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	NAPP2315345615
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party **Halliburton Energy Services, Inc.**	OGRID
Contact Name **James McGinty**	Contact Telephone **1-281-575-4428**
Contact email **jim.mcginty@halliburton.com**	Incident # *(assigned by OCD)*
Contact mailing address **3000 N. Sam Houston Pkwy, E. Houston, TX 77032**	

Location of Release Source

Latitude **32.81393** Longitude **-104.39458**
(NAD 83 in decimal degrees to 5 decimal places)

Site Name **Artesia Field Camp**	Site Type **Oilfield Industry**
Date Release Discovered **August 21, 2020**	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
M	**28**	**17 South**	**26 East**	**Eddy County**

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (*Name:* ***Halliburton Energy Services, Inc.***)

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)	Volume Recovered (bbls)
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	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) **Unknown**	Volume/Weight Recovered (provide units) **N/A**

Cause of Release

Historical leakage from Acid Neutralization tanks near Building 5.

Site address: 2311 S. 1st Street, Artesia, New Mexico 88210

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2315345615
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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?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

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: **James McGinty** Title: **Project Manager**

Signature: _____ Date: **10/6/2022**

email: **jim.mcginty@halliburton.com** Telephone: **1-281-575-4428**

OCD Only

Received by: Jocelyn Harimon Date: 06/05/2023

Incident ID	NAPP2315345615
District RP	
Facility ID	
Application ID	

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?	**10-20** (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 ½-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.

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2315345615
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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: **James McGinty** Title: **Project Manager**

Signature: _____ Date: **10/6/2022**

email: **jim.mcginty@halliburton.com** Telephone: **1 281-575-4428**

OCD Only

Received by: Jocelyn Harimon Date: 06/05/2023

Incident ID	NAPP2315345615
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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: **James McGinty** Title: **Project Manager**

Signature: _____ Date: **10/6/2022**

email: **jim.mcginty@halliburton.com** Telephone: **1-281-575-4428**

OCD Only

Received by: Jocelyn Harimon Date: 06/05/2023

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

Signature: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☐ Description of remediation activities

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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: **James McGinty** Title: **Project Manager**

Signature: _____ Date: **8/11/2022**

email: **jim.mcginty@halliburton.com** Telephone: **1-281-575-4428**

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

Remedial Construction Work Plan Addendum

Artesia NM Field Camp Facility
2311 S. 1st Street, Artesia, New Mexico

Halliburton Energy Services, Inc.

April 13, 2023

→ The Power of Commitment

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Figure index

Figure 1 Vicinity Map
Figure 2 Site Plan
Figure 3 Proposed Excavation Limits

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1. Introduction

GHD Services Inc. (GHD) is pleased to submit this Remedial Construction Work Plan Addendum (Addendum) to the New Mexico Oil Conversation Division (NMOCD) on behalf of Halliburton Energy Services, Inc. (Halliburton) for the Artesia Field Camp Facility (Site/Facility). The Site is located at 2311 S. 1st Street, Artesia, New Mexico, Unit M, Section 28, Township 17 South, Range 26 East, in Eddy County. This Addendum is being submitted to the NMOCD for review and comment, based on the February 23, 2023, conference call discussion of the Remedial Construction Work Plan dated October 18, 2022, between the NMOCD, Halliburton, and GHD. Halliburton and GHD will implement the Addendum once the NMOCD provides written approval to proceed, in accordance with the project schedule provided herein. A vicinity map of the Site is shown on Figure 1. A Site plan is presented on Figure 2.

1.1 Background

GHD completed a Phase I Environmental Site Assessment (ESA) of the Site on June 10, 2020. Halliburton formerly utilized the Site to service the oilfield industry. The Phase I ESA completed by GHD revealed the evidence of potential Recognized Environmental Conditions (RECs) in connection with the Site, as described below:

– Soil Impacts from Former Below Grade Tanks.
– Likely Release(s) related to Wash Bays, Grit Pit, and Associated Oil and Water Separators (OWS).
– Likely Release(s) related to Sumps with Standing Fluids.

One additional REC, groundwater impact from Former Gasoline and Diesel Fuel Leaking Underground Storage Tanks (LUSTs) was identified during the Phase I ESA, but was not included as part of the Phase II investigation since the release is already being managed and regulated by the New Mexico Environmental Department (NMED), Petroleum Storage Tank Bureau (PSTB). Approval from NMED was subsequently received to plug and abandon active monitor wells on Site. Results and pertinent communications between Halliburton and NMED regarding groundwater impacts on Site have been provided to NMOCD in a separate transmittal.

GHD further characterized the Site through the implementation of a Phase II ESA in accordance with Table 1, Closure Criteria for Soils Impacted by a Release, from New Mexico Administrative Code (NMAC) Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12). The results of the Phase II ESA identified impacts in the following three areas (Constituents of Concern noted below):

– ***Area 1*** - The former acid neutralization tanks, near Building 5 (Constituents of Concern [COCs]: Total petroleum hydrocarbons [TPH], and chloride).
– ***Area 2*** - The northern end of the eastern wash bay, west of Building 6 (COCs: TPH and chloride).
– ***Area 3*** - Three sumps located within Building 6 and the area north of the ice room sump of Building 6 (COCs: TPH).

The three areas fall under the jurisdiction of the NMOCD District 2 office in Artesia, New Mexico. A figure depicting each of these areas is included on Figure 3. Closure Criteria for Soils Impacted by a Release are to be assessed and remediated per NMAC Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) in accordance with the following criteria:

– Total Concentrations of TPH by the United States Environmental Protection Agency (EPA) Method 8015 (modified) at a level of 100 milligrams per kilogram (mg/kg) or less.
– Concentrations of chloride by EPA Method 300.0 at a level of 600 mg/kg or less.

In addition, metals concentrations will be assessed and remediated in Areas 1 through 3 during remedial construction activities. Metals will be assessed and remediated in accordance with the following criteria:

– Resource Conservation/Recovery Act (RCRA) 8 Metals by EPA Method 6010 to NMED Table 1-A Soil Screening Levels.

During a conference call with the NMOCD on May 19, 2021, it was suggested that monitor well MW-7 be abandoned and the area around the well excavated to address residual soil impacts associated with two 6,000-gallon gasoline Underground Storage Tanks (USTs) and one 10,000-gallon diesel UST, which were removed in 1990. Impacts associated with the former UST system are currently managed under the NMED PSTB Facility No. 28540, Release No. 326. While impact associated with the former USTs fall under the jurisdiction of the NMED PSTB, a pathway to closure was discussed during this call and the NMOCD indicated that the NMED PSTB is in alignment with the proposed remedial action. The remedial work associated with the USTs was discussed further with both NMOCD and NMED PSTB on September 8, 2021, and it was acknowledged that although the work would likely facilitate increased removal of mass and degradation of residual hydrocarbons present in soil, it is unknown if the effort would help facilitate the reversal of the anerobic and oxidative state of the subsurface that is likely causing iron and manganese to dissolve into groundwater elevating those constituents to above the New Mexico Water Quality Control Commission (NMWQCC) standards.

It is also understood that the work in the area of the former USTs would be at the expense of Halliburton and done on a voluntary basis. If reimbursement is to be pursued for the work, Halliburton would need to address the work with an independent work plan to be approved by the New Mexico Corrective Action Fund. Therefore, excavation of petroleum hydrocarbon impacted soils associated with the former USTs is not included in this Addendum.

2. Remedial Construction Work Plan

The current remedial approach for the Site consists of soil excavation to address approximately 4,849 cubic yards (cy) of impacted soil material not associated with the LUST REC. Excavation activities will be performed in the Site areas immediately adjacent to the source areas exhibiting elevated COC concentrations. The recommended approximate areas of excavation are provided on Figure 3. Note: The areas of excavation are approximate and may be modified during the excavation activities based on soil conditions including soil staining and soil vapor concentrations.

2.1 Rationale for Excavation Limits

The purpose of the remedial excavation is to remove the shallow (less than 12 foot deep) impacted by TPH and chloride (where applicable). The excavation limits are an estimate based on data collected during the Phase II ESA in accordance with the previously cited closure criteria of TPH at a level of 100 mg/kg or less, chloride concentrations at 600 mg/kg or less, and metals concentrations at or below NMED Table 1-A Soil Screening Levels. The approximate volume to be excavated from each area is tabulated below:

- ***Area 1*** - 1050 cy.
- ***Area 2*** - 467 cy.
- ***Area 3*** - 3332 cy.

The 12-foot excavation limit may be exceeded in Area 3 where TPH was detected at 20 feet below grade (Ice Room Sump) and in Area 1 where TPH was detected 12 feet below grade (center of Area 1 excavation), where technically practicable, however, excavation activities will not exceed 14 feet below ground surface (ft bgs), as groundwater may be present at that depth. Excavation activities will not be conducted below the groundwater bearing zone. COC impact detected at depths exceeding the 14-ft maximum excavation depth will be addressed through alternate methods, which will be detailed in a separate document. Excavation limits will be guided further by field and analytical testing as described below.

Soil sample headspace readings will be analyzed with a calibrated portable Photoionization Detector (PID) to assist in guiding the extent of the excavation areas; however due to the nature and age of the hydrocarbons on-Site, PID readings may not be as reliable as expected and will be confirmed by laboratory analysis of TPH. In areas where chlorides are anticipated, soil samples will be field screened for chloride using Hach Chloride Test Strips or a portable

calibrated electrical conductivity meter to guide the extent of excavation, but will also be confirmed by laboratory analysis.

2.2 Notification and Permitting

GHD and/or the excavation contractor will perform required regulatory notifications and obtain the required permits from the various agencies, as necessary, prior to proceeding with the proposed excavation.

2.3 Utility Location and Clearance

GHD will mark the proposed excavation extents in white and will notify New Mexico OneCall a minimum of 48 hours prior to initiating the excavation activities. A private utility location survey will also be completed by a licensed surveyor in the state of New Mexico prior to initiating the field work.

2.4 Soil Management Plan

GHD will prepare a soils management plan prior to performing the remedial excavation, for use throughout remedial construction. The soils management plan will describe the technical approach to be utilized during the excavation, handling, stockpiling, transportation, disposal, sampling, and monitoring of the impacted soils.

2.5 Excavation Methodology

GHD will implement the excavation in the following steps:

- GHD will oversee the mobilization and setup of secure fencing around the work zone, as needed for safety purposes.
- To prevent the excavated sidewalls from collapsing and provide safety to the workers, the limits of the proposed excavations will be properly sloped, as required. Soil will be removed using an excavator and will be stockpiled on plastic sheeting prior to being containerized for off-Site disposal. A composite soil sample of the excavated soil will be collected, as described in the analytical program section of this report:
  - If soil analytical concentrations are at or below 100 mg/kg for TPH, at or below 600 mg/kg for chloride, and at or below NMED Table 1-A criteria for RCRA 8 Metals, the soil will staged on-Site and subsequently used as backfill.
  - If soil analytical concentrations are above 100 mg/kg for TPH, above 600 mg/kg for chloride, and/or above NMED Table 1-A criteria for RCRA 8 Metals the soil will be containerized, profiled, and transported to an approved licensed and permitted oilfield waste landfill or land farm under NMOCD Form C-138.
  - Additionally, impacted soil around acid neutralization holding tanks, or areas used for bulk mixing and acidizing (such as, wash bays, grit pit, and associated oil/water separators), will be field tested for pH.
  - It is anticipated that the construction/transport subcontractor will provide copies of manifests and weight tickets to GHD at end of load out activities for reporting.
- If during the course of excavation activities rock refusal is encountered, a hydraulic vacuum or similar device will be utilized to clean any impacted soil overlaying the rock. A rotary drill will then be utilized to drill into the rock to a depth of approximately 18 to 24 inches. Sample cuttings will be submitted to a lab for impact, and to ensure fluids did not infiltrate the rock.
- Should groundwater be exposed during excavation, temporary monitoring wells will be installed after remedial activities, if needed, for further groundwater sample collection and evaluation.
- Material waiting for analytical results will be staged over poly sheeting and will be securely covered at the end of each workday.
- If material is designated for disposal, GHD's contractor will load the soil into the approved transporter's trucks and perform dust suppression and management of the trucks during load-out activities.

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2.6 Analytical Program

Various soil samples will be collected for analytical laboratory analysis throughout the course of the remedial construction. Soil samples collected for laboratory analysis will be analyzed by a licensed and accredited laboratory in the state of New Mexico. The soil samples to be collected are described in the following section.

2.6.1 Excavation Limits and Closure Sampling

- ***Excavation Limits***: To guide the limits of soil excavation activities, periodic soil sampling will be completed along the sidewall and base of the excavation to evaluate soil concentrations relative to applicable criteria. This sampling is in addition to NMOCD required closure sampling as it is assumed that some of the "excavation limits" soil results will be above applicable criteria, indicating that the limits of the excavation have not been reached. The number of "excavation limits" samples are to be determined based upon the size and extent of the excavation during construction.
  - Sidewall samples will be delineated and/or excavated to 600 mg/kg for chlorides, 100 mg/kg for TPH, and NMED Table 1-A criteria for RCRA 8 Metals, to define the excavation limits.
- ***Closure Sampling***: Composite closure soil samples will be collected every 200 square feet (sf) from the excavation sidewalls and bottom in accordance with NMOCD Closure Criteria for Soils Impacted by a Release.

Excavation limit and closure samples will be analyzed for:

- Total Concentrations of TPH by EPA Method 8015 (modified).
- Concentrations of chloride by EPA Method 300.0.
- RCRA 8 Metals by EPA Method 6010.

2.6.2 Excavated Soil Waste Profile Sampling

Composite excavated soil samples will be collected every 500 cy for waste classification, profiling, and disposal purposes. Composite excavated soil samples will be collected and analyzed in accordance with the receiving facilities profile sampling requirements and may include the following analysis:

- TPH by Method 8015.
- Concentrations of chloride by EPA Method 300.0.
- RCRA Metals.
- Toxicity by Bioassay.
- Ignitability by EPA Method 1010.
- Corrosivity by EPA Method 9040.

Excavated soil material will be disposed of at an appropriate licensed and permitted landfill under the appropriate waste manifest. If any of the analytical results indicate that the excavated soils are classified as hazardous waste, the hazardous soils will be disposed of at an appropriate licensed and permitted landfill under the appropriate waste manifest.

2.7 Backfill of the Remedial Excavation

Once closure soil sampling has been completed and results indicate impacted soil has been sufficiently excavated to the extent practical, the remedial excavation will be backfilled. Clean fill will be transported on-Site, placed and compacted with standard industry heavy equipment (excavator, wheel loader, sheepsfoot). The backfill material will be placed in lifts up to 8-inches thick, soil moisture conditioned, and wheel-rolled with a front-end loader for compaction. Compaction testing will be performed during backfill to confirm the soil is at 90 percent relative compaction. Clean fill material will be used for backfill to approximately 2 feet from the ground surface. The top 2 feet of the excavation will be backfilled and compacted with Class II road-base material. Prior to backfilling, a metal liner will be placed within the

grit pit and smaller holding tanks within the fiberglass OWS tanks to allow for secondary containment and leak detection.

2.8 Field Documentation

Field documentation will include the following:

- Field notes describing field observations, Site conditions and features, excavation layout, sample collection points, and the general description of the Site excavation activities.
- Photographs, a description of each photograph, to include cardinal direction, global positioning system (GPS) coordinates of the photo location, and field feature location.

2.9 Health and Safety

GHD will utilize a Site-Specific Health and Safety Plan (HASP) to protect the safety of their employees and subcontractors. At the beginning of each day of fieldwork, a brief joint safety meeting will be held. During this meeting, the field team will describe the activities to be implemented that day, identify the safety hazards, remind employees of important safety procedures, and comment on safety issues identified the previous day.

2.10 Reporting

At the conclusion of remedial construction activities, a Remedial Construction Completion Report will be prepared by GHD on behalf of Halliburton for submittal to the NMOCD. The Remedial Construction Completion Report will be submitted to the NMOCD within 90 days of completing the remedial construction activities, and will contain, at a minimum, the following:

- A description of the remedial construction activities.
- A Site Plan providing detailed excavation limits.
- Soil sampling results and analysis including analytical laboratory reports.
- Waste documentation including waste manifests.
- A photographic log.

2.11 Project Schedule

Remedial construction will commence within 30-days of written authorization to proceed from the NMOCD. Should permitting be required prior to remedial construction activities, permit applications will be submitted within 10-days of written authorization to proceed from the NMOCD, and remedial construction activities will commence within 30-days of permit issuance. Halliburton is currently in the process of selling this property and will need to complete this remedial action before the buyer takes possession of the property. Halliburton expects the review and approval to be completed within 60 days of receipt of this Addendum.

In light of recent concerns regarding the spread of COVID-19 and the elevated pandemic status of COVID-19, there may be unpredictable events, disruptions, and consequences (as a result of actions by government or other third parties) that affect GHD's ability to provide the services or to provide the services within expected timeframes. Currently, GHD believes that the Halliburton project can be delivered before or on time, but any effects resulting from a related delay to our services is unquantifiable at this time and not included in this proposal. GHD will keep Halliburton informed of any potential impacts and delays, should they occur, and will explore alternative and practicable delivery strategies to minimize any impact and delay. The health and safety of our people, and the clients and communities we work with, remains our number one priority, and GHD is taking all prudent measures to prevent the spread of COVID-19 in the community.

Remedial construction activities including mobilization, private utility location, soil excavation and sampling, transport and disposal of excavated soils, backfilling, and well installation are estimated to take approximately 25 business days. A summary of the remedial construction activities anticipated timeframe is provided below.

– Private utility location (including mobilization/demobilization): 2 days.
– Excavation, backfill, waste disposal and manifesting, well installation and development, mobilization/demobilization: 23 days.

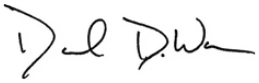
The project schedule may change based on written agreements between the NMOCD and Halliburton.

If you have any questions or require clarification regarding our submission, please do not hesitate to contact Zachary J. Al-Marhoun directly at (225) 952-2944 or via e-mail at Zach.AlMarhoun@GHD.com**.**

