	8021B	25053
LCSD 880-25053/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	25053
890-2252-10 MS	SW-8	Total/NA	Solid	8021B	25053
890-2252-10 MSD	SW-8	Total/NA	Solid	8021B	25053

Analysis Batch: 25034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2252-1	BH-43	Total/NA	Solid	8021B	25031
890-2252-2	BH-44	Total/NA	Solid	8021B	25031
890-2252-3	BH-45	Total/NA	Solid	8021B	25031
890-2252-4	BH-46	Total/NA	Solid	8021B	25031
MB 880-25031/5-A	Method Blank	Total/NA	Solid	8021B	25031
LCS 880-25031/1-A	Lab Control Sample	Total/NA	Solid	8021B	25031
LCSD 880-25031/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	25031

Prep Batch: 25053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2252-10	SW-8	Total/NA	Solid	5035	
890-2252-11	SW-9	Total/NA	Solid	5035	
890-2252-12	SW-10	Total/NA	Solid	5035	
MB 880-25053/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-25053/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-25053/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2252-10 MS	SW-8	Total/NA	Solid	5035	
890-2252-10 MSD	SW-8	Total/NA	Solid	5035	

Analysis Batch: 25055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2252-5	BH-47	Total/NA	Solid	8021B	25072
890-2252-6	SW-4	Total/NA	Solid	8021B	25072
890-2252-7	SW-5	Total/NA	Solid	8021B	25072
890-2252-8	SW-6	Total/NA	Solid	8021B	25072

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2252-1
SDG: 12580761

GC VOA (Continued)

Analysis Batch: 25055 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2252-9	SW-7	Total/NA	Solid	8021B	25072
MB 880-25072/5-A	Method Blank	Total/NA	Solid	8021B	25072
LCS 880-25072/1-A	Lab Control Sample	Total/NA	Solid	8021B	25072
LCSD 880-25072/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	25072
890-2252-5 MS	BH-47	Total/NA	Solid	8021B	25072
890-2252-5 MSD	BH-47	Total/NA	Solid	8021B	25072

Prep Batch: 25072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2252-5	BH-47	Total/NA	Solid	5035	
890-2252-6	SW-4	Total/NA	Solid	5035	
890-2252-7	SW-5	Total/NA	Solid	5035	
890-2252-8	SW-6	Total/NA	Solid	5035	
890-2252-9	SW-7	Total/NA	Solid	5035	
MB 880-25072/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-25072/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-25072/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2252-5 MS	BH-47	Total/NA	Solid	5035	
890-2252-5 MSD	BH-47	Total/NA	Solid	5035	

Analysis Batch: 25083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2252-1	BH-43	Total/NA	Solid	Total BTEX	
890-2252-2	BH-44	Total/NA	Solid	Total BTEX	
890-2252-3	BH-45	Total/NA	Solid	Total BTEX	
890-2252-4	BH-46	Total/NA	Solid	Total BTEX	
890-2252-5	BH-47	Total/NA	Solid	Total BTEX	
890-2252-6	SW-4	Total/NA	Solid	Total BTEX	
890-2252-7	SW-5	Total/NA	Solid	Total BTEX	
890-2252-8	SW-6	Total/NA	Solid	Total BTEX	
890-2252-9	SW-7	Total/NA	Solid	Total BTEX	
890-2252-10	SW-8	Total/NA	Solid	Total BTEX	
890-2252-11	SW-9	Total/NA	Solid	Total BTEX	
890-2252-12	SW-10	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 24438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2252-10	SW-8	Total/NA	Solid	8015NM Prep	
890-2252-11	SW-9	Total/NA	Solid	8015NM Prep	
890-2252-12	SW-10	Total/NA	Solid	8015NM Prep	
MB 880-24438/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-24438/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-24438/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Prep Batch: 24439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2252-1	BH-43	Total/NA	Solid	8015NM Prep	
890-2252-2	BH-44	Total/NA	Solid	8015NM Prep	
890-2252-3	BH-45	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2252-1
SDG: 12580761

GC Semi VOA (Continued)