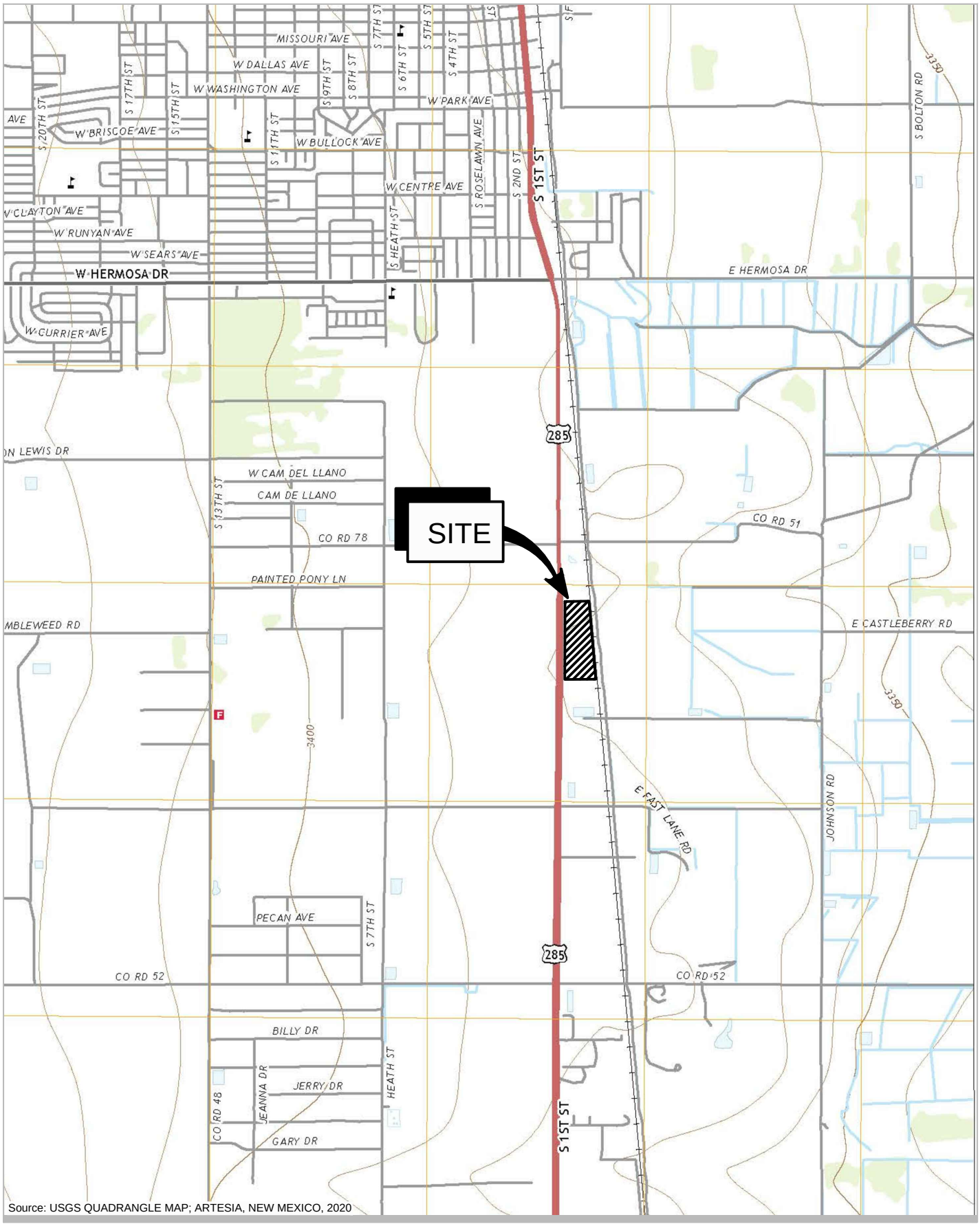
All of Which is Respectfully Submitted,

GHD

Zachary J. Al-Marhoun



Daniel D. Wascom



Source: USGS QUADRANGLE MAP; ARTESIA, NEW MEXICO, 2020

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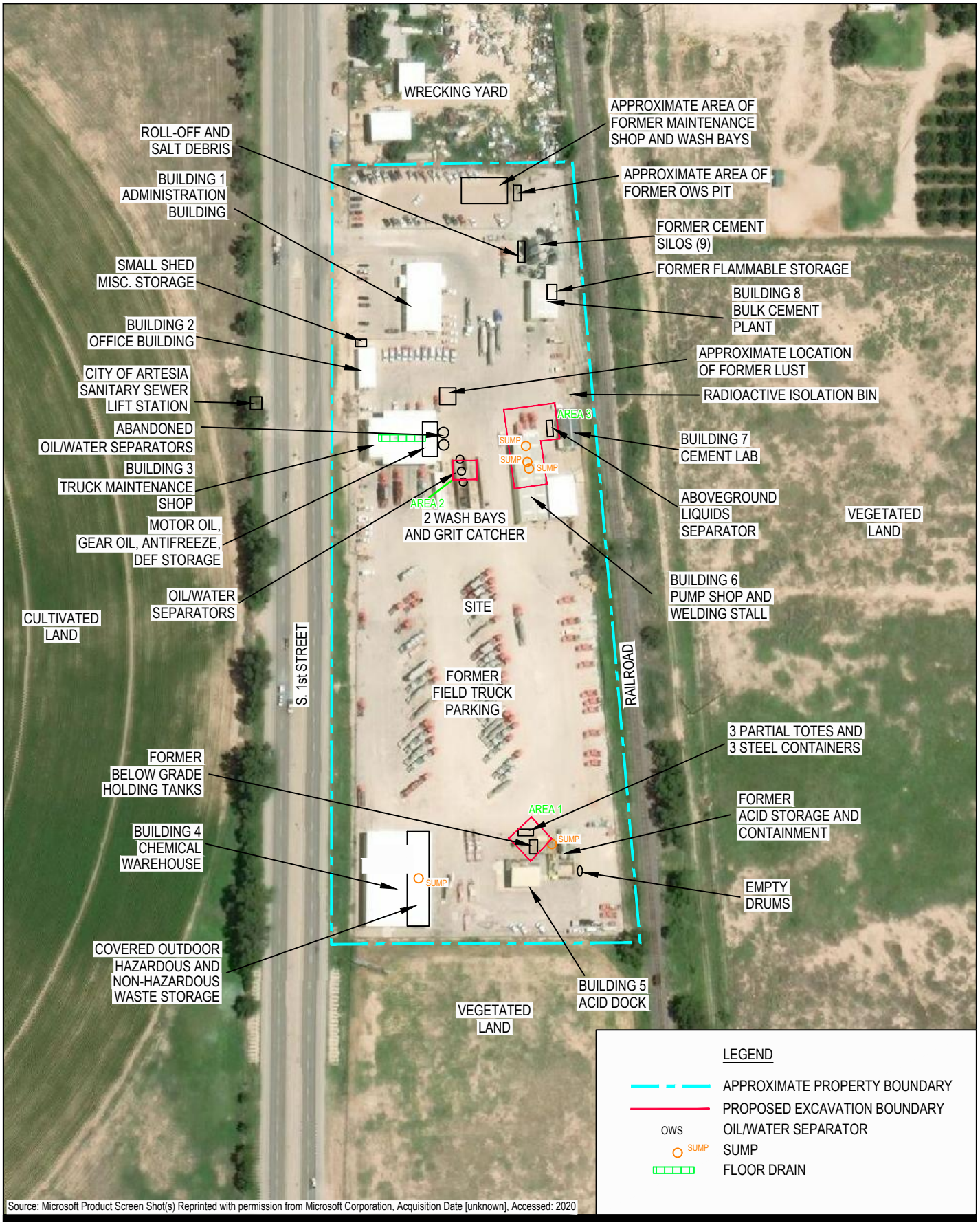
HALLIBURTON ENERGY SERVICES
ARTESIA SOUTH FIELD CAMP
2311 S. 1st STREET
ARTESIA, NEW MEXICO

Project No. **11213301**
Date **June 2020**

SITE LOCATION

FIGURE 1

Filename: N:\US\Baton Rouge\Projects\562\11213301\Digital_Design\ACAD 2018\Figures\RPT-008PH1\111213301-08(RPT-008ARTESIANEWMEXICO)GN-DE001.dwg



Source: Microsoft Product Screen Shot(s) Reprinted with permission from Microsoft Corporation, Acquisition Date [unknown], Accessed: 2020

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Coordinate System: STATE PLANE NM-NAD83

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GHD

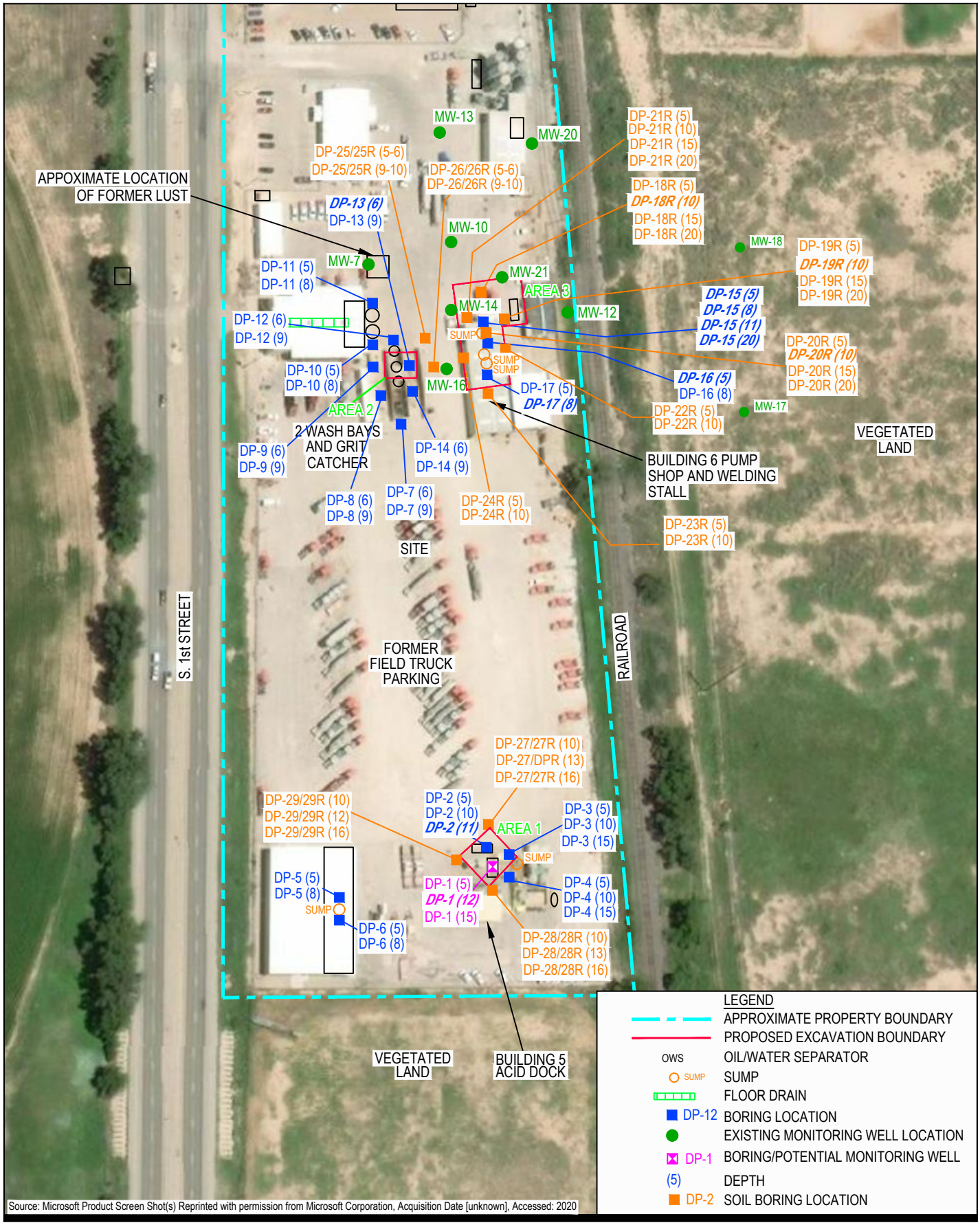
HALLIBURTON ENERGY SERVICES
ARTESIA FIELD CAMP
2311 S. 1st STREET
ARTESIA, NEW MEXICO

Project No. **11231036**
Date **October 2022**

SITE PLAN

FIGURE 2

Filename: N:\US\Albuquerque\Projects\562\11231036\Digital_Design\EN\ACAD\Sheets\PRO-001\11231036-GHD-00-00-PRO-EN-D102_DE-001.dwg



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Coordinate System: STATE PLANE NM-NAD83

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GHD

HALLIBURTON ENERGY SERVICES
ARTESIA FIELD CAMP
2311 S. 1st STREET
ARTESIA, NEW MEXICO

Project No. 11231036
Date October 2022

PROPOSED EXCAVATION LIMITS

FIGURE 3

Filename: N:\US\Albuquerque\Projects\562\11231036\Digital_Design\EN\ACAD\Sheets\PRO-001\11231036-GHD-00-00-PRO-EN-D101_DE-001.dwg

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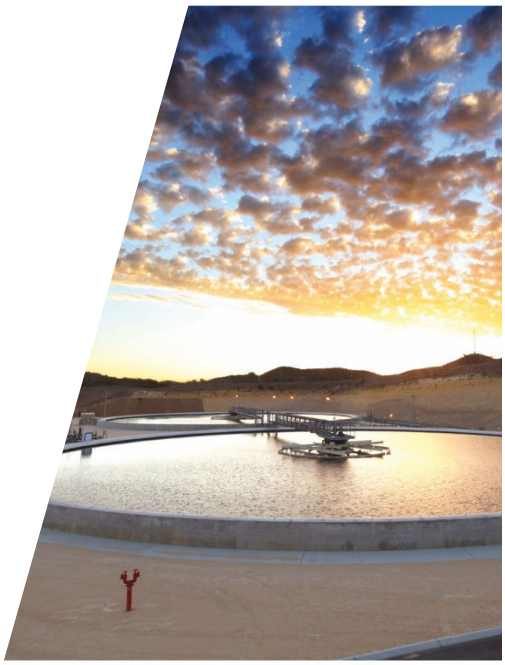
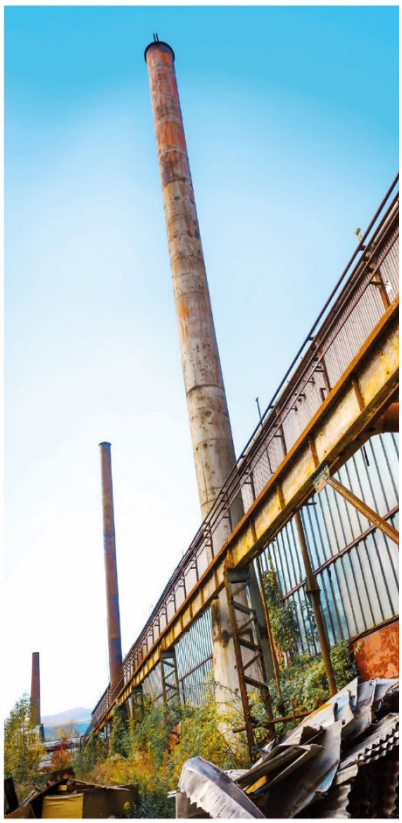


Site Characterization and Deliniation Report

Artesia Field Camp
2311 South 1st Street
Artesia, New Mexico

March 12, 2021

Halliburton Energy Services, Inc.



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Appendix C Photographs
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Appendix E Phase II Report
Appendix F Groundwater Laboratory Analytical Data

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1. Introduction

GHD Services, Inc. (GHD), on behalf of Halliburton Energy Services (Halliburton), submits this Site Characterization and Delineation Report to the New Mexico Oil Conservation Division (NMOCD) District 2 Office and the New Mexico Environment Department (NMED). This Site Characterization and Delineation Report provides documentation of sampling, analyses, and delineation activities in the affected areas at the Halliburton Artesia Field Camp facility at 2311 South 1st Street in Artesia, Eddy County, New Mexico (Site). The Site location is provided on **Figure 1**. Site details are shown on **Figure 2**.

2. Background

GHD completed a Phase I ESA of the Site on June 10, 2020. Halliburton formerly utilized the Site to service the oilfield industry. The Phase I ESA completed by GHD revealed the evidence of potential Recognized Environmental Conditions (RECs) in connection with the Site, as described below:

- **Soil Impacts from Former Below Grade Tanks:** Based on the review of reasonably ascertainable information, two 5,000-gallon below grade acid neutralization holding tanks were removed from an area just north of Building 5 (Acid Dock) in 1998. The tanks received fluids generated during acid neutralization activities and were also used for batch water storage. It is unknown if any other hazardous substances or petroleum products were held in these tanks. A report describing the removal of the tanks was found in available documents on the NMOCD website. The February 1999 report written by Delta Environmental Consultants (Delta) stated that maximum concentrations in soil samples collected during the tank removal were 2,600 milligrams per kilogram (mg/Kg) for total petroleum hydrocarbons (TPH), 414.4 mg/Kg for total volatile organic hydrocarbons (VOC)`s, and 51.94 mg/Kg for total semi-volatile organic compounds (SVOCs), which are above the NMOCD standards. A groundwater sample collected from the excavation pit was found to contain a concentration of total VOCs of 10.31 mg/L. Delta concluded “Analytical results indicate that soil and ground water have been impacted by operation of the neutralization tanks”. No further information pertaining to the assessment or remediation of the soil or groundwater in the area of the former acid neutralization tanks was available to GHD. The detected concentrations of TPH, VOCs and SVOCs above unrestricted criteria in soil and groundwater constitutes a REC.
- **Likely Release(s) related to Wash Bays, Grit Pit, and Associated Oil/Water Separators (OWS):** Based on historical documents, interviews, and review of aerial photographs the current wash bays, grit pit, and associated below grade fiberglass OWSs have been in use since at least 1987 but likely were installed circa 1981 when the Site was expanded. The bays, pit, and OWSs are located southeast of Building 3. The wash bays are used to wash oilfield trucks associated with Site operations of bulk cement mixing, acidizing, and as a stimulation services supplier. Fluids and sediments cleaned out of field trucks may contain hydrocarbons, neutralized acids, and mud. During a 2009 Site inspection performed by the NMOCD for a renewal of the Site’s wastewater discharge permit, it was noted that there was soil staining within the grit pit area and around one or more of the OWS tanks. During GHD’s

Site reconnaissance on June 10, 2020, standing fluids were observed in the grit pit and the OWS tanks. Staining was observed at that time around the grit pit and on one of the OWS tanks access stem. This was the same OWS tank that had previously been noted as having "seepage" visible around the tank during the 2009 NMOCD Site inspection. Additionally, conditions of the Site's discharge permit GW-115 originally obtained in 1993 from the NMOCD states that all pits, ponds, and BGTs are to be retrofitted with secondary containment and leak detection. As of August 2009, according to correspondence with NMOCD, Halliburton had proposed to place a metal liner within the grit pit and place smaller holding tanks within the fiberglass OWS tanks to allow for secondary containment and leak detection. GHD could not observe either of the mentioned implementations due to accessibility. An evaluation of subsurface portions of the grit pit or OWS was not possible. According to Site personnel, no leaks or releases from the units have occurred at the Site. The Site was not listed in the environmental databases searched as having any releases associated with the aforementioned below grade items. Due to the age (i.e., ~40 years) of the wash bays, grit pit, and OWS tanks, the conveyance and/or retaining of fluids likely containing hazardous substances and/or petroleum products, and lack of evidence suggesting that secondary containment or leak detection is present, a release from the units is likely and constitutes a REC.

- **Likely Release(s) related to Sumps with Standing Fluids:** Standing fluids were observed in all Site sumps and the single floor drain. An evaluation of subsurface portions of the sumps was not possible. The Site is not listed in the environmental databases searched as having any releases listed associated with the aforementioned below grade items. Pink staining was observed in the waste storage area and the sump also in this area was full of pink fluid. According to Site personnel, no leaks or releases from the units have occurred at the Site. Due to the age (i.e., ~40 years) of the sumps and the conveyance and/or retaining of fluids likely containing hazardous substances and/or petroleum products for an extended period of time, a release from the units is likely and constitutes a REC.

One additional REC, Groundwater Impact from Former Gasoline and Diesel Fuel Leaking Underground Storage Tanks (LUSTs), was identified during the Phase I ESA but was not included as part of the Phase II investigation since the release is already being managed and regulated by the NMED, Petroleum Storage Tank Bureau (PSTB).

3. Groundwater and Site Characterization

GHD characterized the Site according to **Table 1**, *Closure Criteria for Soils Impacted by a Release*, from New Mexico Administrative Code (NMAC) Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12). The release falls under the jurisdiction of the NMOCD District 2 in Artesia, New Mexico.

Closure criteria for releases are determined by depth to groundwater. Three designations exist for depth to groundwater: groundwater encountered less than 50 feet (ft) below ground surface (bgs); groundwater between 50 and 100 ft bgs; or depth to groundwater greater than 100 ft bgs. Additionally, if any of the limiting conditions listed below are met then soil standards are held to the strictest requirements, i.e., that of a groundwater less than 50 feet bgs.

- Within 300 ft of a watercourse

- Within 200 ft of a lake, sinkhole, or playa
- Within 300 ft of a residence, school, or institution
- Within 500 ft of a private water well used for domestic or agricultural use
- Within 1000 feet of a water supply well or spring
- Within 300 feet of a designated wetland
- Located over a mine or unstable ground
- Within a 100 year flood plain

The site characterization documentation (Karst Potential, FEMA and Wetlands maps) are provided in **Appendix A**. It is known that groundwater at the site is less than 50 feet bgs based on data from existing monitoring wells at the Site; therefore, the delineation and closure criteria for the site are as follows:

Closure Criteria for Soils Impacted by a Release for groundwater <50 feet bgs surface	
Constituent	Limit
Chloride	600 mg/kg
TPH (Gasoline Range Organics (GRO)+Diesel Range Organics (DRO)+Motor oil Range Organics(MRO))	100 mg/kg
TPH (GRO+DRO)	N/A
Benzene	10 mg/kg
Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX)	50 mg/kg

GHD conducted soil assessment at the Site August 3 through 6, October 13 and 14, October 26 and 27, and November 16, 2020. JR Drilling, a New Mexico licensed driller, was contracted to perform the drilling activities and utilized a direct push Geoprobe rig to complete boring advancement. Prior to drilling, utility locates were completed via New Mexico 811. Additionally, each boring was pre-cleared via hand auger to a depth of five feet below ground surface. Soil borings were back filled with hydrated bentonite chips and surface returned to grade with concrete or asphalt cold patch.

During the advancement of the soil borings, sample collection, and field screening, a QA/QC program was employed. The QA/QC procedures included, but were not limited to, the following:

- Cleaning of drilling equipment prior to use at each soil boring location;
- Decontamination of non-disposable sampling equipment prior to each sampling location;
- Proper calibration of field equipment;
- Chain-of-custody protocol for laboratory analysis to ensure sample integrity; and
- Documentation of field procedures.

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Prior to sampling, all non-disposable sampling equipment was washed with a non-ionic detergent and then rinsed with distilled water. Sampling equipment utilized during the Phase II ESA, including nitrile gloves and plastic bags, was disposed between sampling intervals to prevent cross-contaminating the samples.

4. Soil Assessment

GHD conducted initial soil assessment August 3 through 6, 2020. A total of 17 borings were advanced at the Site to evaluate environmental conditions in the areas of concern identified in the Phase I ESA, as follows:

- **Soil Impacts from Former Below Grade Tanks**: Borings DP-1 and DP-2 were advanced to approximately 16 and 11 (refusal) feet below ground surface (ft bgs), respectively.
- **Likely Release(s) related to Wash Bays, Grit Pit, and Associated OWSs**: Borings DP-7 through DP-14 were advanced to approximately 8 to 9 ft bgs.
- **Likely Release(s) related to Sumps with Standing Fluids**: Borings DP-3 and DP-4 were advanced to approximately 15 ft bgs, borings DP-5, DP-6, DP-16, and DP-17 were installed to approximately 8 ft bgs. Boring DP-15 was advanced to approximately 20 ft bgs.

GHD conducted delineation soil assessment October 13 and 14, October 26 and 27, and November 16, 2020 based on the findings of the initial assessment completed in August 2020. A total of 12 boring locations were assessed to delineate impacts found during the initial assessment.