Prep Batch: 24439 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2252-4	BH-46	Total/NA	Solid	8015NM Prep	
890-2252-5	BH-47	Total/NA	Solid	8015NM Prep	
890-2252-6	SW-4	Total/NA	Solid	8015NM Prep	
890-2252-7	SW-5	Total/NA	Solid	8015NM Prep	
890-2252-8	SW-6	Total/NA	Solid	8015NM Prep	
890-2252-9	SW-7	Total/NA	Solid	8015NM Prep	
MB 880-24439/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-24439/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-24439/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2252-1 MS	BH-43	Total/NA	Solid	8015NM Prep	
890-2252-1 MSD	BH-43	Total/NA	Solid	8015NM Prep	

Analysis Batch: 24609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2252-10	SW-8	Total/NA	Solid	8015B NM	24438
890-2252-11	SW-9	Total/NA	Solid	8015B NM	24438
890-2252-12	SW-10	Total/NA	Solid	8015B NM	24438
MB 880-24438/1-A	Method Blank	Total/NA	Solid	8015B NM	24438
LCS 880-24438/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	24438
LCSD 880-24438/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	24438

Analysis Batch: 24611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2252-1	BH-43	Total/NA	Solid	8015B NM	24439
890-2252-2	BH-44	Total/NA	Solid	8015B NM	24439
890-2252-3	BH-45	Total/NA	Solid	8015B NM	24439
890-2252-4	BH-46	Total/NA	Solid	8015B NM	24439
890-2252-5	BH-47	Total/NA	Solid	8015B NM	24439
890-2252-6	SW-4	Total/NA	Solid	8015B NM	24439
890-2252-7	SW-5	Total/NA	Solid	8015B NM	24439
890-2252-8	SW-6	Total/NA	Solid	8015B NM	24439
890-2252-9	SW-7	Total/NA	Solid	8015B NM	24439
MB 880-24439/1-A	Method Blank	Total/NA	Solid	8015B NM	24439
LCS 880-24439/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	24439
LCSD 880-24439/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	24439
890-2252-1 MS	BH-43	Total/NA	Solid	8015B NM	24439
890-2252-1 MSD	BH-43	Total/NA	Solid	8015B NM	24439

Analysis Batch: 24738

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2252-1	BH-43	Total/NA	Solid	8015 NM	
890-2252-2	BH-44	Total/NA	Solid	8015 NM	
890-2252-3	BH-45	Total/NA	Solid	8015 NM	
890-2252-4	BH-46	Total/NA	Solid	8015 NM	
890-2252-5	BH-47	Total/NA	Solid	8015 NM	
890-2252-6	SW-4	Total/NA	Solid	8015 NM	
890-2252-7	SW-5	Total/NA	Solid	8015 NM	
890-2252-8	SW-6	Total/NA	Solid	8015 NM	
890-2252-9	SW-7	Total/NA	Solid	8015 NM	
890-2252-10	SW-8	Total/NA	Solid	8015 NM	
890-2252-11	SW-9	Total/NA	Solid	8015 NM	

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2252-1
SDG: 12580761

GC Semi VOA (Continued)

Analysis Batch: 24738 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2252-12	SW-10	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 24411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2252-1	BH-43	Soluble	Solid	DI Leach	
890-2252-2	BH-44	Soluble	Solid	DI Leach	
890-2252-3	BH-45	Soluble	Solid	DI Leach	
890-2252-4	BH-46	Soluble	Solid	DI Leach	
890-2252-5	BH-47	Soluble	Solid	DI Leach	
MB 880-24411/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-24411/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-24411/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Leach Batch: 24421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2252-6	SW-4	Soluble	Solid	DI Leach	
890-2252-7	SW-5	Soluble	Solid	DI Leach	
890-2252-8	SW-6	Soluble	Solid	DI Leach	
890-2252-9	SW-7	Soluble	Solid	DI Leach	
890-2252-10	SW-8	Soluble	Solid	DI Leach	
890-2252-11	SW-9	Soluble	Solid	DI Leach	
890-2252-12	SW-10	Soluble	Solid	DI Leach	
MB 880-24421/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-24421/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-24421/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 24591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2252-1	BH-43	Soluble	Solid	300.0	24411
890-2252-2	BH-44	Soluble	Solid	300.0	24411
890-2252-3	BH-45	Soluble	Solid	300.0	24411
890-2252-4	BH-46	Soluble	Solid	300.0	24411
890-2252-5	BH-47	Soluble	Solid	300.0	24411
MB 880-24411/1-A	Method Blank	Soluble	Solid	300.0	24411
LCS 880-24411/2-A	Lab Control Sample	Soluble	Solid	300.0	24411
LCSD 880-24411/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	24411