- **Soil Impacts from Former Below Grade Tanks**: Borings DP-27/27R, DP-28/28R and DP-29/29R were advanced to approximately 16 ft bgs.
- **Likely Release(s) related to Wash Bays, Grit Pit, and Associated OWSs**: Borings DP- 25/25R and DP-26/26R were advanced to approximately 10 ft bgs.
- **Likely Release(s) related to Sumps with Standing Fluids**: Borings DP-18/18R through DP-21/21R were advanced to approximately 20 ft bgs and DP-22/22R through DP-24/24R were advanced to approximately 10 ft bgs.

The lithology of the borings beneath the asphalt, concrete, and/or base course cover generally consist of fine to medium sand, silty clay, and fat clay.

Boring locations and sample locations are depicted on **Figure 3**, soil boring logs are provided in **Appendix B**, and photographs of the boring locations are provided in **Appendix C**.

4.1 Sample Collection and Analysis

Soils were screened in the field utilizing a Photoionization Detector (PID). Soils for laboratory analysis were placed in laboratory supplied bottleware and a chain of custody was prepared. Soil samples were placed in a cooler with ice and shipped to the laboratory for analysis.

Eurofins TestAmerica of Houston, Texas performed the analysis of the soil samples collected during the initial soil assessment in August of 2020. The soil samples collected during the October 13 and

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14, 2020 delineation sampling were also sent to Eurofins TestAmerica of Houston, but due to a delay in shipping, the samples were received at a temperature not conducive for analysis of TPH and were only analyzed for chloride. Due to the loss of TPH analysis from the October 13 and 14 sampling, replacement borings (e.g. DP-18R) were advanced near to the earlier delineation boring locations on October 26 and 27, 2020 to resample for TPH. Replacement borings associated with the *Soil Impacts from Former Below Grade Tanks* area were inadvertently missed during the October 26 and 27, 2020 sampling and were subsequently advanced by hand auger on November 16, 2020. All of the analysis of replacement boring samples was completed at Eurofins Xenco, LLC of Carlsbad, New Mexico. Sample analysis is summarized as follows:

Sampling Information	Soil Impacts from Former Below Grade Tanks	Likely Releases related to Wash Bays, Grit Pit, and Associated OWSs	Likely Releases related to Sumps with Standing Fluids
Initial Assessment August 2020			
Boring IDs and sampling intervals:	DP-1 (5) DP-1 (12) DP-1 (15) DP-2 (5) DP-2 (10) DP-2 (11)	DP-7 (6) DP-7 (9) DP-8 (6) DP-8 (9) DP-9 (6) DP-9 (9) DP-10 (5) DP-10 (8) DP-11 (5) DP-11 (8) DP-12 (6) DP-12 (9) DP-13 (6) DP-13 (9) DP-14 (6) DP-14 (9)	DP-3 (5) DP-3 (10) DP-3 (15) DP-4 (5) DP-4 (10) DP-4 (15) DP-5 (5) DP-5 (8) DP-6 (5) DP-6 (8) DP-15 (5) DP-15 (11) DP-15 (20) DP-16 (5) DP-16 (8) DP-17 (5) DP-17 (8)
Sample analyses:	Volatile Organic Compounds (VOCs) by EPA Method 8260B Full Range Total Petroleum Hydrocarbons (TPH) by EPA Method 8015B Chloride by EPA Method 300	VOCs by EPA Method 8260B Full Range TPH by EPA Method 8015B Chloride by EPA Method 300	VOCs by EPA Method 8260B Full Range TPH by EPA Method 8015B Chloride by EPA Method 300
Delineation Assessment October and November 2020			

Boring IDs and sampling intervals:	DP-27/27R (10) DP-27/27R (13) DP-27/27R (16) DP-28/28R (10) DP-28/28R (13) DP-28/28R (16) DP-29/29R (10) DP-29/29R (12) DP-29/29R (16)	DP-25/25R (5-6) DP-25/25R (9-10) DP-26/26R (5-6) DP-26/26R (9-10)	DP-18R (5) DP-18R (10) DP-18R (15) DP-18R (20) DP-19R (5) DP-19R (10) DP-19R (15) DP-19R (20) DP-20R (5) DP-20R (10) DP-20R (15) DP-20R (20) DP-21R (5) DP-21R (10) DP-21R (15) DP-21R (20) DP-22R (5) DP-22R (10) DP-23R (5) DP-23R (10) DP-24R (5) DP-24R (10)
Sample analyses:	Full Range TPH by EPA Method 8015B Chloride by EPA Method 300	Full Range TPH by EPA Method 8015B Chloride by EPA Method 300	Full Range TPH by EPA Method 8015B

Associated laboratory analytical reports are provided in **Appendix D** and a copy of the complete Phase II report is included as **Appendix E**.

4.2 Analytical Results

Soil analytical results have been compared against the Closure Criteria for Soils Impacted by a Release, NMAC 19.15.29.12.

The soil analytical results are presented on **Table 1**. A summary of locations above closure criteria is as follows:

Boring Location	Sampling Interval	Analyte(s) above Standard
Initial Assessment August 2020		
DP-1	12 feet	TPH
DP-2	11feet	TPH
DP-13	6 feet	TPH and Chloride
DP-15	5 feet	TPH
DP-15	8 feet	TPH
DP-15	11 feet	TPH
DP-15	20 feet	TPH
DP-16	5 feet	TPH
DP-17	8 feet	TPH
Delineation Assessment October and November 2020		
DP-18R	10 feet	TPH

DP-19R	10 feet	TPH
DP-20R	10 feet	TPH

5. Groundwater Investigation

A temporary monitoring well, DPW-1, was installed in the DP-1 boring location on August 3, 2020. The well was installed as a two-inch diameter well, constructed of PVC and screened from five to 15 ft bgs due to soil impacts identified at depth and just above groundwater in soil boring DP-1. Groundwater was encountered in DP-1 at approximately 13 ft bgs.

A groundwater sample was attempted via Hydrasleeve, an EPA approved no purge method; however, the Hydrasleeve did not collect a sufficient sample volume. The well was subsequently purged of three well volumes with a new polyethylene bailer and the sample collected following purging. The groundwater sample was collected on August 5, 2020, approximately 48 hours after well installation activities were completed. The groundwater sample was placed in laboratory supplied bottleware and a chain of custody was prepared. The groundwater sample was placed in a cooler with ice and shipped to the laboratory for analysis.

Eurofins TestAmerica performed the analysis of the groundwater samples collected at the Site. The groundwater sample from DPW-1 was analyzed for BTEX by EPA Method 8260 and chloride by EPA Method 300.0. The temporary well location is provided on **Figure 2** and laboratory analytical results are provided on **Table 2** and in **Appendix F**.

Groundwater analytical results have been compared against the New Mexico Water Quality Control Commission (NMWQCC), Standards for Ground Water of 10,000 mg/L TDS Concentration or Less, Human Health Standards – NMAC Title 20, Chapter 6, Part 2, Subpart 3103, Letter A.

A summary of results above regulatory criteria is as follows:

Well ID	Sampling Date	Analyte(s) above Standard
DPW-1	August 5, 2020	Chloride

6. Summary of Findings

Elevated TPH concentrations above site closure criteria were found in samples collected from approximately 12 ft bgs in borings DP-1 and DP-2 in August 2020 at the Acid Dock, Building 5, associated with the former below grade neutralization tanks. The TPH soil impact from the former acid neutralization tanks was vertically and horizontally delineated during the October 2020 sampling efforts. Groundwater collected from a temporary monitoring well, DPW-1, installed in the location of soil boring DP-1 was found to have an elevated concentration of chloride above the NMWQCC standard.

Elevated TPH and chloride concentrations above site closure criteria were found in a sample collected from approximately 6 ft bgs in boring DP-13 in August 2020 near the north end of the

eastern wash bay and OWSs. Chloride and TPH impacts were vertically and horizontally delineated during the October and November 2020 sampling efforts.

Elevated TPH concentrations above site closure criteria were found in samples collected from 5-20 ft bgs in DP-15, 5 ft bgs in DP-16, and 8 ft bgs in DP-17 in August of 2020 associated with three sumps located in the former Pump Shop, Building 6. The TPH impacts from the sumps were vertically and horizontally delineated during the October 2020 sampling efforts, with the exception of north and east of DP-15. Soil borings DP-18R, DP-19R, and DP-20R have elevated TPH concentration above Site closure criteria in the 10 foot sampling interval. Borings DP-18R, DP-19R, and DP-20R are located in an area of the Site that was previously remediated by soil vapor extraction and air sparging associated with a LUST discovered in the early 1980s and is being managed by the NMED PSTB. Ongoing groundwater monitoring is also occurring at the Site in response to the former LUST and is also managed by the NMED PSTB. Further delineation of TPH impacts to the east of DP-19R is impeded by the former Cement Lab, Building 7. An existing monitoring well, MW-12, located east of the former Cement Lab indicates that BTEX is not present in groundwater in that location. Currently only iron and manganese are in exceedance of groundwater standards in MW-12. Further delineation to the north of DP-15 and DP-18R would encroach further into the former LUST release footprint. It is currently unclear whether elevated TPH in DP-18R, DP-19R, and DP-20R at the 10 foot interval are associated with a release from the sump near DP-15 or the former LUST. It is plausable the sump may represent an independent release, as indicated by elevated TPH in DP-15 from 5 to 20 ft bgs, and a secondary source of TPH; however, much of the area around DP-15 has been previously remediated and ongoing groundwater monitoring indicates that volatile organics are not currently present in groundwater above NMWQCC standards at the Site.

Halliburton intends to excavate the TPH impact soil in the area of the previously removed acid neutralization tanks. Halliburton also intends to decommission underground features and over excavate areas of impact associated with releases at the north end of the eastern wash bay and sumps in Building 6 considering the shallow nature of both impacted soil and groundwater at the Site. The existing array of groundwater monitoring wells will be adequate to monitor groundwater quality in response to any areas of new releases as part of the Site Characterization and Delineation reported herein. The RECs identified and investigated as part of this investigation will be documented as a new releases on NMOCD Form C-141.

All of Which is Respectfully Submitted,

GHD

Christine Mathew
Project Manager

Jeff Walker
Senior Project Manager

about GHD

GHD is one of the world's leading professional services companies operating in the global markets of water, energy and resources, environment, property and buildings, and transportation. We provide engineering, environmental, and construction services to private and public sector clients.

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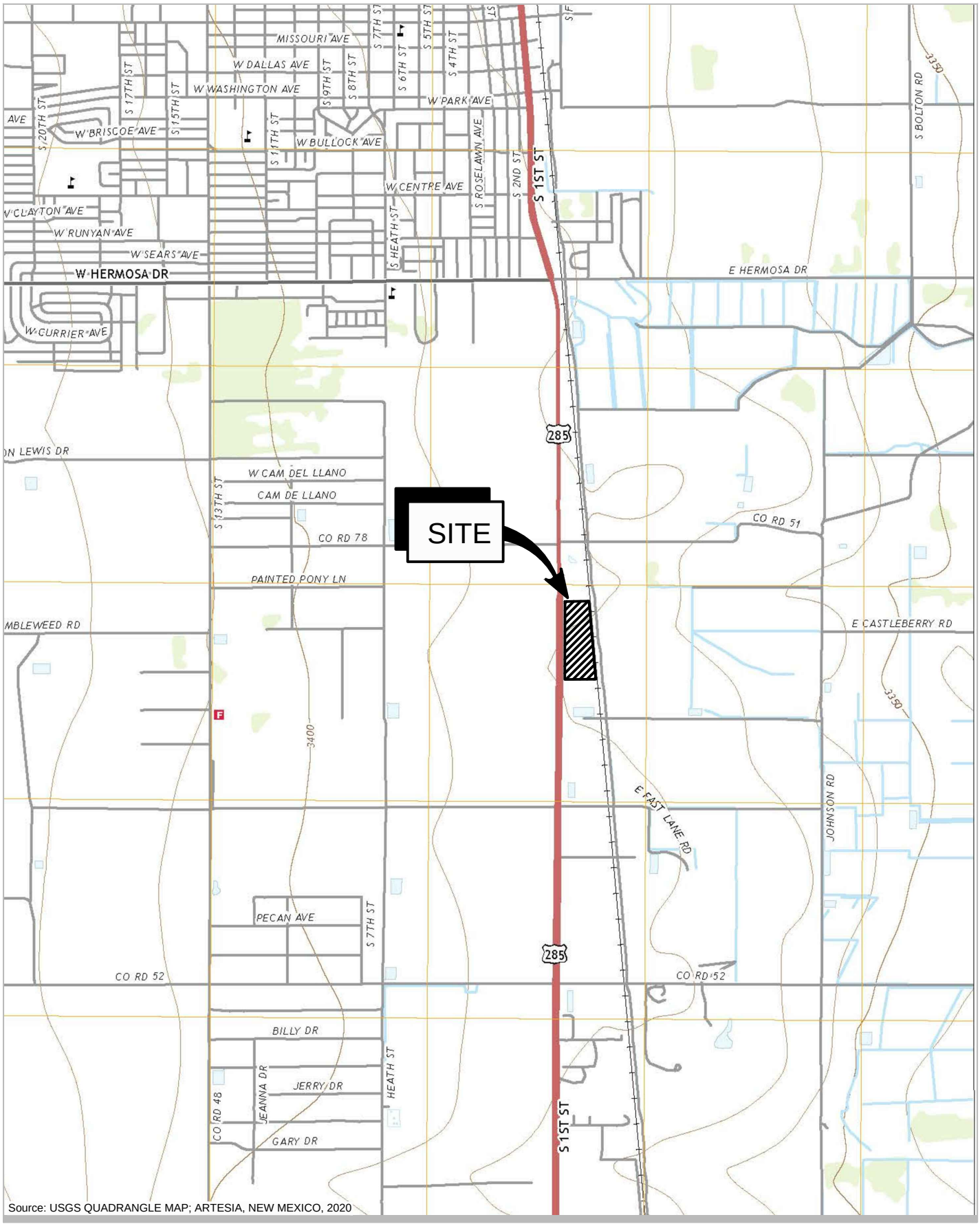
Figures



Source: USGS QUADRANGLE MAP; ARTESIA, NEW MEXICO, 2020

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GHD

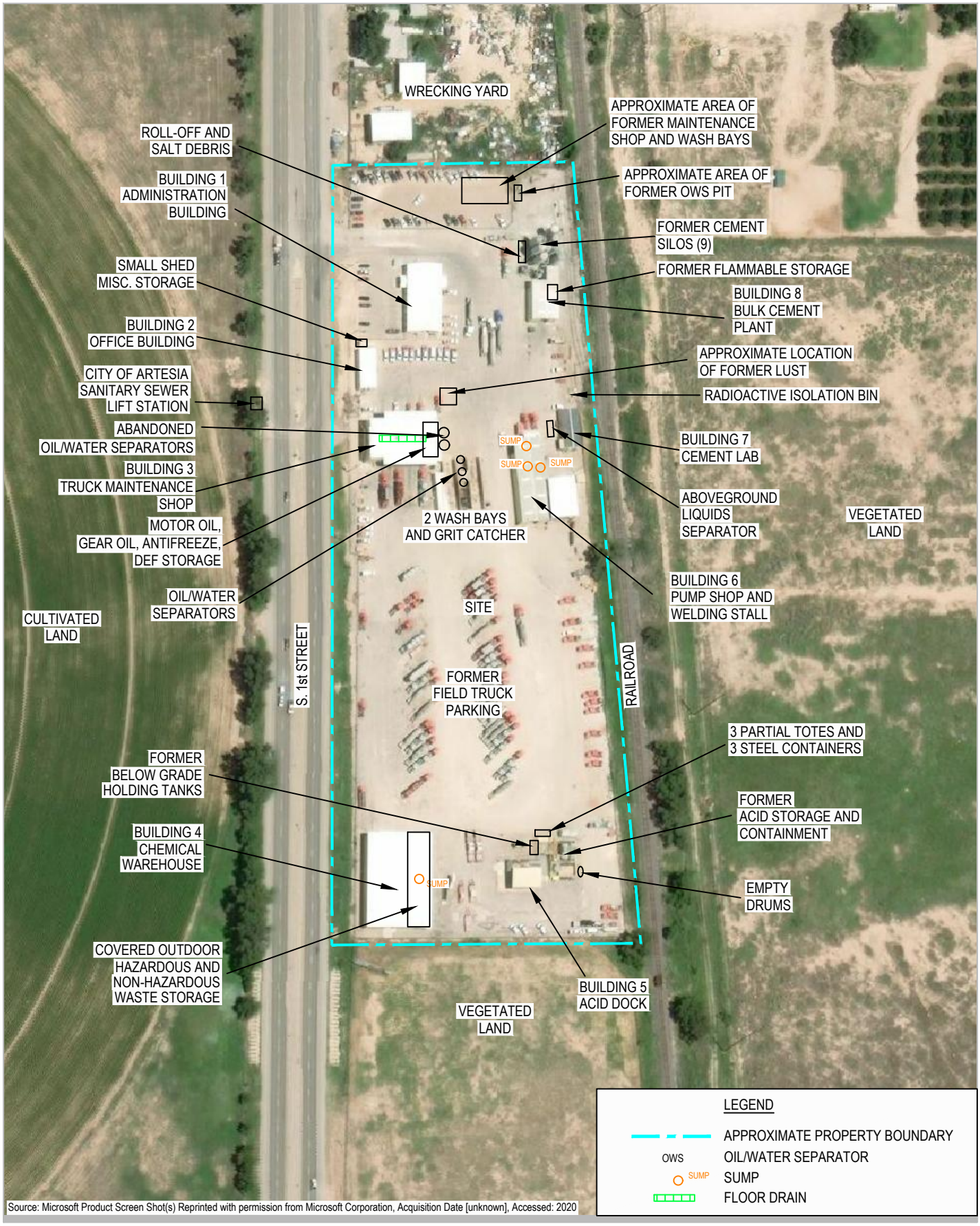
HALLIBURTON PROPERTY
2311 S. 1st STREET
ARTESIA, NEW MEXICO

Project No. **11213301**
Date **May 2020**

SITE LOCATION

FIGURE 1

Filename: N:\US\Baton Rouge\Projects\562\11213301\Digital_Design\ACAD 2018\Figures\RPT-008PH1\111213301-08(RPT-008ARTESIANEWMEXICO)GN-DE001.dwg



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Coordinate System: STATE PLANE NM-NAD83

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GHD

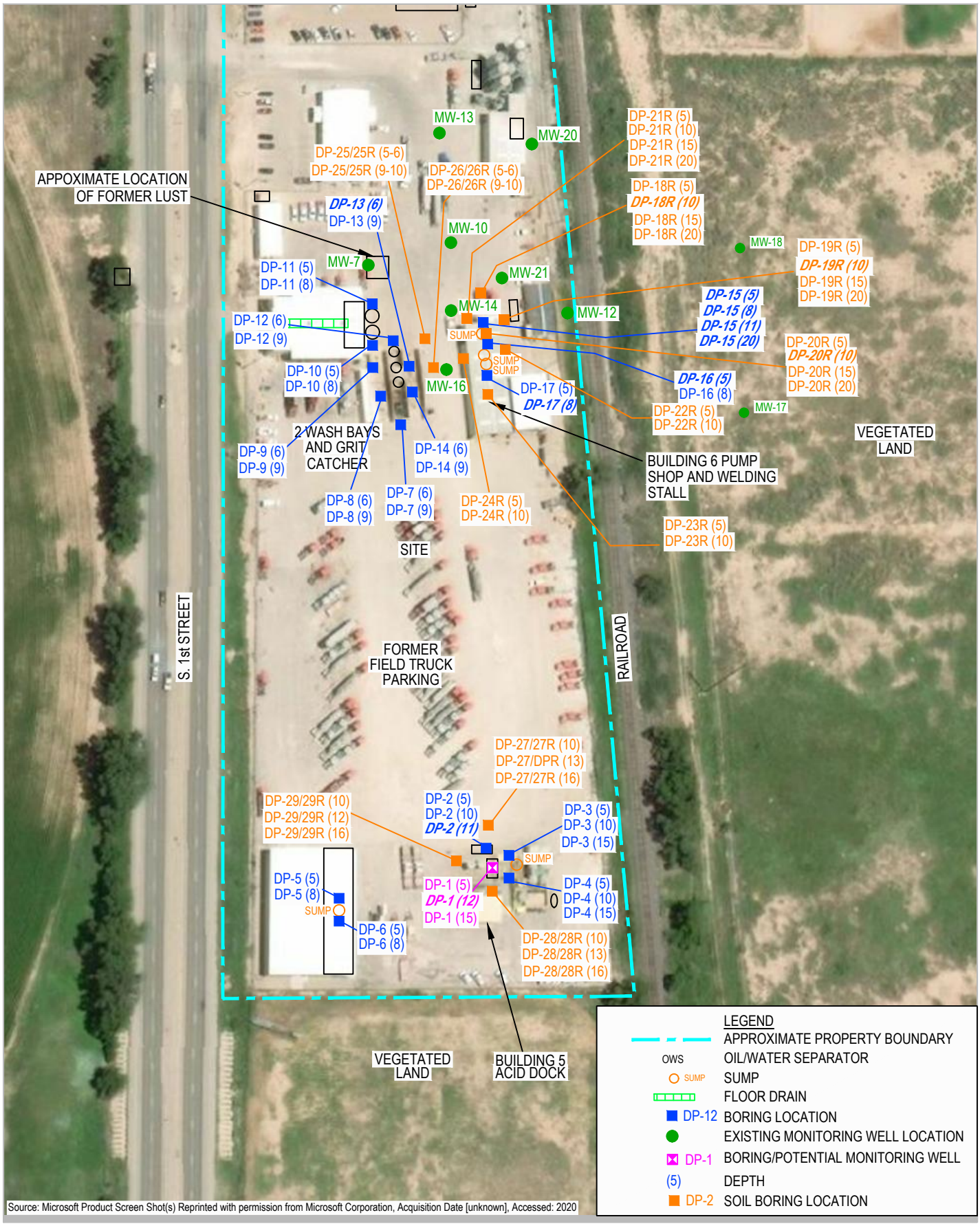
HALLIBURTON ENERGY SERVICES
ARTESIA FIELD CAMP
2311 S. 1st STREET
ARTESIA, NEW MEXICO

Project No. **11213301**
Date **July 2020**

SITE PLAN

FIGURE 2

Filename: N:\US\Baton Rouge\Projects\562\11213301\Digital_Design\ACAD 2018\Figures\RPT-008PH1\11213301-08(RPT-008ARTESIANEWMEXICO)GN-DE002.dwg



Source: Microsoft Product Screen Shot(s) Reprinted with permission from Microsoft Corporation, Acquisition Date [unknown], Accessed: 2020

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Coordinate System: STATE PLANE NM-NAD83

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GHD

HALLIBURTON ENERGY SERVICES
ARTESIA FIELD CAMP
2311 S. 1st STREET
ARTESIA, NEW MEXICO

Project No. **11213301**
Date **November 2020**

SAMPLE LOCATION MAP

FIGURE 3

Filename: N:\US\Baton Rouge\Projects\562\11213301\Digital_Design\ACAD 2018\Figures\RPT-015PH2\11213301-08(RPT-015PHIIARTESIANEWMEXICO)GN-DE003.dwg

Tables

Table 1
Soil Analytical Results Summary
Halliburton Energy Services, Ltd. - Artesia Field Camp
Artesia, New Mexico

Sample ID	Date	TPH GRO (C6-C-10) (mg/kg)	TPH DRO (C10-C28) (mg/kg)	TPH ORO (C28-C36) (mg/kg)	Total TPH GRO/DRO/ORO (mg/kg)	Chlorides (mg/kg)
S-11213301-080320-CN-DP-1-5'	8/3/2020	<1.2	<15	49	49	80
S-11213301-080320-CN-DP-1-12'	8/3/2020	**110**	**350**	**280**	**740**	87
S-11213301-080320-CN-DP-1-15'	8/3/2020	<1.3	<15	<15	<31.3	230
S-11213301-080320-CN-DP-2-5'	8/3/2020	<1.2	<15	57	57	37
S-11213301-080320-CN-DP-2-10'	8/3/2020	<1.2	<15	54	54	28
S-11213301-080320-CN-DP-2-11'	8/3/2020	<1.1	**85**	**170**	**255**	38
S-11213301-080420-CN-DP-3-5'	8/4/2020	< 36	28	43	71	180
S-11213301-080420-CN-DP-3-10'	8/4/2020	<1.2	<30	<30	<61.2	96
S-11213301-080420-CN-DP-3-15'	8/4/2020	<1.2	<30	<30	<61.2	390
S-11213301-080420-CN-DP-4-5'	8/4/2020	<1.2	<15	46	46	27
S-11213301-080420-CN-DP-4-10'	8/4/2020	<1.5	<35	<35	<71.5	84
S-11213301-080420-CN-DP-4-15'	8/4/2020	<1.2	<30	<30	<61.2	290
S-11213301-080420-CN-DP-5-5'	8/4/2020	<1.2	<31	<31	<63.2	340
S-11213301-080420-CN-DP-5-8'	8/4/2020	<1.3	<31	<31	<63.3	130
S-11213301-080420-CN-DP-6-5'	8/4/2020	<1.2	<30	<30	<61.2	390
S-11213301-080420-CN-DP-6-8'	8/4/2020	<1.2	<30	<30	<61.2	200
S-11213301-080420-CN-DP-7-6'	8/4/2020	<1.2	<15	36	36	100
S-11213301-080420-CN-DP-7-9'	8/4/2020	<1.2	<15	<15	<31.2	73
S-11213301-080420-CN-DP-8-6'	8/4/2020	<1.2	<30	<30	<61.2	160
S-11213301-080420-CN-DP-8-9'	8/4/2020	<1.4	<57	<57	<115.4	130
S-11213301-080420-CN-DP-9-6'	8/4/2020	<1.3	<33	83	83	54
S-11213301-080420-CN-DP-9-9'	8/4/2020	<1.1	<30	<30	<61.1	<48
S-11213301-080520-CN-DP-10-5'	8/5/2020	<1.1	<29	<29	<59.1	480
S-11213301-080520-CN-DP-10-8'	8/5/2020	<1.0	<25	<25	<51	160
S-11213301-080520-CN-DP-11-5'	8/5/2020	<1.3	<31	<31	<63.3	180
S-11213301-080520-CN-DP-11-8'	8/5/2020	<1.0	<27	<27	<60	130
S-11213301-080520-CN-DP-12-6'	8/5/2020	<1.2	<31	<31	<63.2	<99
S-11213301-080520-CN-DP-12-9'	8/5/2020	<1.2	<30	<30	<61.2	<48
S-11213301-080520-CN-DP-13-6'	8/5/2020	<1.2	<30	**130**	**130**	**640**
S-11213301-080520-CN-DP-13-9'	8/5/2020	<1.3	<32	<32	<65.3	22
S-11213301-080520-CN-DP-14-6'	8/5/2020	<1.2	<15	64	64	120
S-11213301-080520-CN-DP-14-9'	8/5/2020	<1.3	<31	<31	<63.3	68
S-11213301-080520-CN-DP-15-5'	8/5/2020	<1.2	<30	**110**	**110**	6.8
S-112133-1-080520-CN-DP-15-8'	8/5/2020	**36**	**170**	<31	**206**	18
S-11213301-080520-CN-DP-15-11'	8/5/2020	**870**	**690**	**120**	**1680**	13
S-11213301-080520-CN-DP-15-20'	8/5/2020	<1.4	<35	**110**	**110**	40
S-11213301-080520-CN-DP-16-5'	8/5/2020	<1.2	<30	**100**	**100**	23
S-11213301-080520-CN-DP-16-8'	8/5/2020	<1.3	<32	<32	<65.3	28
S-11213301-080520-CN-DP-17-5'	8/5/2020	<1.1	<27	82	82	20
S-11213301-080520-CN-DP-17-8'	8/5/2020	<1.2	**60**	**160**	**220**	51
S-11213301-102620-CN-DP-18R-5'	10/26/2020	<60.7	<60.7	<60.7	<60.7	NA
S-11213301-102620-CN-DP-18R-10'	10/26/2020	**158**	**166**	<62.6	**324**	NA
S-11213301-102620-CN-DP-18R-15'	10/26/2020	<64.7	<64.7	<64.7	<64.7	NA
S-11213301-102620-CN-DP-18R-20'	10/26/2020	<65.2	<65.2	<65.2	<65.2	NA
S-11213301-102620-CN-DP-19R-5'	10/26/2020	<62.1	<62.1	<62.1	<62.1	NA
S-11213301-102620-CN-DP-19R-10'	10/26/2020	67.6	82.4	<62.7	**150**	NA
S-11213301-102620-CN-DP-19R-15'	10/26/2020	<67.8	<67.8	<67.8	<67.8	NA
S-11213301-102620-CN-DP-19R-20'	10/26/2020	<66.8	<66.8	<66.8	<66.8	NA
S-11213301-102720-CN-DP-20R-5'	10/27/2020	<59.9	<59.9	<59.9	<59.9	NA
S-11213301-102720-CN-DP-20R-10'	10/27/2020	<66.0	**128**	<66.0	**128**	NA
S-11213301-102720-CN-DP-20R-15'	10/27/2020	<67.0	<67.0	<67.0	<67.0	NA
S-11213301-102720-CN-DP-20R-20'	10/27/2020	<86.1	<86.1	<86.1	<86.1	NA
S-11213301-102620-CN-DP-21R-5'	10/26/2020	<62.3	<62.3	<62.3	<62.3	NA
S-11213301-102620-CN-DP-21R-10'	10/26/2020	<62.7	82.2	<62.7	82.2	NA
S-11213301-102620-CN-DP-21R-15'	10/26/2020	<64.8	<64.8	<64.8	<64.8	NA
S-11213301-102620-CN-DP-21R-20'	10/26/2020	<64.8	<64.8	<64.8	<64.8	NA
S-11213301-102720-CN-DP-22R-5'	10/27/2020	<58.8	<58.8	<58.8	<58.8	NA
S-11213301-102720-CN-DP-22R-10'	10/27/2020	<66.3	<66.3	<66.3	<66.3	NA
S-11213301-102720-CN-DP-23R-5'	10/27/2020	<59.2	<59.2	<59.2	<59.2	NA
S-11213301-102720-CN-DP-23R-10'	10/27/2020	<70.3	<70.3	<70.3	<70.3	NA
S-11213301-102720-CN-DP-24R-5'	10/27/2020	<59.1	<59.1	<59.1	<59.1	NA

Table 1
Soil Analytical Results Summary
Halliburton Energy Services, Ltd. - Artesia Field Camp
Artesia, New Mexico

Sample ID	Date	TPH GRO (C6-C-10) (mg/kg)	TPH DRO (C10-C28) (mg/kg)	TPH ORO (C28-C36) (mg/kg)	Total TPH GRO/DRO/ORO (mg/kg)	Chlorides (mg/kg)
S-11213301-102720-CN-DP-24R-10'	10/27/2020	<67.2	<67.2	<67.2	<67.2	NA
S-11213301-101320-CN-DP-25-6'	10/13/2020	NA	NA	NA	NA	440
25R-5	11/6/2020	<49.9	<49.9	<49.9	<49.9	NA
S-11213301-101320-CN-DP-25-9'	10/13/2020	NA	NA	NA	NA	490
25R-10	11/6/2020	<50.3	<50.3	<50.3	<50.3	NA
S-11213301-101320-CN-DP-26-6'	10/13/2020	NA	NA	NA	NA	<480
26R-5	11/6/2020	<49.9	<49.9	<49.9	<49.9	NA
S-11213301-101320-CN-DP-26-9'	10/13/2020	NA	NA	NA	NA	<510
26R-10	11/6/2020	<49.8	<49.8	<49.8	<49.8	NA
S-11213301-101420-CN-DP-27-10'	10/14/2020	NA	NA	NA	NA	<240
S-11213301-102720-CN-DP-27R-10'	10/27/2020	<62.1	<62.1	<62.1	<62.1	NA
S-11213301-101420-CN-DP-27-13'	10/14/2020	NA	NA	NA	NA	<510
S-11213301-102720-CN-DP-27R-13'	10/27/2020	<61.5	<61.5	<61.5	<61.5	NA
S-11213301-101420-CN-DP-27-16'	10/14/2020	NA	NA	NA	NA	300
S-11213301-102720-CN-DP-27R-16'	10/27/2020	<67.4	<67.4	<67.4	<67.4	NA
S-11213301-101420-CN-DP-28-10'	10/14/2020	NA	NA	NA	NA	<570
S-11213301-102620-CN-DP-28R-10'	10/26/2020	<87.0	<87.0	<87.0	<87.0	NA
S-11213301-101420-CN-DP-28-13'	10/14/2020	NA	NA	NA	NA	<470
S-11213301-102620-CN-DP-28R-13'	10/26/2020	<62.8	<62.8	<62.8	<62.8	NA
S-11213301-101420-CN-DP-28-16'	10/14/2020	NA	NA	NA	NA	190
S-11213301-102620-CN-DP-28R-16'	10/26/2020	<61.6	<61.6	<61.6	<61.6	NA
S-11213301-101420-CN-DP-29-10'	10/14/2020	NA	NA	NA	NA	<480
S-11213301-102620-CN-DP-29R-10'	10/26/2020	<90.9	<90.9	<90.9	<90.9	NA
S-11213301-101420-CN-DP-29-13'	10/14/2020	NA	NA	NA	NA	61
S-11213301-102620-CN-DP-29R-12'	10/26/2020	<69.5	<69.5	<69.5	<69.5	NA
S-11213301-101420-CN-DP-29-16'	10/14/2020	NA	NA	NA	NA	250
S-11213301-102620-CN-DP-29R-16'	10/26/2020	<59.6	<59.6	<59.6	<59.6	NA
NMOCD Remediation Action Levels			**100**		**100**	**600**

Note: Concentrations that are **BOLD** exceed the NMOCD Remediation Action Level
NE = Not Established
mg/Kg = milligrams per Kilogram

Table 2
Groundwater Analytical Results Summary
Halliburton Energy Services, Ltd. - Artesia Field Camp
Artesia, New Mexico

Sample ID	Date	Chlorides (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (mg/L)
GW-11213301-080520-CN-DPW-1	8/5/2020	**650**	<0.0010	0.017	0.0054	0.023
NMWQCC Standards (mg/L)		**250**	**0.005**	**1.0**	**0.7**	**0.62**

Note: Concentrations that are **BOLD** exceed the NMWQCC Human Health Standard
mg/L = milligrams per liter

Appendices

Appendix A
Site Characterization Documentation

Artesia South Camp

0.5 Mile Radius of 2311 S 1st Street

Legend

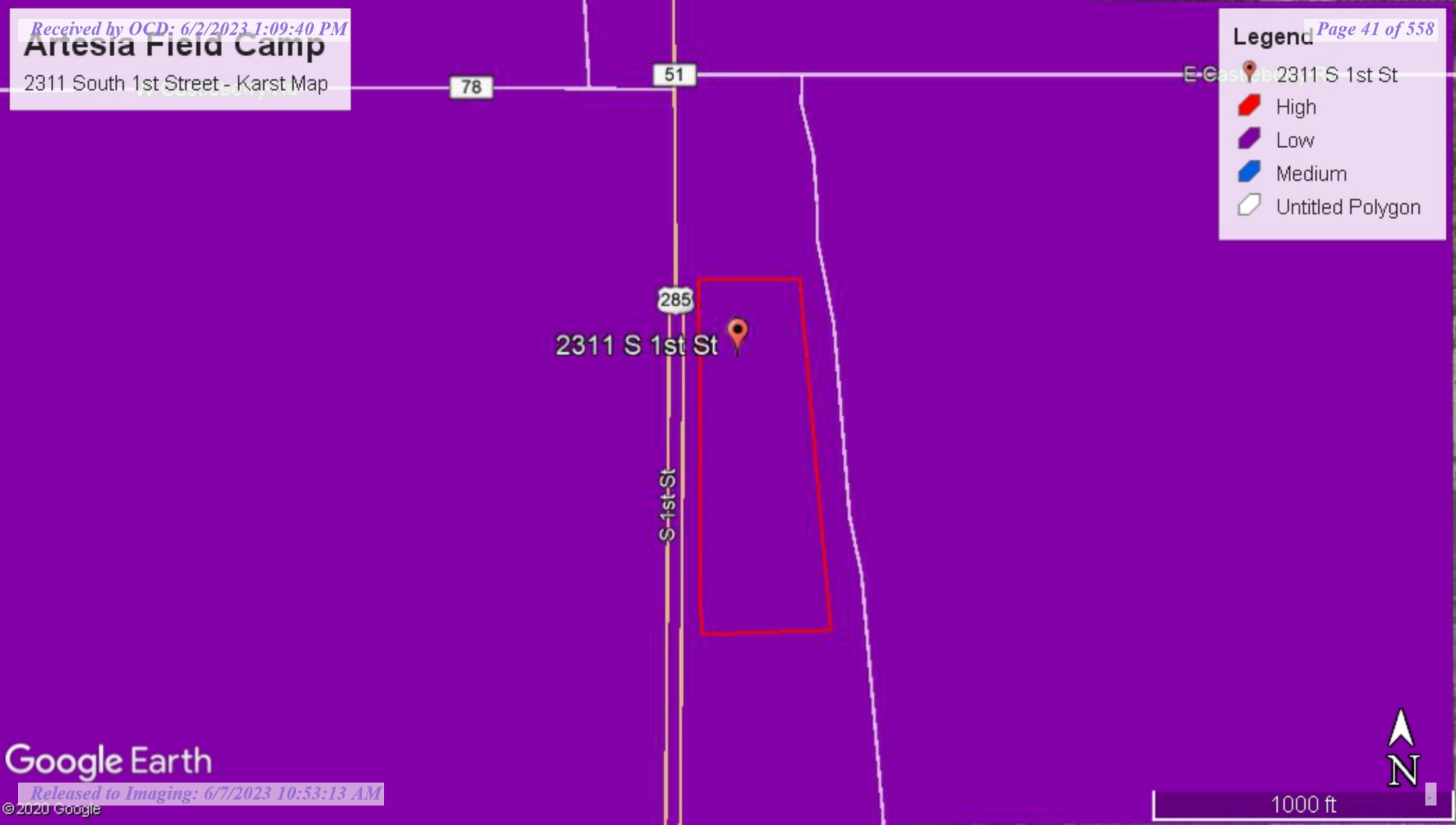
Camino Del Llano
S Heath St
W Castleberry Rd
78
Painted Pony Ln
S 10th St
153
W Thoroughbred Rd
Quarter Horse Dr
2311 S 1st St
E Castleberry Rd
55
48
S 13th St
Heath St
S 1st St
Johnson Rd
E East Lane Rd
285
51
N
2000 ft

Google Earth

© 2020 Google

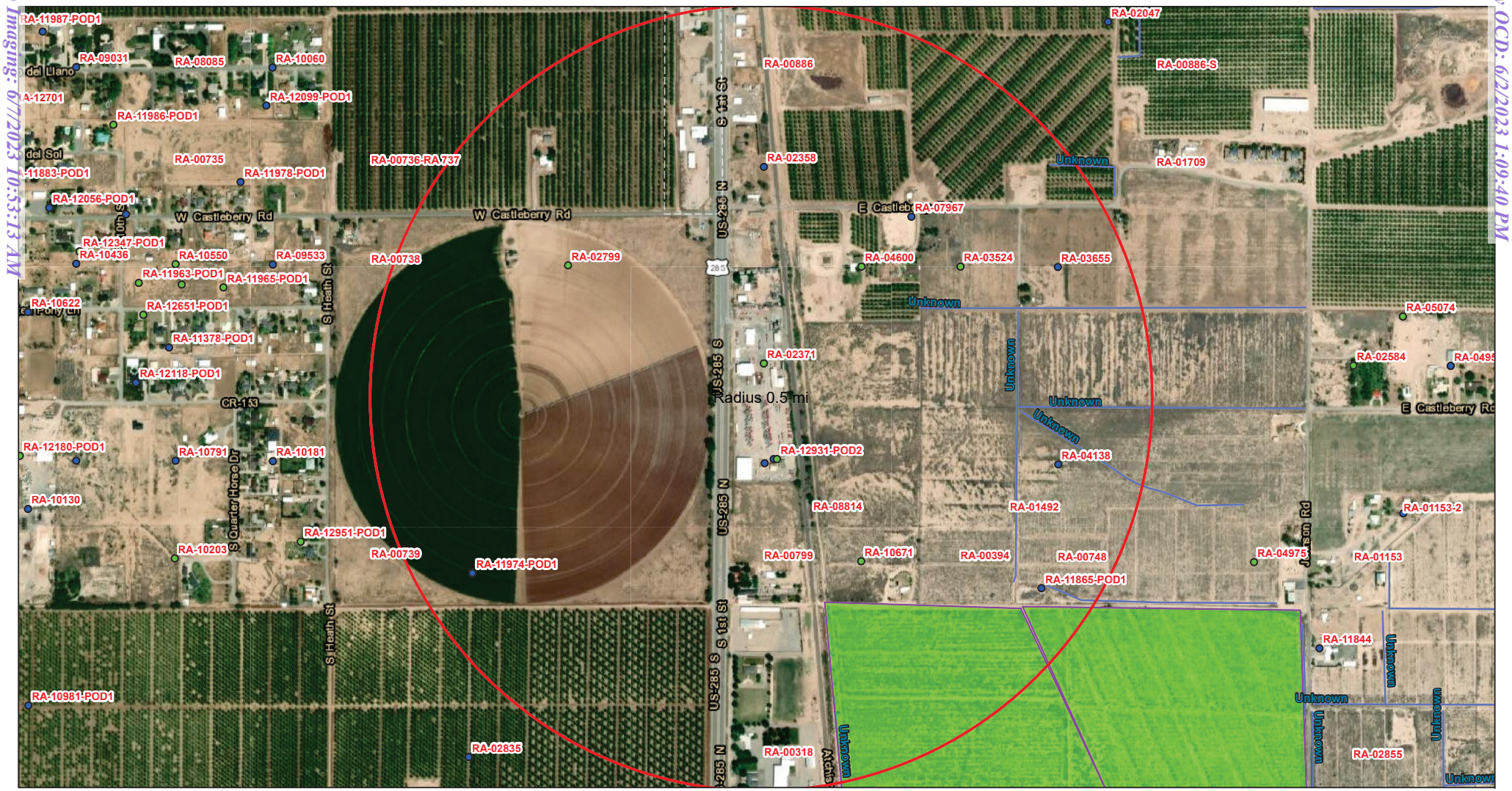
Artesia Field Camp

2311 South 1st Street - Karst Map



Released to Imaging: 6/7/2023 10:53:13 AM
Received by OCD: 6/2/2023 1:09:40 PM

OSE Public Print - 0.5 Miles Radius of 2311 South 1st Street Artesia



12/4/2020 4:14:56 AM

Override 1

OSE District Boundary

Conveyances

Ditch

GIS WATERS PODs

Active

Pending

Water Right Regulations

Negative Easement Area

SiteBoundaries

1:9,028

0 0.07 0.15 0.3 mi

0 0.15 0.3 0.6 km

USDA FSA, GeoEye, Maxar, Esri, HERE, iPC, U.S. Department of Energy Office of Legacy Management, Esri, HERE, Garmin, iPC