Analysis Batch: 24747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2252-6	SW-4	Soluble	Solid	300.0	24421
890-2252-7	SW-5	Soluble	Solid	300.0	24421
890-2252-8	SW-6	Soluble	Solid	300.0	24421
890-2252-9	SW-7	Soluble	Solid	300.0	24421
890-2252-10	SW-8	Soluble	Solid	300.0	24421
890-2252-11	SW-9	Soluble	Solid	300.0	24421
890-2252-12	SW-10	Soluble	Solid	300.0	24421
MB 880-24421/1-A	Method Blank	Soluble	Solid	300.0	24421
LCS 880-24421/2-A	Lab Control Sample	Soluble	Solid	300.0	24421
LCSD 880-24421/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	24421

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Lab Chronicle

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2252-1
SDG: 12580761

Client Sample ID: BH-43

Date Collected: 04/27/22 09:30

Date Received: 04/27/22 13:41

Lab Sample ID: 890-2252-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	25031	05/07/22 13:16	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25034	05/09/22 13:12	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25083	05/09/22 11:41	MR	XEN MID
Total/NA	Analysis	8015 NM		1			24738	05/03/22 11:44	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	24439	04/28/22 14:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24611	05/02/22 15:04	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	24411	04/28/22 11:37	SC	XEN MID
Soluble	Analysis	300.0		1			24591	05/01/22 23:10	CH	XEN MID

Client Sample ID: BH-44

Date Collected: 04/27/22 09:35

Date Received: 04/27/22 13:41

Lab Sample ID: 890-2252-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	25031	05/07/22 13:16	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25034	05/09/22 13:32	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25083	05/09/22 11:41	MR	XEN MID
Total/NA	Analysis	8015 NM		1			24738	05/03/22 11:44	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	24439	04/28/22 14:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24611	05/02/22 16:09	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	24411	04/28/22 11:37	SC	XEN MID
Soluble	Analysis	300.0		1			24591	05/01/22 23:19	CH	XEN MID

Client Sample ID: BH-45

Date Collected: 04/27/22 09:40

Date Received: 04/27/22 13:41

Lab Sample ID: 890-2252-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	25031	05/07/22 13:16	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25034	05/09/22 13:52	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25083	05/09/22 11:41	MR	XEN MID
Total/NA	Analysis	8015 NM		1			24738	05/03/22 11:44	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	24439	04/28/22 14:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24611	05/02/22 16:31	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	24411	04/28/22 11:37	SC	XEN MID
Soluble	Analysis	300.0		1			24591	05/01/22 23:27	CH	XEN MID

Client Sample ID: BH-46

Date Collected: 04/27/22 09:45

Date Received: 04/27/22 13:41

Lab Sample ID: 890-2252-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	25031	05/07/22 13:16	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25034	05/09/22 14:13	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25083	05/09/22 11:41	MR	XEN MID

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Lab Chronicle

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2252-1
SDG: 12580761

Client Sample ID: BH-46

Lab Sample ID: 890-2252-4

Date Collected: 04/27/22 09:45

Matrix: Solid

Date Received: 04/27/22 13:41

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			24738	05/03/22 11:44	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	24439	04/28/22 14:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24611	05/02/22 16:53	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	24411	04/28/22 11:37	SC	XEN MID
Soluble	Analysis	300.0		1			24591	05/01/22 23:36	CH	XEN MID

Client Sample ID: BH-47

Lab Sample ID: 890-2252-5

Date Collected: 04/27/22 09:50

Matrix: Solid

Date Received: 04/27/22 13:41

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	25072	05/09/22 11:01	MR	XEN MID
Total/NA	Analysis	8021B		1			25055	05/10/22 00:21	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25083	05/09/22 11:41	MR	XEN MID
Total/NA	Analysis	8015 NM		1			24738	05/03/22 11:44	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	24439	04/28/22 14:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24611	05/02/22 17:14	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	24411	04/28/22 11:37	SC	XEN MID
Soluble	Analysis	300.0		1			24591	05/01/22 23:45	CH	XEN MID