OSE POD Locations

The New Mexico Office of the State Engineer (OSE) provides this geographic data and any associated metadata "as is" without warranty of any kind, including but not limited to its completeness, fitness for a particular use, or accuracy of its content, positional or otherwise. It is the sole responsibility of the user to

Appendix B
Soil Boring Logs

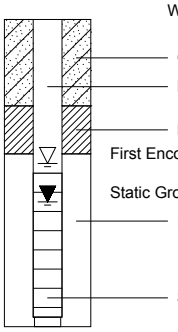
MAJOR DIVISIONS					TYPICAL NAMES
COARSE-GRAINED SOILS MORE THAN HALF IS COARSER THAN NO. 200 SIEVE	GRAVELS MORE THAN HALF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE	CLEAN GRAVELS WITH LESS THAN 15% FINES	GW		WELL-GRADED GRAVELS WITH OR WITHOUT SAND
			GP		POORLY-GRADED GRAVELS WITH OR WITHOUT SAND
		GRAVELS WITH 15% OR MORE FINES	GM		SILTY GRAVELS WITH OR WITHOUT SAND
			GC		CLAYEY GRAVELS WITH OR WITHOUT SAND
	SANDS MORE THAN HALF COARSE FRACTION IS FINER THAN NO. 4 SIEVE SIZE	CLEAN SANDS WITH LESS THAN 15% FINES	SW		WELL-GRADED SANDS WITH OR WITHOUT GRAVEL
			SP		POORLY-GRADED SANDS WITH OR WITHOUT GRAVEL
		SANDS WITH 15% OR MORE FINES	SM		SILTY SANDS WITH OR WITHOUT GRAVEL
			SC		CLAYEY SANDS WITH OR WITHOUT GRAVEL
FINE-GRAINED SOILS MORE THAN HALF IS FINER THAN NO. 200 SIEVE	SILTS AND CLAYS LIQUID LIMIT 50% OR LESS		ML		INORGANIC SILTS OF LOW TO MEDIUM PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
			CL		INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
			OL		ORGANIC SILTS OR CLAYS OF LOW TO MEDIUM PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50%		MH		INORGANIC SILTS OF HIGH PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
			CH		INORGANIC CLAYS OF HIGH PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
			OH		ORGANIC SILTS OR CLAYS OF HIGH PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
HIGHLY ORGANIC SOILS			PT		PEAT AND OTHER HIGHLY ORGANIC SOILS

SYMBOLS KEY

SAMPLE TYPES

- AK — Air Knife
- Auger Cuttings
- C — Composite
- Rock Core
- HV — Hydro-Vac
- HA — Hand Auger
- Large Bore
- P/S — Macro-Core
- Modified Split Spoon
- No Recovery
- Post Hole Digger
- Shelby Tube
- Sonic Core
- Split Spoon
- Undisturbed Core
- Vane Shear

WELL SYMBOLS



ABBREVIATION KEY

CA	-	CHEMICAL ANALYSIS (CORROSIVITY)	(200)	-	(WITH % PASSING NO. 200 SIEVE
CD	-	CONSOLIDATED DRAINED TRIAXIAL			
CN	-	CONSOLIDATION	SW	-	SWELL TEST
CU	-	CONSOLIDATED UNDRAINED TRIAXIAL	TC	-	CYCLIC TRIAXIAL
DS	-	DIRECT SHEAR	TV	-	TORVANE SHEAR
PP	-	POCKET PENETROMETER (TSF)	UC	-	UNCONFINED COMPRESSION
(3.0)	-	(WITH SHEAR STRENGTH IN KSF)	(1.5)	-	(WITH SHEAR STRENGTH IN KSF)
RV	-	R-VALUE			
SA	-	SIEVE ANALYSIS: % PASSING #200 SIEVE	UU	-	UNCONSOLIDATED UNDRAINED TRIAXIAL
			WA	-	WASH ANALYSIS
			(200%)	-	(WITH % PASSING NO. 200 SIEVE)

Key to Boring Log

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/08
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-2
DATE COMPLETED: 3 August 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
0	Fine, silt, fill dirt			0.2		
3	Fat clay, brown, damp	3.00				
5			5'	0.2	57	37
10			10'	0.6	54	28
11			11'	1.3	255	38
11.3	END OF HOLE @ 11.3ft BGS	11.50				

NOTES:

LABORATORY ANALYSIS ( )

DEVON MIGURA LOG 11213301 HALLIBURTON ARTESIA.GPJ CRA_CORP.GDT 28/8/20

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/08
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-3
DATE COMPLETED: 4 August 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Concrete surface cover					
	Sub base material	1.00				
2	Fat clay, brown, damp, with fine gravels.	2.00				
4						
		5.00	5'	0.2	71	180
	Fat clay, brown, damp					
6						
8						
10			10'	0.4	<61.2	96
12						
14						
		15.00	15'	1.3	<61.2	390
	END OF HOLE @ 15.0ft BGS					
16						
18						
20						
22						
24						

NOTES:

LABORATORY ANALYSIS ( )

DEVON MIGURA LOG 11213301 HALLIBURTON ARTESIA.GPJ CRA_CORP.GDT 28/8/20

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/08
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-4
DATE COMPLETED: 4 August 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Concrete surface cover					
	Sub base material	1.00				
2	Fat clay, brown, damp	2.00				
4			5'	1	46	27
6						
8						
		9.50				
10	Fine-med sandy clay, grey/brown, damp		10'	1.5	<71.5	84
		11.00				
12	Very fine, silty, clay, dry,grey, slight odor					
14						
		15.00	15'	2.3	<61.2	290
16	END OF HOLE @ 15.0ft BGS					
18						
20						
22						
24						

NOTES:

LABORATORY ANALYSIS ( )

DEVON MIGURA LOG 11213301 HALLIBURTON ARTESIA.GPJ CRA_CORP.GDT 28/8/20

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/08
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-5
DATE COMPLETED: 4 August 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Concrete surface cover					
	Sub base material	1.00				
2	Fat clay, brown, damp	2.00				
4			5'	0.3	<63.2	340
6						
8						
10	END OF HOLE @ 10.0ft BGS	10.00	10'	0.6	<63.3	130
12						
14						
16						
18						
20						
22						
24						

NOTES:

LABORATORY ANALYSIS ( )

DEVON MIGURA LOG 11213301 HALLIBURTON ARTESIA.GPJ CRA_CORP.GDT 28/8/20

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/08
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-6
DATE COMPLETED: 4 August 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Concrete surface cover					
	Sub base material	1.00				
2	Fat clay, brown, damp	2.00				
4			5'	0.3	<61.2	390
6						
8	END OF HOLE @ 8.0ft BGS	8.00	8'	1.1	<61.2	200
10						
12						
14						
16						
18						
20						
22						
24						

NOTES:

LABORATORY ANALYSIS (5' 8')

DEVON MIGURA LOG 11213301 HALLIBURTON ARTESIA.GPJ CRA_CORP.GDT 28/8/20

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/08
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-7
DATE COMPLETED: 4 August 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Concrete surface cover					
	Sub base material	1.00				
2	Fat clay, brown, damp	2.00				
4						
6			6'	4.3	36	100
8						
	END OF HOLE @ 9.0ft BGS	9.00	9'		<31.2	73
10						
12						
14						
16						
18						
20						
22						
24						

NOTES:

LABORATORY ANALYSIS ( )

DEVON MIGURA LOG 11213301 HALLIBURTON ARTESIA.GPJ CRA_CORP.GDT 28/8/20

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/08
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-8
DATE COMPLETED: 4 August 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Concrete surface cover					
	Sub base material	1.00				
2	Fat clay, brown, damp	2.00		1.6		
4						
6			6'	4.2	<61.2	160
8						
	END OF HOLE @ 9.0ft BGS	9.00	9'	6	<115.4	130
10						
12						
14						
16						
18						
20						
22						
24						

NOTES:

LABORATORY ANALYSIS (6' 9')

DEVON MIGURA LOG 11213301 HALLIBURTON ARTESIA.GPJ CRA_CORP.GDT 28/8/20

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/08
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-9
DATE COMPLETED: 4 August 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Concrete surface cover					
	Sub base material	1.00				
2	Fat clay, brown, damp	2.00				
4						
6			6'	3.4	83	54
8						
	END OF HOLE @ 9.0ft BGS	9.00	9'	0.2	<61.1	<48
10						
12						
14						
16						
18						
20						
22						
24						

NOTES:

LABORATORY ANALYSIS ( )

DEVON MIGURA LOG 11213301 HALLIBURTON ARTESIA.GPJ CRA_CORP.GDT 28/8/20

This log should not be used separately from the original report.

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/08
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-1 (DPW-1)
DATE COMPLETED: 3 August 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	WELL CONSTRUCTION	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
0	Fine, silty sand, brown, dry, with med-fine gravels		Hydrated Bentonite Seal; Sch. 40 PVC riser				
3	Fat clay, damp, brown, fine gravels	3.00					
5	Fat clay, damp, brown, fine gravels	5.00		5'	20	49	80
6			10-20 Silica Sand; Sch. 40 PVC screen 0.010 slotted				
11	Black, fiberglass, odor	11.50					
12	Med sand,wet, black, odor	12.00		12'	407.9	740	87
13	Fat clay,dry, brown, black silt	13.00			31.8		
15	END OF HOLE @ 15.0ft BGS	15.00		15'	2.7	<31.3	230

WELL DETAILS
Screened interval:
5.00 to 15.00ft BGS
Length: 10ft
Slot Size: 0.010 inch
Material: PVC
Seal:
3.00 to 0.00ft BGS
Material: Bentonite
Sand Pack:
15.00 to 3.00ft BGS
Material: 10/20

BOREHOLE DIAMETER

NOTES:

LABORATORY ANALYSIS ( )

DEVON MIGURA LOG 11213301 HALLIBURTON ARTESIA.GPJ CRA_CORP.GDT 28/8/20

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/08
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-10
DATE COMPLETED: 5 August 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Concrete surface cover					
	Sub base material	1.00				
2	Fine caliche sand, tan/white, damp	2.00				
4						
	Silty clay, dry, brown/tan	5.00	5'	0	<59.1	480
6						
8	END OF HOLE @ 8.0ft BGS	8.00	8'	0	<51	160
10						
12						
14						
16						
18						
20						
22						
24						

NOTES:

LABORATORY ANALYSIS

DEVON MIGURA LOG 11213301 HALLIBURTON ARTESIA.GPJ CRA_CORP.GDT 28/8/20

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/08
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-11
DATE COMPLETED: 5 August 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Concrete surface cover					
	Sub base material	1.00				
2	Fine, sand (Magnetic fill?), tan/white, dry	2.00				
4						
	Silty clay, dry, brown/tan	5.00	5'	0.3	<63.3	180
6						
8	END OF HOLE @ 8.0ft BGS	8.00	8'	0.5	<60	130
10						
12						
14						
16						
18						
20						
22						
24						

NOTES:

LABORATORY ANALYSIS (5' 8')

DEVON MIGURA LOG 11213301 HALLIBURTON ARTESIA.GPJ CRA_CORP.GDT 28/8/20

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/08
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-12
DATE COMPLETED: 5 August 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Concrete surface cover					
	Sub base material	1.00				
2	Fine, caliche sand, tan, dry	2.00				
4		5.00				
	Fine sandy clay, tan/brown, dry					
6	Clay, brown, dry	6.00	6'	2.7	<63.2	<99
8						
	END OF HOLE @ 9.0ft BGS	9.00	9'	2.3	<61.2	<48
10						
12						
14						
16						
18						
20						
22						
24						

NOTES:

LABORATORY ANALYSIS

DEVON MIGURA LOG 11213301 HALLIBURTON ARTESIA.GPJ CRA_CORP.GDT 28/8/20

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/08
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-13
DATE COMPLETED: 5 August 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Concrete surface cover					
	Sub base material	1.00				
2	Fat clay, brown, damp	2.00				
4						
6			6'	2.1	130	640
8						
	END OF HOLE @ 9.0ft BGS	9.00	9'	1.1	<65.3	22
10						
12						
14						
16						
18						
20						
22						
24						

NOTES:

LABORATORY ANALYSIS (6')

DEVON MIGURA LOG 11213301 HALLIBURTON ARTESIA.GPJ CRA_CORP.GDT 28/8/20

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/08
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-14
DATE COMPLETED: 5 August 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Concrete surface cover					
	Sub base material	1.00				
2	Fat clay, brown, damp	2.00				
4						
6			6'	3	64	120
8						
	END OF HOLE @ 9.0ft BGS	9.00	9'	15	<63.3	68
10						
12						
14						
16						
18						
20						
22						
24						

NOTES:

LABORATORY ANALYSIS (6' 9')

DEVON MIGURA LOG 11213301 HALLIBURTON ARTESIA.GPJ CRA_CORP.GDT 28/8/20

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/08
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-15
DATE COMPLETED: 5 August 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Concrete surface cover					
	Sub base material	1.00				
2	Fat clay, grey, damp, odor	2.00				
4			5'	1.1	110	6.8
6						
8			8'	684.3	206	18
10						
12			11'	798.1	1680	13
				565.9		
	Fat clay, brown, damp - trace fractured limestone, olive at 19'	13.00		203.1		
14						
16				229.3		
18				0.1		
20	END OF HOLE @ 20.0ft BGS	20.00	20'	0.3	110	40
22						
24						

NOTES:

LABORATORY ANALYSIS ( )

DEVON MIGURA LOG 11213301 HALLIBURTON ARTESIA.GPJ CRA_CORP.GDT 28/8/20

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/08
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-16
DATE COMPLETED: 5 August 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Concrete surface cover					
	Sub base material	1.00				
2	Fat clay, brown, damp	2.00				
4			5'	4.9	100	23
6						
8	END OF HOLE @ 8.0ft BGS	8.00	8'	2.8	<65.3	28
10						
12						
14						
16						
18						
20						
22						
24						

NOTES:

LABORATORY ANALYSIS ( )

DEVON MIGURA LOG 11213301 HALLIBURTON ARTESIA.GPJ CRA_CORP.GDT 28/8/20

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/08
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-17
DATE COMPLETED: 5 August 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Concrete surface cover					
	Sub base material	1.00				
2	Fat clay, brown, damp	2.00				
4			5'	2.1	82	20
6						
8	END OF HOLE @ 8.0ft BGS	8.00	8'	35.5	220	51
10						
12						
14						
16						
18						
20						
22						
24						

NOTES:

LABORATORY ANALYSIS ( )

DEVON MIGURA LOG 11213301 HALLIBURTON ARTESIA.GPJ CRA_CORP.GDT 28/8/20

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/18
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-18R
DATE COMPLETED: 27 October 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
0	Sub base material					
2	Fine-med sandy clay, brown, damp	2.00				
4						
6			5'	7.1	<60.7	
8	Fat clay, gray, odor, damp	8.00				
10			10'	1102	324	
12						
14						
16	Fine, sandy clay, brown, damp	16.00	15'	5.6	<64.7	
18						
20	END OF HOLE @ 20.0ft BGS	20.00	20'	3.8	<65.2	
22						
24						

NOTES:

LABORATORY ANALYSIS

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/18
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-19R
DATE COMPLETED: 26 October 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Sub base material					
2	Fine-med sandy clay, brown, damp	2.00				
4			5'	4.2	<62.1	
6						
8	Fat clay, gray, odor, dry	8.00				
10			10'	806.1	150	
12	Fat clay, brown, damp	12.00				
14			15'	2.5	<67.8	
16	Fine sandy clay, brown, damp	16.00				
18						
20	END OF HOLE @ 20.0ft BGS	20.00	20'	4.2	<66.8	
22						
24						

NOTES:

LABORATORY ANALYSIS (15')

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/18
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-20R
DATE COMPLETED: 27 October 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Sub base material					
2	Fine-med sandy clay, brown, damp	2.00				
4			5'	3.2	<59.9	
6						
8	Fat clay, gray, odor, dry	8.00				
10			10'	245.1	128	
12	Fat clay, brown, damp	12.00				
14						
15			15'	8.2	<67.7	
16						
18						
20	END OF HOLE @ 20.0ft BGS	20.00	20'	2.4	<86.1	
22						
24						

NOTES:

LABORATORY ANALYSIS ( )

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/18
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-21R
DATE COMPLETED: 26 October 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Sub base material					
2	Fine-med sandy clay, brown, damp	2.00				
4						
	Fat clay, brown, damp	5.00	5'	1.8	<62.3	
6						
8	Fat clay, gray, odor, dry	8.00				
10			10'	626.8	82.2	
12						
14	Fat clay, brown, damp	14.00				
			15'	4.7	<64.8	
16						
18						
20	END OF HOLE @ 20.0ft BGS	20.00	20'	5.2	<64.8	
22						
24						

NOTES:

LABORATORY ANALYSIS ( )

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/18
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-22R
DATE COMPLETED: 27 October 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Concrete surface cover					
	Sub base material	1.00				
2	Fine sandy clay, brown, damp	2.00				
4			5'	2.8	<58.8	
6						
8	Fat clay, gray, odor, dry	8.00				
10	END OF HOLE @ 10.0ft BGS	10.00	10'	78.9	<66.3	
12						
14						
16						
18						
20						
22						
24						

NOTES:

LABORATORY ANALYSIS (5' 10')

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/18
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-23R
DATE COMPLETED: 27 October 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Concrete surface cover					
	Sub base material	1.00				
2	Fine sandy clay, brown, damp	2.00				
4			5'	4.7	<59.2	
6						
8	Fat clay, brown, damp	8.00				
10	END OF HOLE @ 10.0ft BGS	10.00	10'	5.3	<70.3	
12						
14						
16						
18						
20						
22						
24						

NOTES:

LABORATORY ANALYSIS (10')

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/18
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-24R
DATE COMPLETED: 27 October 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Concrete surface cover					
	Sub base material	1.00				
2	Fat clay, brown, damp	2.00				
4			5'	4.6	<59.1	
6						
8						
10	END OF HOLE @ 10.0ft BGS	10.00	10'	4	<62.7	
12						
14						
16						
18						
20						
22						
24						

NOTES:

LABORATORY ANALYSIS

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/18
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-25
DATE COMPLETED: 13 October 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
0	Sub base material					
2	Fine-med sandy clay, brown, damp	2.00				
6			6'	4		440
8						
9	END OF HOLE @ 9.0ft BGS	9.00	9'	2.6		490
10						
12						
14						
16						
18						
20						
22						
24						

NOTES:

LABORATORY ANALYSIS (6' 9')

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/18
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-26
DATE COMPLETED: 13 October 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
0	Sub base material					
2	Fine sandy clay, brown, damp	2.00				
4						
6			6'	3.9		<480
8						
	END OF HOLE @ 9.0ft BGS	9.00	9'	3		<510
10						
12						
14						
16						
18						
20						
22						
24						

NOTES:

LABORATORY ANALYSIS (6')

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/18
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-27/27R
DATE COMPLETED: 27 October 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
0	Sub base material					
2	Fine sandy clay, brown, damp	2.00				
8	Medium sand, tan, wet	8.00				
9	Fine sandy clay, brown, damp	9.00				
10			10'	2.6	<62.1	<240
12	Fat clay, brown, dry	12.00				
13			13'	2.2	<61.5	<510
16	END OF HOLE @ 16.0ft BGS	16.00	16'	1.3	<67.4	300

NOTES:

LABORATORY ANALYSIS ( )

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/18
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-28/28R
DATE COMPLETED: 27 October 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
0	Sub base material					
2	Fine sandy clay, brown, damp	2.00				
8	Fat sandy clay, brown, damp	8.00				
10			10'	4.1	<87	<570
12						
13			13'	3.8	<62.8	<470
14						
16	END OF HOLE @ 16.0ft BGS	16.00	16'	3.7	<61.6	190
18						
20						
22						
24						

NOTES:

LABORATORY ANALYSIS ( )

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/18
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-29/29R
DATE COMPLETED: 27 October 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
0	Sub base material					
2	Fine-med sandy clay, brown, damp	2.00				
8	Fat clay, brown, damp	8.00				
10			10'	4.1	<90.9	<480
12						
13			13'	3.8	<69.5	81
14						
16	END OF HOLE @ 16.0ft BGS	16.00	16'	5	<59.6	250
18						
20						
22						
24						

NOTES:

LABORATORY ANALYSIS ( )

This log should not be used separately from the original report.

Appendix C
Photographs

Photo 1 - Looking south at wooden stakes showing location of DP-2 in front of DP-1 north of Building 5. DP-1 was completed as well DPW-1.

Photo 2 - Looking south at locations of DP-3 nearest containment and DP-4 near drain in truck bay. Final location of DP-4 was offset to the east

Site Photographs

Photo 3 - Looking southwest at east side of Building 4 at DP-5 on the right and DP-6 on the left marked in white

Photo 4 - Looking north at south side of the grit pit and DP-7 location marked in white

Site Photographs

Photo 5 - Looking north through west wash bay at location of DP-8 in front of DP-9 marked in white

Photo 6 - Looking northwest at DP-10 and DP-11 marked I white on east side of building 3. Final location of both borings was shifted east to avoid underground piping.

Site Photographs

Photo 7 - Looking southeast at DP-12 location marked in white on north end of oil water separators/grit pit

Photo 8 - Looking north through east wash bay at locations marked in white DP-14 in front of DP-13 just beyond the hose

Site Photographs

Photo 9 - Looking south at location of DP-15 marked in white near north end of Building 6

Photo 10 - Looking east at locations of DP-16 and DP-17 marked in white inside of Building 6

Site Photographs

Photo 11 - Looking south at location of DP-18R marked in white north of Building 6

Photo 12 - Looking west at location of DP-19R marked in white north of Building 6

Site Photographs

Photo 13 - Looking south at location of DP-20R marked in white inside of Building 6

Photo 14 - Looking east at location of DP-21R marked in white southeast of Building 6

Site Photographs

Photo 15 - Looking west at location of DP-22R marked in white inside of Building 6

Photo 16 - Looking north at location of DP-23R marked in white inside of Building 6

Site Photographs

Photo 17 - Looking east at location of DP-24R marked in white inside of Building 6

Photo 18 - Looking south at location of DP-25/25R and beyond at DP-26/26R marked by fresh black asphalt on east side of eastern wash bay

Site Photographs

Photo 19 - Looking south at location of DP-27/27R marked in white north of DPW-1 and Building 5

Photo 20 - Looking east at location of DP-29/29R marked in white west of DPW-1 and north of Building 5

Site Photographs

Appendix D
Soil Laboratory Analytical Data

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-209487-1
Client Project/Site: 11213301-08 / Halliburton 2311 S 1st St

For:
GHD Services Inc.
5551 Corporate Boulevard
Suite 200
Baton Rouge, Louisiana 70808

Attn: Daniel Wascom

Authorized for release by:
8/21/2020 5:39:10 PM

Sachin Kudchadkar, Senior Project Manager
(713)690-4444
Sachin.Kudchadkar@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

Client: GHD Services Inc.
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Laboratory Job ID: 600-209487-1

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Case Narrative

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Job ID: 600-209487-1

Laboratory: Eurofins TestAmerica, Houston

Narrative

Job Narrative
600-209487-1

Comments
No additional comments.

Receipt
The samples were received on 8/7/2020 9:20 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 2.0º C, 3.0º C, 3.2º C and 4.3º C.

GC/MS VOA
Method 8260B: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 600-300707 recovered outside control limits for the following analytes: 2-Butanone (MEK), Acetone, and Bromomethane.

Method 8260B: The following sample was diluted to bring the concentration of target analytes within the calibration range: S-11213301-080320-CN-DP-1-12' (600-209487-2). Elevated reporting limits (RLs) are provided.

Method 8260B: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 600-300771 recovered outside control limits for the following analytes: 1,1,2,2,-Tetrachloroethane, 2-Hexanone, 4-Methyl-2-pentanone (MIBK), Acetone, Methyl acetate, and Vinyl acetate.

Method 8260B: The following compounds were outside control limits in the continuing calibration verification (CCV) associated with batch 600-300707: Methyl acetate (36.2%). These compounds are not classified as Calibration Check Compounds (CCCs) in the reference method, and the laboratory defaults to in-house and/or project-specific criteria for evaluation. The drift% is more than 35% but below 50%.

Method 8260B: The following sample was diluted to bring the concentration of target analytes within the calibration range: S-11213301-080520-CN-DP-15-11' (600-209487-34). Elevated reporting limits (RLs) are provided.

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

GC VOA
Method 8015B: The following sample was diluted due to the nature of the sample matrix: S-11213301-080320-CN-DP-1-12' (600-209487-2). Elevated reporting limits (RLs) are provided.

Method 8015B: The following sample was diluted to bring the concentration of target analytes within the calibration range: S-11213301-080520-CN-DP-15-11' (600-209487-34). Elevated reporting limits (RLs) are provided.

Method 8015B: The following sample required a dilution due to the nature of the sample matrix: S-11213301-080520-CN-DP-15-11' (600-209487-34). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method 8015B: The following samples were diluted to bring the concentration of target analytes within the calibration range: S-11213301-080520-CN-DP-15-11' (600-209487-34) and S-11213301-080520-CN-DPW-15-8' (600-209487-41). Elevated reporting limits (RLs) are provided.

Method 8015B: The following sample required a dilution due to the nature of the sample matrix: S-11213301-080520-CN-DP-15-11' (600-209487-34). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

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

GC Semi VOA
Method 8015D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 600-300964 and analytical batch 600-301085 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample

Case Narrative

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Job ID: 600-209487-1 (Continued)

Laboratory: Eurofins TestAmerica, Houston (Continued)

(LCS) recovery was within acceptance limits.

Method 8015D: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 600-300964 and analytical batch 600-301085 was outside control limits. Sample non-homogeneity is suspected.

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

General Chemistry
Method 300.0: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 600-301125 and analytical batch 600-301062 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) precision was within acceptance limits.

(600-209487-A-1-A MS) and (600-209487-A-1-A MSD)

Method 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 600-301125 and analytical batch 600-301062 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 300.0: The following samples were diluted to bring the concentration of target analytes within the calibration range: S-11213301-080420-CN-DP-9-9' (600-209487-22), S-11213301-080520-CN-DP-12-6' (600-209487-27) and S-11213301-080520-CN-DP-12-9' (600-209487-28). Elevated reporting limits (RLs) are provided.

Method 300.0: The continuing calibration blank for preparation batch 600-301125 and analytical batch 600-301663 contained Chloride above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

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

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

Organic Prep
Method 3546: Due to the matrix, the initial volumes used for the following samples deviated from the standard procedure: S-11213301-080320-CN-DP-1-5' (600-209487-1), S-11213301-080320-CN-DP-1-12' (600-209487-2), S-11213301-080320-CN-DP-1-15' (600-209487-3), S-11213301-080320-CN-DP-2-5' (600-209487-4), S-11213301-080320-CN-DP-2-10' (600-209487-5), S-11213301-080320-CN-DP-2-11' (600-209487-6), S-11213301-080420-CN-DP-3-5' (600-209487-7), S-11213301-080420-CN-DP-3-10' (600-209487-8), S-11213301-080420-CN-DP-3-15' (600-209487-9), S-11213301-080420-CN-DP-4.5' (600-209487-10), S-11213301-080420-CN-DP-4-10' (600-209487-11), S-11213301-080420-CN-DP-4-15' (600-209487-12), S-11213301-080420-CN-DP-5-5' (600-209487-13), S-11213301-080420-CN-DP-5-8' (600-209487-14), S-11213301-080420-CN-DP-6-5' (600-209487-15), S-11213301-080420-CN-DP-6-8' (600-209487-16), S-11213301-080420-CN-DP-7-6' (600-209487-17), S-11213301-080420-CN-DP-7-9' (600-209487-18), S-11213301-080420-CN-DP-8-6' (600-209487-19), S-11213301-080420-CN-DP-8-9' (600-209487-20), (600-209487-B-13 MS) and (600-209487-B-13 MSD). The reporting limits (RLs) have been adjusted proportionately.

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

Method Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8015B	Gasoline Range Organics - (GC)	SW846	TAL HOU
8015D	Diesel Range Organics (DRO) (GC)	SW846	TAL HOU
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU
2540G	SM 2540G	SM22	TAL HOU
3546	Microwave Extraction	SW846	TAL HOU
5030B	Purge and Trap for Methanol Extractions	SW846	TAL HOU
5030B	Purge and Trap for Solids	SW846	TAL HOU
DI Leach	Deionized Water Leaching Procedure (Routine)	ASTM	TAL HOU

Protocol References:

ASTM = ASTM International
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SM22 = Standard Methods For The Examination Of Water And Wastewater, 22nd Edition
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: GHD Services Inc.
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Job ID: 600-209487-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
600-209487-1	S-11213301-080320-CN-DP-1-5'	Solid	08/03/20 13:20	08/07/20 09:20	
600-209487-2	S-11213301-080320-CN-DP-1-12'	Solid	08/03/20 13:30	08/07/20 09:20	
600-209487-3	S-11213301-080320-CN-DP-1-15'	Solid	08/03/20 13:50	08/07/20 09:20	
600-209487-4	S-11213301-080320-CN-DP-2-5'	Solid	08/03/20 14:40	08/07/20 09:20	
600-209487-5	S-11213301-080320-CN-DP-2-10'	Solid	08/03/20 15:00	08/07/20 09:20	
600-209487-6	S-11213301-080320-CN-DP-2-11'	Solid	08/03/20 15:10	08/07/20 09:20	
600-209487-7	S-11213301-080420-CN-DP-3-5'	Solid	08/04/20 09:50	08/07/20 09:20	
600-209487-8	S-11213301-080420-CN-DP-3-10'	Solid	08/04/20 09:55	08/07/20 09:20	
600-209487-9	S-11213301-080420-CN-DP-3-15'	Solid	08/04/20 10:00	08/07/20 09:20	
600-209487-10	S-11213301-080420-CN-DP-4.5'	Solid	08/04/20 10:30	08/07/20 09:20	
600-209487-11	S-11213301-080420-CN-DP-4-10'	Solid	08/04/20 10:35	08/07/20 09:20	
600-209487-12	S-11213301-080420-CN-DP-4-15'	Solid	08/04/20 10:40	08/07/20 09:20	
600-209487-13	S-11213301-080420-CN-DP-5-5'	Solid	08/04/20 11:10	08/07/20 09:20	
600-209487-14	S-11213301-080420-CN-DP-5-8'	Solid	08/04/20 11:15	08/07/20 09:20	
600-209487-15	S-11213301-080420-CN-DP-6-5'	Solid	08/04/20 11:50	08/07/20 09:20	
600-209487-16	S-11213301-080420-CN-DP-6-8'	Solid	08/04/20 11:55	08/07/20 09:20	
600-209487-17	S-11213301-080420-CN-DP-7-6'	Solid	08/04/20 13:55	08/07/20 09:20	
600-209487-18	S-11213301-080420-CN-DP-7-9'	Solid	08/04/20 14:00	08/07/20 09:20	
600-209487-19	S-11213301-080420-CN-DP-8-6'	Solid	08/04/20 15:00	08/07/20 09:20	
600-209487-20	S-11213301-080420-CN-DP-8-9'	Solid	08/04/20 15:05	08/07/20 09:20	
600-209487-21	S-11213301-080420-CN-DP-9-6'	Solid	08/04/20 15:50	08/07/20 09:20	
600-209487-22	S-11213301-080420-CN-DP-9-9'	Solid	08/04/20 15:55	08/07/20 09:20	
600-209487-23	S-11213301-080520-CN-DP-10-5'	Solid	08/05/20 08:15	08/07/20 09:20	
600-209487-24	S-11213301-080520-CN-DP-10-8'	Solid	08/05/20 08:20	08/07/20 09:20	
600-209487-25	S-11213301-080520-CN-DP-11-5'	Solid	08/05/20 09:00	08/07/20 09:20	
600-209487-26	S-11213301-080520-CN-DP-11-8	Solid	08/05/20 09:05	08/07/20 09:20	
600-209487-27	S-11213301-080520-CN-DP-12-6'	Solid	08/05/20 09:45	08/07/20 09:20	
600-209487-28	S-11213301-080520-CN-DP-12-9'	Solid	08/05/20 09:50	08/07/20 09:20	
600-209487-29	S-11213301-080520-CN-DP-13-6'	Solid	08/05/20 10:50	08/07/20 09:20	
600-209487-30	S-11213301-080520-CN-DP-13-9'	Solid	08/05/20 10:55	08/07/20 09:20	
600-209487-31	S-11213301-080520-CN-DP-14-6'	Solid	08/05/20 11:25	08/07/20 09:20	
600-209487-32	S-11213301-080520-CN-DP-14-9'	Solid	08/05/20 11:30	08/07/20 09:20	
600-209487-33	S-11213301-080520-CN-DP-15-5'	Solid	08/05/20 12:10	08/07/20 09:20	
600-209487-34	S-11213301-080520-CN-DP-15-11'	Solid	08/05/20 17:15	08/07/20 09:20	
600-209487-35	S-11213301-080520-CN-DP-15-20'	Solid	08/05/20 17:20	08/07/20 09:20	
600-209487-36	S-11213301-080520-CN-DP-16-5'	Solid	08/05/20 14:45	08/07/20 09:20	
600-209487-37	S-11213301-080520-CN-DP-16-8'	Solid	08/05/20 14:50	08/07/20 09:20	
600-209487-38	S-11213301-080520-CN-DP-17-5'	Solid	08/05/20 15:35	08/07/20 09:20	
600-209487-39	S-11213301-080520-CN-DP-17-8'	Solid	08/05/20 15:40	08/07/20 09:20	
600-209487-41	S-11213301-080520-CN-DPW-15-8'	Solid	08/05/20 12:15	08/07/20 09:20	

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080320-CN-DP-1-5' **Lab Sample ID: 600-209487-1**
Date Collected: 08/03/20 13:20 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.6**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Chloromethane	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Vinyl chloride	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Bromomethane	ND	*1	0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Chloroethane	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Trichlorofluoromethane	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
1,1-Dichloroethene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
trans-1,2-Dichloroethene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Methyl tert-butyl ether	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Acetone	ND	*1	0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Carbon disulfide	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Methyl acetate	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Methylene Chloride	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Vinyl acetate	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
cis-1,2-Dichloroethene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
1,2-Dichloroethene, Total	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
2-Butanone (MEK)	ND	*1	0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Chlorobromomethane	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Cyclohexane	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Carbon tetrachloride	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Benzene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
1,2-Dichloroethane	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Trichloroethene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
1,1,1-Trichloroethane	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
1,1-Dichloroethane	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
1,2-Dichloropropane	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Chloroform	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Bromodichloromethane	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Methylcyclohexane	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
cis-1,3-Dichloropropene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
4-Methyl-2-pentanone (MIBK)	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Toluene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
trans-1,3-Dichloropropene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
1,1,2-Trichloroethane	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Tetrachloroethene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
2-Hexanone	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Dibromochloromethane	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
1,2-Dibromoethane	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Chlorobenzene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Ethylbenzene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
m-Xylene & p-Xylene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Xylenes, Total	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
o-Xylene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Styrene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Bromoform	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Isopropylbenzene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
1,1,2,2-Tetrachloroethane	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
1,3-Dichlorobenzene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080320-CN-DP-1-5' Lab Sample ID: 600-209487-1

Date Collected: 08/03/20 13:20 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.6**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
1,2-Dichlorobenzene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
1,2-Dibromo-3-Chloropropane	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
1,2,4-Trichlorobenzene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*61 - 130*	*08/08/20 10:45*	*08/08/20 15:13*	*1*
Dibromofluoromethane	*84*		*68 - 140*	*08/08/20 10:45*	*08/08/20 15:13*	*1*
Toluene-d8 (Surr)	*94*		*50 - 130*	*08/08/20 10:45*	*08/08/20 15:13*	*1*
4-Bromofluorobenzene	*105*		*57 - 140*	*08/08/20 10:45*	*08/08/20 15:13*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/08/20 07:14	08/08/20 14:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*92*		*70 - 130*	*08/08/20 07:14*	*08/08/20 14:00*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		15		mg/Kg	☼	08/12/20 08:32	08/14/20 21:49	1
C28-C36	**49**		15		mg/Kg	☼	08/12/20 08:32	08/14/20 21:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*75*		*60 - 140*	*08/12/20 08:32*	*08/14/20 21:49*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**80**	**F2 F1**	4.8		mg/Kg	☼		08/13/20 14:03	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**16.4**		1.0		%			08/11/20 08:50	1
Percent Solids	**83.6**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080320-CN-DP-1-12' Lab Sample ID: 600-209487-2

Date Collected: 08/03/20 13:30 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 80.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Chloromethane	ND		0.072		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Vinyl chloride	ND		0.072		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Bromomethane	ND	*1	0.072		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Chloroethane	ND		0.072		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Trichlorofluoromethane	ND		0.072		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
1,1-Dichloroethene	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
trans-1,2-Dichloroethene	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Methyl tert-butyl ether	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Acetone	**0.63**	***1**	0.072		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080320-CN-DP-1-12' **Lab Sample ID: 600-209487-2**
Date Collected: 08/03/20 13:30 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 80.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		0.072		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Methyl acetate	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Methylene Chloride	ND		0.072		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Vinyl acetate	ND		0.072		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
cis-1,2-Dichloroethene	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
1,2-Dichloroethene, Total	ND		0.072		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
2-Butanone (MEK)	**1.4**	***1**	0.072		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Chlorobromomethane	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Cyclohexane	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Carbon tetrachloride	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Benzene	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
1,2-Dichloroethane	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Trichloroethene	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
1,1,1-Trichloroethane	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
1,1-Dichloroethane	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
1,2-Dichloropropane	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Chloroform	ND		0.072		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Bromodichloromethane	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Methylcyclohexane	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
cis-1,3-Dichloropropene	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
4-Methyl-2-pentanone (MIBK)	ND		0.072		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Toluene	**0.45**		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
trans-1,3-Dichloropropene	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
1,1,2-Trichloroethane	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Tetrachloroethene	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
2-Hexanone	ND		0.072		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Dibromochloromethane	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
1,2-Dibromoethane	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Chlorobenzene	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Ethylbenzene	**0.36**		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
m-Xylene & p-Xylene	**1.4**		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Xylenes, Total	**2.3**		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
o-Xylene	**0.89**		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Styrene	**1.1**		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Bromoform	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Isopropylbenzene	**0.23**		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
1,1,2,2-Tetrachloroethane	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
1,3-Dichlorobenzene	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
1,4-Dichlorobenzene	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
1,2-Dichlorobenzene	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
1,2-Dibromo-3-Chloropropane	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
1,2,4-Trichlorobenzene	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*61 - 130*	*08/08/20 10:45*	*08/08/20 15:37*	*1*
Dibromofluoromethane	*85*		*68 - 140*	*08/08/20 10:45*	*08/08/20 15:37*	*1*
Toluene-d8 (Surr)	*96*		*50 - 130*	*08/08/20 10:45*	*08/08/20 15:37*	*1*
4-Bromofluorobenzene	*121*		*57 - 140*	*08/08/20 10:45*	*08/08/20 15:37*	*1*

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080320-CN-DP-1-12' Lab Sample ID: 600-209487-2

Date Collected: 08/03/20 13:30 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 80.0**

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	110		26		mg/Kg	☼	08/08/20 07:14	08/08/20 14:50	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*117*		*70 - 130*	*08/08/20 07:14*	*08/08/20 14:50*	*20*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	350		31		mg/Kg	☼	08/17/20 12:40	08/18/20 15:54	1
C28-C36	280		31		mg/Kg	☼	08/17/20 12:40	08/18/20 15:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*96*		*60 - 140*	*08/17/20 12:40*	*08/18/20 15:54*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	87		5.0		mg/Kg	☼		08/13/20 15:04	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20.0		1.0		%			08/11/20 08:50	1
Percent Solids	80.0		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080320-CN-DP-1-15' Lab Sample ID: 600-209487-3

Date Collected: 08/03/20 13:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Chloromethane	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Vinyl chloride	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Bromomethane	ND	*1	0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Chloroethane	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Trichlorofluoromethane	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
1,1-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
trans-1,2-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Methyl tert-butyl ether	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Acetone	ND	*1	0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Carbon disulfide	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Methyl acetate	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Methylene Chloride	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Vinyl acetate	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
cis-1,2-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
1,2-Dichloroethene, Total	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
2-Butanone (MEK)	ND	*1	0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Chlorobromomethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Cyclohexane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Carbon tetrachloride	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Benzene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080320-CN-DP-1-15' **Lab Sample ID: 600-209487-3**
Date Collected: 08/03/20 13:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Trichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
1,1,1-Trichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
1,1-Dichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
1,2-Dichloropropane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Chloroform	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Bromodichloromethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Methylcyclohexane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
cis-1,3-Dichloropropene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
4-Methyl-2-pentanone (MIBK)	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Toluene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
trans-1,3-Dichloropropene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
1,1,2-Trichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Tetrachloroethene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
2-Hexanone	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Dibromochloromethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
1,2-Dibromoethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Chlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Ethylbenzene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
m-Xylene & p-Xylene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Xylenes, Total	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
o-Xylene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Styrene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Bromoform	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Isopropylbenzene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
1,1,2,2-Tetrachloroethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
1,3-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
1,4-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
1,2-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
1,2-Dibromo-3-Chloropropane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
1,2,4-Trichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*61 - 130*	*08/08/20 10:45*	*08/08/20 16:00*	*1*
Dibromofluoromethane	*87*		*68 - 140*	*08/08/20 10:45*	*08/08/20 16:00*	*1*
Toluene-d8 (Surr)	*94*		*50 - 130*	*08/08/20 10:45*	*08/08/20 16:00*	*1*
4-Bromofluorobenzene	*104*		*57 - 140*	*08/08/20 10:45*	*08/08/20 16:00*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.3		mg/Kg	☼	08/08/20 07:14	08/08/20 15:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*99*		*70 - 130*	*08/08/20 07:14*	*08/08/20 15:15*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		15		mg/Kg	☼	08/12/20 08:32	08/14/20 23:02	1
C28-C36	ND		15		mg/Kg	☼	08/12/20 08:32	08/14/20 23:02	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080320-CN-DP-1-15' Lab Sample ID: 600-209487-3