Client Sample ID: SW-4

Lab Sample ID: 890-2252-6

Date Collected: 04/27/22 09:55

Matrix: Solid

Date Received: 04/27/22 13:41

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	25072	05/09/22 11:01	MR	XEN MID
Total/NA	Analysis	8021B		1			25055	05/10/22 00:41	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25083	05/09/22 11:41	MR	XEN MID
Total/NA	Analysis	8015 NM		1			24738	05/03/22 11:44	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	24439	04/28/22 14:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24611	05/02/22 17:36	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	24421	04/28/22 11:39	SC	XEN MID
Soluble	Analysis	300.0		1			24747	05/04/22 09:28	CH	XEN MID

Client Sample ID: SW-5

Lab Sample ID: 890-2252-7

Date Collected: 04/27/22 10:00

Matrix: Solid

Date Received: 04/27/22 13:41

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	25072	05/09/22 11:01	MR	XEN MID
Total/NA	Analysis	8021B		1			25055	05/10/22 01:01	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25083	05/09/22 11:41	MR	XEN MID
Total/NA	Analysis	8015 NM		1			24738	05/03/22 11:44	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	24439	04/28/22 14:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24611	05/02/22 17:58	AJ	XEN MID

Eurofins Carlsbad

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2252-1
SDG: 12580761

Client Sample ID: SW-5

Date Collected: 04/27/22 10:00

Date Received: 04/27/22 13:41

Lab Sample ID: 890-2252-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5 g	50 mL	24421	04/28/22 11:39	SC	XEN MID
Soluble	Analysis	300.0		1			24747	05/04/22 09:34	CH	XEN MID

Client Sample ID: SW-6

Date Collected: 04/27/22 10:05

Date Received: 04/27/22 13:41

Lab Sample ID: 890-2252-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	25072	05/09/22 11:01	MR	XEN MID
Total/NA	Analysis	8021B		1			25055	05/10/22 01:22	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25083	05/09/22 11:41	MR	XEN MID
Total/NA	Analysis	8015 NM		1			24738	05/03/22 11:44	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	24439	04/28/22 14:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24611	05/02/22 18:19	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	24421	04/28/22 11:39	SC	XEN MID
Soluble	Analysis	300.0		1			24747	05/04/22 09:41	CH	XEN MID

Client Sample ID: SW-7

Date Collected: 04/27/22 10:10

Date Received: 04/27/22 13:41

Lab Sample ID: 890-2252-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	25072	05/09/22 11:01	MR	XEN MID
Total/NA	Analysis	8021B		1			25055	05/10/22 04:46	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25083	05/09/22 11:41	MR	XEN MID
Total/NA	Analysis	8015 NM		1			24738	05/03/22 11:44	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	24439	04/28/22 14:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24611	05/02/22 18:41	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	24421	04/28/22 11:39	SC	XEN MID
Soluble	Analysis	300.0		1			24747	05/04/22 09:47	CH	XEN MID

Client Sample ID: SW-8

Date Collected: 04/27/22 10:15

Date Received: 04/27/22 13:41

Lab Sample ID: 890-2252-10

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	25053	05/08/22 16:37	MR	XEN MID
Total/NA	Analysis	8021B		1			25032	05/08/22 23:21	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25083	05/09/22 11:41	MR	XEN MID
Total/NA	Analysis	8015 NM		1			24738	05/03/22 11:44	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	24438	04/28/22 13:59	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24609	05/02/22 22:17	BJH	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	24421	04/28/22 11:39	SC	XEN MID
Soluble	Analysis	300.0		1			24747	05/04/22 09:53	CH	XEN MID

Eurofins Carlsbad

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2252-1
SDG: 12580761

Client Sample ID: SW-9

Lab Sample ID: 890-2252-11

Date Collected: 04/27/22 10:20

Matrix: Solid

Date Received: 04/27/22 13:41

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	25053	05/08/22 16:37	MR	XEN MID
Total/NA	Analysis	8021B		1			25032	05/08/22 23:46	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25083	05/09/22 11:41	MR	XEN MID
Total/NA	Analysis	8015 NM		1			24738	05/03/22 11:44	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	24438	04/28/22 13:59	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24609	05/02/22 22:39	BJH	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	24421	04/28/22 11:39	SC	XEN MID
Soluble	Analysis	300.0		1			24747	05/04/22 10:00	CH	XEN MID