Date Collected: 08/03/20 13:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.2**

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*75*		*60 - 140*	*08/12/20 08:32*	*08/14/20 23:02*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	230		4.8		mg/Kg	☼		08/13/20 15:24	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16.8		1.0		%			08/11/20 08:50	1
Percent Solids	83.2		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080320-CN-DP-2-5' Lab Sample ID: 600-209487-4

Date Collected: 08/03/20 14:40 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Chloromethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Vinyl chloride	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Bromomethane	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Chloroethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Trichlorofluoromethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
1,1-Dichloroethene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
trans-1,2-Dichloroethene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Methyl tert-butyl ether	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Acetone	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Carbon disulfide	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Methyl acetate	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Methylene Chloride	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Vinyl acetate	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
cis-1,2-Dichloroethene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
1,2-Dichloroethene, Total	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
2-Butanone (MEK)	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Chlorobromomethane	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Cyclohexane	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Carbon tetrachloride	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Benzene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
1,2-Dichloroethane	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Trichloroethene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
1,1,1-Trichloroethane	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
1,1-Dichloroethane	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
1,2-Dichloropropane	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Chloroform	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Bromodichloromethane	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Methylcyclohexane	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
cis-1,3-Dichloropropene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
4-Methyl-2-pentanone (MIBK)	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Toluene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
trans-1,3-Dichloropropene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080320-CN-DP-2-5' **Lab Sample ID: 600-209487-4**
Date Collected: 08/03/20 14:40 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Tetrachloroethene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
2-Hexanone	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Dibromochloromethane	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
1,2-Dibromoethane	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Chlorobenzene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Ethylbenzene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
m-Xylene & p-Xylene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Xylenes, Total	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
o-Xylene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Styrene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Bromoform	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Isopropylbenzene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
1,1,2,2-Tetrachloroethane	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
1,3-Dichlorobenzene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
1,4-Dichlorobenzene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
1,2-Dichlorobenzene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
1,2-Dibromo-3-Chloropropane	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
1,2,4-Trichlorobenzene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*61 - 130*	*08/08/20 10:45*	*08/08/20 16:24*	*1*
Dibromofluoromethane	*84*		*68 - 140*	*08/08/20 10:45*	*08/08/20 16:24*	*1*
Toluene-d8 (Surr)	*91*		*50 - 130*	*08/08/20 10:45*	*08/08/20 16:24*	*1*
4-Bromofluorobenzene	*102*		*57 - 140*	*08/08/20 10:45*	*08/08/20 16:24*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/08/20 07:14	08/08/20 15:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*100*		*70 - 130*	*08/08/20 07:14*	*08/08/20 15:41*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		15		mg/Kg	☼	08/12/20 08:32	08/14/20 23:38	1
C28-C36	**57**		15		mg/Kg	☼	08/12/20 08:32	08/14/20 23:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*97*		*60 - 140*	*08/12/20 08:32*	*08/14/20 23:38*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**37**		4.8		mg/Kg	☼		08/13/20 15:45	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**16.7**		1.0		%			08/11/20 08:50	1
Percent Solids	**83.3**		1.0		%			08/11/20 08:50	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080320-CN-DP-2-10' **Lab Sample ID: 600-209487-5**
Date Collected: 08/03/20 15:00 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Chloromethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Vinyl chloride	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Bromomethane	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Chloroethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Trichlorofluoromethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
1,1-Dichloroethene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
trans-1,2-Dichloroethene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Methyl tert-butyl ether	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Acetone	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Carbon disulfide	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Methyl acetate	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Methylene Chloride	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Vinyl acetate	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
cis-1,2-Dichloroethene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
1,2-Dichloroethene, Total	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
2-Butanone (MEK)	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Chlorobromomethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Cyclohexane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Carbon tetrachloride	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Benzene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
1,2-Dichloroethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Trichloroethene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
1,1,1-Trichloroethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
1,1-Dichloroethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
1,2-Dichloropropane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Chloroform	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Bromodichloromethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Methylcyclohexane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
cis-1,3-Dichloropropene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
4-Methyl-2-pentanone (MIBK)	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Toluene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
trans-1,3-Dichloropropene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
1,1,2-Trichloroethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Tetrachloroethene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
2-Hexanone	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Dibromochloromethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
1,2-Dibromoethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Chlorobenzene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Ethylbenzene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
m-Xylene & p-Xylene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Xylenes, Total	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
o-Xylene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Styrene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Bromoform	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Isopropylbenzene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
1,1,2,2-Tetrachloroethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
1,3-Dichlorobenzene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080320-CN-DP-2-10' Lab Sample ID: 600-209487-5

Date Collected: 08/03/20 15:00 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
1,2-Dichlorobenzene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
1,2-Dibromo-3-Chloropropane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
1,2,4-Trichlorobenzene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*61 - 130*	*08/08/20 10:45*	*08/08/20 16:48*	*1*
Dibromofluoromethane	*83*		*68 - 140*	*08/08/20 10:45*	*08/08/20 16:48*	*1*
Toluene-d8 (Surr)	*97*		*50 - 130*	*08/08/20 10:45*	*08/08/20 16:48*	*1*
4-Bromofluorobenzene	*104*		*57 - 140*	*08/08/20 10:45*	*08/08/20 16:48*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/08/20 07:14	08/08/20 16:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*103*		*70 - 130*	*08/08/20 07:14*	*08/08/20 16:06*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		15		mg/Kg	☼	08/12/20 08:32	08/15/20 00:14	1
C28-C36	**54**		15		mg/Kg	☼	08/12/20 08:32	08/15/20 00:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*68*		*60 - 140*	*08/12/20 08:32*	*08/15/20 00:14*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**28**		4.9		mg/Kg	☼		08/13/20 16:05	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**18.0**		1.0		%			08/11/20 08:50	1
Percent Solids	**82.0**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080320-CN-DP-2-11' Lab Sample ID: 600-209487-6

Date Collected: 08/03/20 15:10 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 91.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Chloromethane	ND		0.010		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Vinyl chloride	ND		0.010		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Bromomethane	ND		0.010		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Chloroethane	ND		0.010		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Trichlorofluoromethane	ND		0.010		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
1,1-Dichloroethene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
trans-1,2-Dichloroethene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Methyl tert-butyl ether	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Acetone	ND	*1	0.010		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080320-CN-DP-2-11' **Lab Sample ID: 600-209487-6**
Date Collected: 08/03/20 15:10 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 91.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		0.010		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Methyl acetate	ND	*1	0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Methylene Chloride	ND		0.010		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Vinyl acetate	ND	*1	0.010		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
cis-1,2-Dichloroethene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
1,2-Dichloroethene, Total	ND		0.010		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
2-Butanone (MEK)	ND		0.010		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Chlorobromomethane	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Cyclohexane	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Carbon tetrachloride	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Benzene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
1,2-Dichloroethane	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Trichloroethene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
1,1,1-Trichloroethane	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
1,1-Dichloroethane	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
1,2-Dichloropropane	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Chloroform	ND		0.010		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Bromodichloromethane	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Methylcyclohexane	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
cis-1,3-Dichloropropene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.010		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Toluene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
trans-1,3-Dichloropropene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
1,1,2-Trichloroethane	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Tetrachloroethene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
2-Hexanone	ND	*1	0.010		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Dibromochloromethane	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
1,2-Dibromoethane	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Chlorobenzene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Ethylbenzene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
m-Xylene & p-Xylene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Xylenes, Total	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
o-Xylene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Styrene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Bromoform	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Isopropylbenzene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
1,3-Dichlorobenzene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
1,4-Dichlorobenzene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
1,2-Dichlorobenzene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
1,2-Dibromo-3-Chloropropane	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
1,2,4-Trichlorobenzene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*61 - 130*	*08/08/20 10:45*	*08/10/20 15:56*	*1*
Dibromofluoromethane	*87*		*68 - 140*	*08/08/20 10:45*	*08/10/20 15:56*	*1*
Toluene-d8 (Surr)	*94*		*50 - 130*	*08/08/20 10:45*	*08/10/20 15:56*	*1*
4-Bromofluorobenzene	*86*		*57 - 140*	*08/08/20 10:45*	*08/10/20 15:56*	*1*

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080320-CN-DP-2-11' Lab Sample ID: 600-209487-6

Date Collected: 08/03/20 15:10 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 91.2

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.1		mg/Kg	☼	08/08/20 07:14	08/08/20 16:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*102*		*70 - 130*	*08/08/20 07:14*	*08/08/20 16:31*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**85**		27		mg/Kg	☼	08/17/20 12:40	08/18/20 16:31	1
C28-C36	**170**		27		mg/Kg	☼	08/17/20 12:40	08/18/20 16:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*109*		*60 - 140*	*08/17/20 12:40*	*08/18/20 16:31*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**38**		4.4		mg/Kg	☼		08/13/20 16:25	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**8.8**		1.0		%			08/11/20 08:50	1
Percent Solids	**91.2**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080420-CN-DP-3-5' Lab Sample ID: 600-209487-7

Date Collected: 08/04/20 09:50 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 83.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Chloromethane	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Vinyl chloride	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Bromomethane	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Chloroethane	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Trichlorofluoromethane	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
1,1-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
trans-1,2-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Methyl tert-butyl ether	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Acetone	ND	*1	0.012		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Carbon disulfide	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Methyl acetate	ND	*1	0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Methylene Chloride	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Vinyl acetate	ND	*1	0.012		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
cis-1,2-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
1,2-Dichloroethene, Total	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
2-Butanone (MEK)	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Chlorobromomethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Cyclohexane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Carbon tetrachloride	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Benzene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
1,2-Dichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-3-5' **Lab Sample ID: 600-209487-7**
Date Collected: 08/04/20 09:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
1,1,1-Trichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
1,1-Dichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
1,2-Dichloropropane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Chloroform	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Bromodichloromethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Methylcyclohexane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
cis-1,3-Dichloropropene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.012		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Toluene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
trans-1,3-Dichloropropene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
1,1,2-Trichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Tetrachloroethene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
2-Hexanone	ND	*1	0.012		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Dibromochloromethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
1,2-Dibromoethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Chlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Ethylbenzene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
m-Xylene & p-Xylene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Xylenes, Total	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
o-Xylene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Styrene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Bromoform	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Isopropylbenzene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
1,3-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
1,4-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
1,2-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
1,2-Dibromo-3-Chloropropane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
1,2,4-Trichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*61 - 130*	*08/08/20 10:45*	*08/10/20 16:22*	*1*
Dibromofluoromethane	*87*		*68 - 140*	*08/08/20 10:45*	*08/10/20 16:22*	*1*
Toluene-d8 (Surr)	*89*		*50 - 130*	*08/08/20 10:45*	*08/10/20 16:22*	*1*
4-Bromofluorobenzene	*85*		*57 - 140*	*08/08/20 10:45*	*08/10/20 16:22*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		36		mg/Kg	☼	08/08/20 07:14	08/08/20 16:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*101*		*70 - 130*	*08/08/20 07:14*	*08/08/20 16:56*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**28**		15		mg/Kg	☼	08/12/20 08:32	08/15/20 01:27	1
C28-C36	**43**		15		mg/Kg	☼	08/12/20 08:32	08/15/20 01:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*80*		*60 - 140*	*08/12/20 08:32*	*08/15/20 01:27*	*1*

Eurofins TestAmerica, Houston

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-3-5' Lab Sample ID: 600-209487-7

Date Collected: 08/04/20 09:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.8**

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	180		4.8		mg/Kg	☼		08/13/20 17:27	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16.2		1.0		%			08/11/20 08:50	1
Percent Solids	83.8		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080420-CN-DP-3-10' Lab Sample ID: 600-209487-8

Date Collected: 08/04/20 09:55 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 81.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Chloromethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Vinyl chloride	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Bromomethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Chloroethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Trichlorofluoromethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
1,1-Dichloroethene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
trans-1,2-Dichloroethene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Methyl tert-butyl ether	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Acetone	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Carbon disulfide	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Methyl acetate	ND	*1	0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Methylene Chloride	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Vinyl acetate	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
cis-1,2-Dichloroethene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
1,2-Dichloroethene, Total	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
2-Butanone (MEK)	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Chlorobromomethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Cyclohexane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Carbon tetrachloride	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Benzene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
1,2-Dichloroethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Trichloroethene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
1,1,1-Trichloroethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
1,1-Dichloroethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
1,2-Dichloropropane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Chloroform	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Bromodichloromethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Methylcyclohexane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
cis-1,3-Dichloropropene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Toluene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
trans-1,3-Dichloropropene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
1,1,2-Trichloroethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Tetrachloroethene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
2-Hexanone	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-3-10' **Lab Sample ID: 600-209487-8**
Date Collected: 08/04/20 09:55 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 81.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
1,2-Dibromoethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Chlorobenzene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Ethylbenzene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
m-Xylene & p-Xylene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Xylenes, Total	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
o-Xylene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Styrene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Bromoform	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Isopropylbenzene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
1,3-Dichlorobenzene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
1,4-Dichlorobenzene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
1,2-Dichlorobenzene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
1,2-Dibromo-3-Chloropropane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
1,2,4-Trichlorobenzene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*61 - 130*	*08/08/20 10:45*	*08/10/20 16:48*	*1*
Dibromofluoromethane	*85*		*68 - 140*	*08/08/20 10:45*	*08/10/20 16:48*	*1*
Toluene-d8 (Surr)	*96*		*50 - 130*	*08/08/20 10:45*	*08/10/20 16:48*	*1*
4-Bromofluorobenzene	*92*		*57 - 140*	*08/08/20 10:45*	*08/10/20 16:48*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/08/20 07:14	08/08/20 17:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*101*		*70 - 130*	*08/08/20 07:14*	*08/08/20 17:21*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		30		mg/Kg	☼	08/17/20 12:40	08/18/20 17:08	1
C28-C36	ND		30		mg/Kg	☼	08/17/20 12:40	08/18/20 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*112*		*60 - 140*	*08/17/20 12:40*	*08/18/20 17:08*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**96**		4.9		mg/Kg	☼		08/13/20 17:47	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**18.2**		1.0		%			08/11/20 08:50	1
Percent Solids	**81.8**		1.0		%			08/11/20 08:50	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-3-15' **Lab Sample ID: 600-209487-9**
Date Collected: 08/04/20 10:00 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Chloromethane	ND		0.011		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Vinyl chloride	ND		0.011		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Bromomethane	ND		0.011		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Chloroethane	ND		0.011		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Trichlorofluoromethane	ND		0.011		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
1,1-Dichloroethene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
trans-1,2-Dichloroethene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Methyl tert-butyl ether	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Acetone	**0.057**	***1**	0.011		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Carbon disulfide	ND		0.011		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Methyl acetate	ND	*1	0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Methylene Chloride	ND		0.011		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Vinyl acetate	ND	*1	0.011		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
cis-1,2-Dichloroethene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
1,2-Dichloroethene, Total	ND		0.011		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
2-Butanone (MEK)	ND		0.011		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Chlorobromomethane	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Cyclohexane	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Carbon tetrachloride	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Benzene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
1,2-Dichloroethane	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Trichloroethene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
1,1,1-Trichloroethane	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
1,1-Dichloroethane	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
1,2-Dichloropropane	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Chloroform	ND		0.011		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Bromodichloromethane	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Methylcyclohexane	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
cis-1,3-Dichloropropene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.011		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Toluene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
trans-1,3-Dichloropropene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
1,1,2-Trichloroethane	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Tetrachloroethene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
2-Hexanone	ND	*1	0.011		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Dibromochloromethane	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
1,2-Dibromoethane	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Chlorobenzene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Ethylbenzene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
m-Xylene & p-Xylene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Xylenes, Total	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
o-Xylene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Styrene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Bromoform	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Isopropylbenzene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
1,3-Dichlorobenzene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-3-15' Lab Sample ID: 600-209487-9

Date Collected: 08/04/20 10:00 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
1,2-Dichlorobenzene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
1,2-Dibromo-3-Chloropropane	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
1,2,4-Trichlorobenzene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*61 - 130*	*08/08/20 10:45*	*08/10/20 17:14*	*1*
Dibromofluoromethane	*83*		*68 - 140*	*08/08/20 10:45*	*08/10/20 17:14*	*1*
Toluene-d8 (Surr)	*87*		*50 - 130*	*08/08/20 10:45*	*08/10/20 17:14*	*1*
4-Bromofluorobenzene	*85*		*57 - 140*	*08/08/20 10:45*	*08/10/20 17:14*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/08/20 13:51	08/08/20 17:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*98*		*70 - 130*	*08/08/20 13:51*	*08/08/20 17:46*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		30		mg/Kg	☼	08/17/20 12:40	08/18/20 17:45	1
C28-C36	ND		30		mg/Kg	☼	08/17/20 12:40	08/18/20 17:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*101*		*60 - 140*	*08/17/20 12:40*	*08/18/20 17:45*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**390**		4.9		mg/Kg	☼		08/13/20 18:07	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**18.0**		1.0		%			08/11/20 08:50	1
Percent Solids	**82.0**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080420-CN-DP-4.5' Lab Sample ID: 600-209487-10

Date Collected: 08/04/20 10:30 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Chloromethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Vinyl chloride	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Bromomethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Chloroethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Trichlorofluoromethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
1,1-Dichloroethene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
trans-1,2-Dichloroethene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Methyl tert-butyl ether	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Acetone	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-4.5' **Lab Sample ID: 600-209487-10**
Date Collected: 08/04/20 10:30 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Methyl acetate	ND	*1	0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Methylene Chloride	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Vinyl acetate	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
cis-1,2-Dichloroethene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
1,2-Dichloroethene, Total	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
2-Butanone (MEK)	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Chlorobromomethane	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Cyclohexane	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Carbon tetrachloride	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Benzene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
1,2-Dichloroethane	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Trichloroethene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
1,1,1-Trichloroethane	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
1,1-Dichloroethane	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
1,2-Dichloropropane	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Chloroform	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Bromodichloromethane	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Methylcyclohexane	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
cis-1,3-Dichloropropene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Toluene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
trans-1,3-Dichloropropene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
1,1,2-Trichloroethane	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Tetrachloroethene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
2-Hexanone	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Dibromochloromethane	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
1,2-Dibromoethane	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Chlorobenzene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Ethylbenzene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
m-Xylene & p-Xylene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Xylenes, Total	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
o-Xylene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Styrene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Bromoform	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Isopropylbenzene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
1,3-Dichlorobenzene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
1,4-Dichlorobenzene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
1,2-Dichlorobenzene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
1,2-Dibromo-3-Chloropropane	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
1,2,4-Trichlorobenzene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*61 - 130*	*08/08/20 10:45*	*08/10/20 17:40*	*1*
Dibromofluoromethane	*88*		*68 - 140*	*08/08/20 10:45*	*08/10/20 17:40*	*1*
Toluene-d8 (Surr)	*94*		*50 - 130*	*08/08/20 10:45*	*08/10/20 17:40*	*1*
4-Bromofluorobenzene	*94*		*57 - 140*	*08/08/20 10:45*	*08/10/20 17:40*	*1*

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-4.5' Lab Sample ID: 600-209487-10

Date Collected: 08/04/20 10:30 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.8**

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/08/20 13:51	08/08/20 18:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*101*		*70 - 130*	*08/08/20 13:51*	*08/08/20 18:11*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		15		mg/Kg	☼	08/12/20 08:32	08/15/20 04:27	1
C28-C36	**46**		15		mg/Kg	☼	08/12/20 08:32	08/15/20 04:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*73*		*60 - 140*	*08/12/20 08:32*	*08/15/20 04:27*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**27**		4.8		mg/Kg	☼		08/13/20 18:28	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**17.2**		1.0		%			08/11/20 08:50	1
Percent Solids	**82.8**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080420-CN-DP-4-10' Lab Sample ID: 600-209487-11