Client Sample ID: SW-10

Lab Sample ID: 890-2252-12

Date Collected: 04/27/22 10:25

Matrix: Solid

Date Received: 04/27/22 13:41

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	25053	05/08/22 16:37	MR	XEN MID
Total/NA	Analysis	8021B		1			25032	05/09/22 00:10	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25083	05/09/22 11:41	MR	XEN MID
Total/NA	Analysis	8015 NM		1			24738	05/03/22 11:44	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	24438	04/28/22 13:59	DM	XEN MID
Total/NA	Analysis	8015B NM		1			24609	05/02/22 23:00	BJH	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	24421	04/28/22 11:39	SC	XEN MID
Soluble	Analysis	300.0		1			24747	05/04/22 10:06	CH	XEN MID

Laboratory References:

XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Carlsbad

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2252-1
SDG: 12580761

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2252-1
SDG: 12580761

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: GHD Services Inc.
Project/Site: Romeo Federal 22 Battery

Job ID: 890-2252-1
SDG: 12580761

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2252-1	BH-43	Solid	04/27/22 09:30	04/27/22 13:41	43
890-2252-2	BH-44	Solid	04/27/22 09:35	04/27/22 13:41	44
890-2252-3	BH-45	Solid	04/27/22 09:40	04/27/22 13:41	45
890-2252-4	BH-46	Solid	04/27/22 09:45	04/27/22 13:41	46
890-2252-5	BH-47	Solid	04/27/22 09:50	04/27/22 13:41	47
890-2252-6	SW-4	Solid	04/27/22 09:55	04/27/22 13:41	4
890-2252-7	SW-5	Solid	04/27/22 10:00	04/27/22 13:41	5
890-2252-8	SW-6	Solid	04/27/22 10:05	04/27/22 13:41	6
890-2252-9	SW-7	Solid	04/27/22 10:10	04/27/22 13:41	7
890-2252-10	SW-8	Solid	04/27/22 10:15	04/27/22 13:41	8
890-2252-11	SW-9	Solid	04/27/22 10:20	04/27/22 13:41	9
890-2252-12	SW-10	Solid	04/27/22 10:25	04/27/22 13:41	10



Page 1 Of 2

Lakeland, Florida (863-646-8526)

Stafford, Texas (281-240-4200)

Dallas Texas (214-902-0300)

Service Center - San Antonio, Texas (210-509-3334)

www.xenco.com

Xenco Quote

Xenco Job #

Tampa, Florida (813-620-2000)

[illegible]



Setting the Standard since 1990
Stafford, Texas (281-240-4200)

Dallas Texas (214-902-0300)

Service Center - San Antonio, Texas (210-509-3334)

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CHAIN OF CUSTODY
Page 2 of 2

Page 7 of 7

Odessa, Texas (432-563-1800)

Norcross, Georgia (770-449-8800)

Lakeland, Florida (863-646-8526)
Tampa, Florida (813-620-2000)

5/11/2022

Service Center - San Antonio, Texas (210-509-3334)

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Xenco Quote #

Xenco Job #

Client / Reporting Information		Project Information		Analytical Information		Matrix Codes									
Company Name / Branch: GHD/Midland Company Address: 2135 S. Loop 280 West Midland TX		Project Name/Number: Romeo Federal 22 Battery / 12580761 Project Location: Eddy County, New Mexico													
Email: becky.haskell@ghd.com Phone No: (432)250-7917 Matthew.laughlin@ghd.com Zach.comino@ghd.com Nikki.mishler@cddevinc.com tom.larson@ghd.com Project Contact: Becky Haskell / Glenn Quinney		Invoice To: Centennial Resource Development, Inc / Nikki Mishler PO Number: NA													
Sampler's Name: Zach Comino															
No.	Field ID / Point of Collection	Collection	Number of preserved bottles					Field Comments							
		Sample Depth	Date	Time	Matrix	# of bottles	HCl		NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE
1	SW-9		4/27/22	1020	S	1									
2	SW-10		4/27/22	1025	S	1									
3															
4															
5															
6															
7															
8															
9															
10															
Turnaround Time (Business days)															
☐ Same Day TAT ☒ 5 Day TAT ☐ Next Day EMERGENCY ☐ 7 Day TAT ☐ 2 Day EMERGENCY ☐ Contract TAT ☐ 3 Day EMERGENCY		☐ Level II Sid QC ☐ Level III Sid QC+ Forms ☐ TRRP Level IV ☐ Level 3 (CLP Forms) ☐ TRRP Checklist		☐ Level IV (Full Data Pkg /raw data) ☐ TRRP Level IV ☐ UST / RG -411		☐ TRRP Checklist ☐ UST / RG -411		☐ TRRP Checklist ☐ UST / RG -411		☐ TRRP Checklist ☐ UST / RG -411		☐ TRRP Checklist ☐ UST / RG -411		☐ TRRP Checklist ☐ UST / RG -411	
TAT Starts Day received by Lab, if received by 5:00 pm		Report MDLs and J values.													
Relinquished by Sample:		Relinquished by:		Relinquished By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:	
Relinquished by:		Relinquished by:		Relinquished By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:	
Relinquished by:		Relinquished by:		Relinquished By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:	
Relinquished by:		Relinquished by:		Relinquished By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:	
Relinquished by:		Relinquished by:		Relinquished By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:	
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Relinquished by:		Relinquished by:		Relinquished By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:	
Relinquished by:		Relinquished by:		Relinquished By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:	
Relinquished by:		Relinquished by:													

Eurofins Carlsbad

1089 N Canal St.
Carlsbad NM 88220
Phone: 575-988-3199 Fax 575-988-3199

Chain of Custody Record



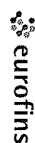
Environment Testing
America

Client Information (Sub Contract Lab)		Sampler	Lab PM	Carrier Tracking No(s)	COG No:
Client Contact:		Phone:	Simmons Debbie		890-731 1
Shipping/Receiving		E-Mail:	Debbie.Simmons@eurofins.com	State of Origin	Page: 1 of 2
Company		Accreditations Required (See note)		NEIAP - Louisiana NEIAP - Texas	Page 1 of 2
Address		Due Date Requested	Analysis Requested		Job #
1211 W Florida Ave		5/3/2022			890-2252-1
City	Midland	TAT Requested (days)	Preservation Codes		
State Zip	TX, 79701		A HCL B NaOH C - Zn Acetate D Nitric Acid E NaHSO4 F MeOH G Ammonia H Ascorbic Acid I Ice J DI Water K EDTA L EDA M Hexane N None O AsNaO2 P Na2OAS Q Na2SO3 R Na2S2O3 S H2SO4 T TSP Dodecylaldehyde U Acetone V MCAA W pH 4-5 Z other (specify)		
Phone	432-704-5440(Tel)	PO #:			
Email		WO #:			
Project Name	Romeo Federal 22 Battery	Project #:			
Site	SSOW#	88001187			
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=Water, S=solid, O=wastewater, BT=Tissue A=Air)
BH-43 (890-2252-1)	4/27/22	09 30	Mountain	Solid	
BH-44 (890-2252-2)	4/27/22	09 35	Mountain	Solid	
BH-45 (890-2252-3)	4/27/22	09 40	Mountain	Solid	
BH-46 (890-2252-4)	4/27/22	09 45	Mountain	Solid	
BH-47 (890-2252-5)	4/27/22	09 50	Mountain	Solid	
SW-4 (890-2252-8)	4/27/22	09 55	Mountain	Solid	
SW-5 (890-2252-7)	4/27/22	10 00	Mountain	Solid	
SW-6 (890-2252-8)	4/27/22	10 05	Mountain	Solid	
SW-7 (890-2252-9)	4/27/22	10 10	Mountain	Solid	
Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon out subcontracted laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analyte(s)/method, being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to Eurofins Environment Testing South Central, LLC.					
Possible Hazard Identification					
Unconfirmed					
Deliverable Requested I II III IV Other (specify)		Primary Deliverable Rank 2		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
				☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months	
Empty Kit Relinquished by:		Date	Time	Method of Shipment:	
Relinquished by: <i>Joe Ay</i>		Date/Time: <i>4.27.22</i>	Company:	Received by: <i>Steve</i>	
Relinquished by:		Date/Time:	Company:	Received by: <i>Steve</i>	
Relinquished by:		Date/Time:	Company:	Received by: <i>Steve</i>	
Custody Seals Intact: ☐ Yes ☐ No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks	
				15/1.3 -2 IPB	

Eurofins Carlsbad

1089 N Canal St
Carlsbad NM 88220
Phone: 575-988-3199 Fax: 575-988-3199

Chain of Custody Record



Environment Testing America

[illegible]

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 890-2252-1

SDG Number: 12580761

Login Number: 2252

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 890-2252-1

SDG Number: 12580761

Login Number: 2252**List Number: 2****Creator: Rodriguez, Leticia****List Source: Eurofins Midland****List Creation: 04/28/22 10:30 AM**

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

Appendix D

Confirmation Sampling Notifications

Becky Haskell

From: Becky Haskell
Sent: Thursday, April 14, 2022 2:31 PM
To: 'OCDOnline@state.nm.us'
Cc: nikki.mishler@cdevinc.com; Zach Comino; Becky Haskell
Subject: Romeo Federal 22 Battery 1 (nAPP2208051921 Sampling Notification)

DISABLEFILINGSTA10

To Whom it May Concern,

GHD on behalf of Centennial Resource Production, Inc., respectfully submits notification of sampling to be conducted at the below location.

Romeo Federal 22 Battery 1
D-22-24S-34E
Lea County, NM
nAPP2208051921

Sampling will begin at 1:45 p.m. on Tuesday, April 19, 2022 and will be continuous through Friday, April 22, 2022.

Thank You,

Thank You,

Becky Haskell
Senior Project Manager

GHD
Proudly employee owned | ghd.com
2135 S. Loop 250 West, Midland, Texas 79703
D 432-686-0086 M 432-250-7917 E becky.haskell@ghd.com

➔ **The Power of Commitment**

Connect



Please consider the environment before printing this email

Becky Haskell

From: Becky Haskell
Sent: Friday, April 22, 2022 10:42 AM
To: OCDOnline@state.nm.us
Cc: nikki.mishler@cdevinc.com
Subject: FW: Romeo Federal 22 Battery 1 (nAPP2208051921 Sampling Notification)

DISABLEFILINGSTA10

To Whom it May Concern,

Excavation and sampling activities have not been completed and will continue into next week. We will continue to collect confirmation samples on Monday and continue through the week. Please let me know if you have any questions.

Thank You,

Becky Haskell
Senior Project Manager

GHD
Proudly employee owned | ghd.com
2135 S. Loop 250 West, Midland, Texas 79703
D 432-686-0086 M 432-250-7917 E becky.haskell@ghd.com

➔ **The Power of Commitment**

Connect



Please consider the environment before printing this email

From: Becky Haskell
Sent: Thursday, April 14, 2022 2:31 PM
To: 'OCDOnline@state.nm.us' <OCDOnline@state.nm.us>
Cc: nikki.mishler@cdevinc.com; Zach Comino <Zach.Comino@ghd.com>; Becky Haskell <Becky.Haskell@ghd.com>
Subject: Romeo Federal 22 Battery 1 (nAPP2208051921 Sampling Notification)

To Whom it May Concern,

GHD on behalf of Centennial Resource Production, Inc., respectfully submits notification of sampling to be conducted at the below location.

Romeo Federal 22 Battery 1
D-22-24S-34E
Lea County, NM
nAPP2208051921

Sampling will begin at 1:45 p.m. on Tuesday, April 19, 2022 and will be continuous through Friday, April 22, 2022.

Thank You,

Thank You,

Becky Haskell
Senior Project Manager

GHD

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District III

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Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

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Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 117478

CONDITIONS

Operator: CENTENNIAL RESOURCE PRODUCTION, LLC 1001 17th Street, Suite 1800 Denver, CO 80202	OGRID: 372165
	Action Number: 117478
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Remediation Plan Approved. Please request Deferral in final Remediation Summary Report once excavation activities have been completed.	6/22/2022