Date Collected: 08/04/20 10:35 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 72.1**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Chloromethane	ND		0.015		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Vinyl chloride	ND		0.015		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Bromomethane	ND		0.015		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Chloroethane	ND		0.015		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Trichlorofluoromethane	ND		0.015		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
1,1-Dichloroethene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
trans-1,2-Dichloroethene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Methyl tert-butyl ether	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Acetone	ND	*1	0.015		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Carbon disulfide	ND		0.015		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Methyl acetate	ND	*1	0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Methylene Chloride	ND		0.015		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Vinyl acetate	ND	*1	0.015		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
cis-1,2-Dichloroethene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
1,2-Dichloroethene, Total	ND		0.015		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
2-Butanone (MEK)	ND		0.015		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Chlorobromomethane	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Cyclohexane	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Carbon tetrachloride	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Benzene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
1,2-Dichloroethane	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-4-10' **Lab Sample ID: 600-209487-11**
Date Collected: 08/04/20 10:35 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 72.1**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
1,1,1-Trichloroethane	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
1,1-Dichloroethane	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
1,2-Dichloropropane	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Chloroform	ND		0.015		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Bromodichloromethane	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Methylcyclohexane	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
cis-1,3-Dichloropropene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.015		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Toluene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
trans-1,3-Dichloropropene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
1,1,2-Trichloroethane	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Tetrachloroethene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
2-Hexanone	ND	*1	0.015		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Dibromochloromethane	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
1,2-Dibromoethane	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Chlorobenzene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Ethylbenzene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
m-Xylene & p-Xylene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Xylenes, Total	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
o-Xylene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Styrene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Bromoform	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Isopropylbenzene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
1,3-Dichlorobenzene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
1,4-Dichlorobenzene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
1,2-Dichlorobenzene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
1,2-Dibromo-3-Chloropropane	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
1,2,4-Trichlorobenzene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*61 - 130*	*08/08/20 10:45*	*08/10/20 18:06*	*1*
Dibromofluoromethane	*83*		*68 - 140*	*08/08/20 10:45*	*08/10/20 18:06*	*1*
Toluene-d8 (Surr)	*87*		*50 - 130*	*08/08/20 10:45*	*08/10/20 18:06*	*1*
4-Bromofluorobenzene	*83*		*57 - 140*	*08/08/20 10:45*	*08/10/20 18:06*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.5		mg/Kg	☼	08/08/20 13:51	08/08/20 18:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*70 - 130*	*08/08/20 13:51*	*08/08/20 18:36*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		35		mg/Kg	☼	08/17/20 12:40	08/18/20 18:21	1
C28-C36	ND		35		mg/Kg	☼	08/17/20 12:40	08/18/20 18:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*112*		*60 - 140*	*08/17/20 12:40*	*08/18/20 18:21*	*1*

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-4-10' Lab Sample ID: 600-209487-11

Date Collected: 08/04/20 10:35 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 72.1**

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**84**		55		mg/Kg	☼		08/13/20 18:48	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**27.9**		1.0		%			08/11/20 08:50	1
Percent Solids	**72.1**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080420-CN-DP-4-15' Lab Sample ID: 600-209487-12

Date Collected: 08/04/20 10:40 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Chloromethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Vinyl chloride	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Bromomethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Chloroethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Trichlorofluoromethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
1,1-Dichloroethene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
trans-1,2-Dichloroethene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Methyl tert-butyl ether	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Acetone	**0.041**	***1**	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Carbon disulfide	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Methyl acetate	ND	*1	0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Methylene Chloride	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Vinyl acetate	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
cis-1,2-Dichloroethene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
1,2-Dichloroethene, Total	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
2-Butanone (MEK)	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Chlorobromomethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Cyclohexane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Carbon tetrachloride	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Benzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
1,2-Dichloroethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Trichloroethene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
1,1,1-Trichloroethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
1,1-Dichloroethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
1,2-Dichloropropane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Chloroform	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Bromodichloromethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Methylcyclohexane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
cis-1,3-Dichloropropene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Toluene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
trans-1,3-Dichloropropene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
1,1,2-Trichloroethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Tetrachloroethene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
2-Hexanone	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-4-15' **Lab Sample ID: 600-209487-12**
Date Collected: 08/04/20 10:40 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
1,2-Dibromoethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Chlorobenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Ethylbenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
m-Xylene & p-Xylene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Xylenes, Total	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
o-Xylene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Styrene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Bromoform	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Isopropylbenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
1,3-Dichlorobenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
1,4-Dichlorobenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
1,2-Dichlorobenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
1,2-Dibromo-3-Chloropropane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
1,2,4-Trichlorobenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*61 - 130*	*08/08/20 10:45*	*08/10/20 18:32*	*1*
Dibromofluoromethane	*84*		*68 - 140*	*08/08/20 10:45*	*08/10/20 18:32*	*1*
Toluene-d8 (Surr)	*91*		*50 - 130*	*08/08/20 10:45*	*08/10/20 18:32*	*1*
4-Bromofluorobenzene	*92*		*57 - 140*	*08/08/20 10:45*	*08/10/20 18:32*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/11/20 08:53	08/11/20 12:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*79*		*70 - 130*	*08/11/20 08:53*	*08/11/20 12:07*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		30		mg/Kg	☼	08/17/20 12:40	08/18/20 18:58	1
C28-C36	ND		30		mg/Kg	☼	08/17/20 12:40	08/18/20 18:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*118*		*60 - 140*	*08/17/20 12:40*	*08/18/20 18:58*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**290**		120		mg/Kg	☼		08/13/20 19:55	25

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**17.2**		1.0		%			08/11/20 08:50	1
Percent Solids	**82.8**		1.0		%			08/11/20 08:50	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-5-5' **Lab Sample ID: 600-209487-13**
Date Collected: 08/04/20 11:10 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 80.6**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Chloromethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Vinyl chloride	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Bromomethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Chloroethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Trichlorofluoromethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
1,1-Dichloroethene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
trans-1,2-Dichloroethene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Methyl tert-butyl ether	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Acetone	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Carbon disulfide	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Methyl acetate	ND	*1	0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Methylene Chloride	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Vinyl acetate	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
cis-1,2-Dichloroethene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
1,2-Dichloroethene, Total	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
2-Butanone (MEK)	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Chlorobromomethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Cyclohexane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Carbon tetrachloride	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Benzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
1,2-Dichloroethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Trichloroethene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
1,1,1-Trichloroethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
1,1-Dichloroethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
1,2-Dichloropropane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Chloroform	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Bromodichloromethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Methylcyclohexane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
cis-1,3-Dichloropropene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Toluene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
trans-1,3-Dichloropropene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
1,1,2-Trichloroethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Tetrachloroethene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
2-Hexanone	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Dibromochloromethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
1,2-Dibromoethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Chlorobenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Ethylbenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
m-Xylene & p-Xylene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Xylenes, Total	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
o-Xylene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Styrene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Bromoform	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Isopropylbenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
1,3-Dichlorobenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-5-5' Lab Sample ID: 600-209487-13

Date Collected: 08/04/20 11:10 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 80.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
1,2-Dichlorobenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
1,2-Dibromo-3-Chloropropane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
1,2,4-Trichlorobenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*61 - 130*	*08/08/20 10:45*	*08/10/20 18:58*	*1*
Dibromofluoromethane	*79*		*68 - 140*	*08/08/20 10:45*	*08/10/20 18:58*	*1*
Toluene-d8 (Surr)	*89*		*50 - 130*	*08/08/20 10:45*	*08/10/20 18:58*	*1*
4-Bromofluorobenzene	*82*		*57 - 140*	*08/08/20 10:45*	*08/10/20 18:58*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/11/20 08:53	08/11/20 11:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*81*		*70 - 130*	*08/11/20 08:53*	*08/11/20 11:39*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		31		mg/Kg	☼	08/17/20 12:40	08/18/20 19:34	1
C28-C36	ND		31		mg/Kg	☼	08/17/20 12:40	08/18/20 19:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*117*		*60 - 140*	*08/17/20 12:40*	*08/18/20 19:34*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**340**		50		mg/Kg	☼		08/13/20 20:18	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**19.4**		1.0		%			08/11/20 08:50	1
Percent Solids	**80.6**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080420-CN-DP-5-8' Lab Sample ID: 600-209487-14

Date Collected: 08/04/20 11:15 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 81.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Chloromethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Vinyl chloride	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Bromomethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Chloroethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Trichlorofluoromethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
1,1-Dichloroethene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
trans-1,2-Dichloroethene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Methyl tert-butyl ether	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Acetone	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-5-8' **Lab Sample ID: 600-209487-14**
Date Collected: 08/04/20 11:15 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 81.4**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Methyl acetate	ND	*1	0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Methylene Chloride	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Vinyl acetate	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
cis-1,2-Dichloroethene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
1,2-Dichloroethene, Total	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
2-Butanone (MEK)	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Chlorobromomethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Cyclohexane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Carbon tetrachloride	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Benzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
1,2-Dichloroethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Trichloroethene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
1,1,1-Trichloroethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
1,1-Dichloroethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
1,2-Dichloropropane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Chloroform	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Bromodichloromethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Methylcyclohexane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
cis-1,3-Dichloropropene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Toluene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
trans-1,3-Dichloropropene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
1,1,2-Trichloroethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Tetrachloroethene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
2-Hexanone	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Dibromochloromethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
1,2-Dibromoethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Chlorobenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Ethylbenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
m-Xylene & p-Xylene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Xylenes, Total	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
o-Xylene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Styrene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Bromoform	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Isopropylbenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
1,3-Dichlorobenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
1,4-Dichlorobenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
1,2-Dichlorobenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
1,2-Dibromo-3-Chloropropane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
1,2,4-Trichlorobenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*61 - 130*	*08/08/20 10:45*	*08/10/20 19:24*	*1*
Dibromofluoromethane	*79*		*68 - 140*	*08/08/20 10:45*	*08/10/20 19:24*	*1*
Toluene-d8 (Surr)	*91*		*50 - 130*	*08/08/20 10:45*	*08/10/20 19:24*	*1*
4-Bromofluorobenzene	*83*		*57 - 140*	*08/08/20 10:45*	*08/10/20 19:24*	*1*

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-5-8' Lab Sample ID: 600-209487-14

Date Collected: 08/04/20 11:15 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 81.4**

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.3		mg/Kg	☼	08/11/20 08:53	08/11/20 12:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*70 - 130*	*08/11/20 08:53*	*08/11/20 12:38*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		31		mg/Kg	☼	08/17/20 12:40	08/18/20 20:47	1
C28-C36	ND		31		mg/Kg	☼	08/17/20 12:40	08/18/20 20:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*117*		*60 - 140*	*08/17/20 12:40*	*08/18/20 20:47*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**130**		25		mg/Kg	☼		08/14/20 07:51	5

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**18.6**		1.0		%			08/11/20 08:50	1
Percent Solids	**81.4**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080420-CN-DP-6-5' Lab Sample ID: 600-209487-15

Date Collected: 08/04/20 11:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Chloromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Vinyl chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Bromomethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Chloroethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Trichlorofluoromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
1,1-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
trans-1,2-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Methyl tert-butyl ether	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Acetone	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Carbon disulfide	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Methyl acetate	ND	*1	0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Methylene Chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Vinyl acetate	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
cis-1,2-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
1,2-Dichloroethene, Total	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
2-Butanone (MEK)	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Chlorobromomethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Cyclohexane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Carbon tetrachloride	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Benzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
1,2-Dichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-6-5' **Lab Sample ID: 600-209487-15**
Date Collected: 08/04/20 11:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
1,1,1-Trichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
1,1-Dichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
1,2-Dichloropropane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Chloroform	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Bromodichloromethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Methylcyclohexane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
cis-1,3-Dichloropropene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Toluene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
trans-1,3-Dichloropropene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
1,1,2-Trichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Tetrachloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
2-Hexanone	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Dibromochloromethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
1,2-Dibromoethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Chlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Ethylbenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
m-Xylene & p-Xylene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Xylenes, Total	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
o-Xylene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Styrene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Bromoform	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Isopropylbenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
1,3-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
1,4-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
1,2-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
1,2-Dibromo-3-Chloropropane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
1,2,4-Trichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*61 - 130*	*08/08/20 15:31*	*08/10/20 19:49*	*1*
Dibromofluoromethane	*77*		*68 - 140*	*08/08/20 15:31*	*08/10/20 19:49*	*1*
Toluene-d8 (Surr)	*94*		*50 - 130*	*08/08/20 15:31*	*08/10/20 19:49*	*1*
4-Bromofluorobenzene	*93*		*57 - 140*	*08/08/20 15:31*	*08/10/20 19:49*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/11/20 08:53	08/11/20 13:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*95*		*70 - 130*	*08/11/20 08:53*	*08/11/20 13:10*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		30		mg/Kg	☼	08/17/20 12:40	08/18/20 21:23	1
C28-C36	ND		30		mg/Kg	☼	08/17/20 12:40	08/18/20 21:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*119*		*60 - 140*	*08/17/20 12:40*	*08/18/20 21:23*	*1*

Eurofins TestAmerica, Houston

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-6-5' Lab Sample ID: 600-209487-15

Date Collected: 08/04/20 11:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.2**

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	390		49		mg/Kg	☼		08/14/20 08:55	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17.8		1.0		%			08/11/20 08:50	1
Percent Solids	82.2		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080420-CN-DP-6-8' Lab Sample ID: 600-209487-16

Date Collected: 08/04/20 11:55 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.1**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Chloromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Vinyl chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Bromomethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Chloroethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Trichlorofluoromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
1,1-Dichloroethene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
trans-1,2-Dichloroethene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Methyl tert-butyl ether	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Acetone	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Carbon disulfide	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Methyl acetate	ND	*1	0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Methylene Chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Vinyl acetate	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
cis-1,2-Dichloroethene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
1,2-Dichloroethene, Total	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
2-Butanone (MEK)	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Chlorobromomethane	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Cyclohexane	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Carbon tetrachloride	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Benzene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
1,2-Dichloroethane	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Trichloroethene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
1,1,1-Trichloroethane	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
1,1-Dichloroethane	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
1,2-Dichloropropane	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Chloroform	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Bromodichloromethane	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Methylcyclohexane	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
cis-1,3-Dichloropropene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Toluene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
trans-1,3-Dichloropropene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
1,1,2-Trichloroethane	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Tetrachloroethene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
2-Hexanone	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-6-8' **Lab Sample ID: 600-209487-16**
Date Collected: 08/04/20 11:55 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.1**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
1,2-Dibromoethane	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Chlorobenzene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Ethylbenzene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
m-Xylene & p-Xylene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Xylenes, Total	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
o-Xylene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Styrene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Bromoform	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Isopropylbenzene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
1,3-Dichlorobenzene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
1,4-Dichlorobenzene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
1,2-Dichlorobenzene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
1,2-Dibromo-3-Chloropropane	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
1,2,4-Trichlorobenzene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*61 - 130*	*08/08/20 15:31*	*08/10/20 20:15*	*1*
Dibromofluoromethane	*78*		*68 - 140*	*08/08/20 15:31*	*08/10/20 20:15*	*1*
Toluene-d8 (Surr)	*97*		*50 - 130*	*08/08/20 15:31*	*08/10/20 20:15*	*1*
4-Bromofluorobenzene	*80*		*57 - 140*	*08/08/20 15:31*	*08/10/20 20:15*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/11/20 08:53	08/11/20 13:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*95*		*70 - 130*	*08/11/20 08:53*	*08/11/20 13:44*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		30		mg/Kg	☼	08/17/20 12:40	08/18/20 21:58	1
C28-C36	ND		30		mg/Kg	☼	08/17/20 12:40	08/18/20 21:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*99*		*60 - 140*	*08/17/20 12:40*	*08/18/20 21:58*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**200**		24		mg/Kg	☼		08/14/20 09:15	5

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**17.9**		1.0		%			08/11/20 08:50	1
Percent Solids	**82.1**		1.0		%			08/11/20 08:50	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-7-6' **Lab Sample ID: 600-209487-17**
Date Collected: 08/04/20 13:55 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 81.6**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Chloromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Vinyl chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Bromomethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Chloroethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Trichlorofluoromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
1,1-Dichloroethene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
trans-1,2-Dichloroethene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Methyl tert-butyl ether	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Acetone	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Carbon disulfide	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Methyl acetate	ND	*1	0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Methylene Chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Vinyl acetate	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
cis-1,2-Dichloroethene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
1,2-Dichloroethene, Total	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
2-Butanone (MEK)	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Chlorobromomethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Cyclohexane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Carbon tetrachloride	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Benzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
1,2-Dichloroethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Trichloroethene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
1,1,1-Trichloroethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
1,1-Dichloroethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
1,2-Dichloropropane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Chloroform	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Bromodichloromethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Methylcyclohexane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
cis-1,3-Dichloropropene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Toluene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
trans-1,3-Dichloropropene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
1,1,2-Trichloroethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Tetrachloroethene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
2-Hexanone	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Dibromochloromethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
1,2-Dibromoethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Chlorobenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Ethylbenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
m-Xylene & p-Xylene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Xylenes, Total	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
o-Xylene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Styrene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Bromoform	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Isopropylbenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
1,3-Dichlorobenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-7-6' Lab Sample ID: 600-209487-17

Date Collected: 08/04/20 13:55 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 81.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
1,2-Dichlorobenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
1,2-Dibromo-3-Chloropropane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
1,2,4-Trichlorobenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*61 - 130*	*08/08/20 15:31*	*08/10/20 20:40*	*1*
Dibromofluoromethane	*78*		*68 - 140*	*08/08/20 15:31*	*08/10/20 20:40*	*1*
Toluene-d8 (Surr)	*91*		*50 - 130*	*08/08/20 15:31*	*08/10/20 20:40*	*1*
4-Bromofluorobenzene	*84*		*57 - 140*	*08/08/20 15:31*	*08/10/20 20:40*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/11/20 08:53	08/11/20 14:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*70 - 130*	*08/11/20 08:53*	*08/11/20 14:20*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		15		mg/Kg	☼	08/12/20 08:32	08/14/20 01:19	1
C28-C36	**36**		15		mg/Kg	☼	08/12/20 08:32	08/14/20 01:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*60*		*60 - 140*	*08/12/20 08:32*	*08/14/20 01:19*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**100**		49		mg/Kg	☼		08/14/20 09:36	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**18.4**		1.0		%			08/11/20 08:50	1
Percent Solids	**81.6**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080420-CN-DP-7-9' Lab Sample ID: 600-209487-18

Date Collected: 08/04/20 14:00 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 84.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Chloromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Vinyl chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Bromomethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Chloroethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Trichlorofluoromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
1,1-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
trans-1,2-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Methyl tert-butyl ether	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Acetone	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-7-9' **Lab Sample ID: 600-209487-18**
Date Collected: 08/04/20 14:00 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 84.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Methyl acetate	ND	*1	0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Methylene Chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Vinyl acetate	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
cis-1,2-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
1,2-Dichloroethene, Total	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
2-Butanone (MEK)	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Chlorobromomethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Cyclohexane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Carbon tetrachloride	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Benzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
1,2-Dichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Trichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
1,1,1-Trichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
1,1-Dichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
1,2-Dichloropropane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Chloroform	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Bromodichloromethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Methylcyclohexane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
cis-1,3-Dichloropropene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Toluene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
trans-1,3-Dichloropropene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
1,1,2-Trichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Tetrachloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
2-Hexanone	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Dibromochloromethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
1,2-Dibromoethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Chlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Ethylbenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
m-Xylene & p-Xylene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Xylenes, Total	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
o-Xylene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Styrene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Bromoform	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Isopropylbenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
1,3-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
1,4-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
1,2-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
1,2-Dibromo-3-Chloropropane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
1,2,4-Trichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*61 - 130*	*08/08/20 15:31*	*08/10/20 21:06*	*1*
Dibromofluoromethane	*79*		*68 - 140*	*08/08/20 15:31*	*08/10/20 21:06*	*1*
Toluene-d8 (Surr)	*100*		*50 - 130*	*08/08/20 15:31*	*08/10/20 21:06*	*1*
4-Bromofluorobenzene	*85*		*57 - 140*	*08/08/20 15:31*	*08/10/20 21:06*	*1*

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-7-9' Lab Sample ID: 600-209487-18

Date Collected: 08/04/20 14:00 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 84.8**

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/11/20 08:53	08/11/20 14:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*101*		*70 - 130*	*08/11/20 08:53*	*08/11/20 14:59*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		15		mg/Kg	☼	08/12/20 08:32	08/14/20 01:52	1
C28-C36	ND		15		mg/Kg	☼	08/12/20 08:32	08/14/20 01:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*78*		*60 - 140*	*08/12/20 08:32*	*08/14/20 01:52*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**73**		47		mg/Kg	☼		08/14/20 09:56	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**15.2**		1.0		%			08/11/20 08:50	1
Percent Solids	**84.8**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080420-CN-DP-8-6' Lab Sample ID: 600-209487-19

Date Collected: 08/04/20 15:00 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Chloromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Vinyl chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Bromomethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Chloroethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Trichlorofluoromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
1,1-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
trans-1,2-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Methyl tert-butyl ether	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Acetone	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Carbon disulfide	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Methyl acetate	ND	*1	0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Methylene Chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Vinyl acetate	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
cis-1,2-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
1,2-Dichloroethene, Total	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
2-Butanone (MEK)	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Chlorobromomethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Cyclohexane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Carbon tetrachloride	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Benzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
1,2-Dichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-8-6' **Lab Sample ID: 600-209487-19**
Date Collected: 08/04/20 15:00 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
1,1,1-Trichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
1,1-Dichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
1,2-Dichloropropane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Chloroform	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Bromodichloromethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Methylcyclohexane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
cis-1,3-Dichloropropene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Toluene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
trans-1,3-Dichloropropene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
1,1,2-Trichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Tetrachloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
2-Hexanone	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Dibromochloromethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
1,2-Dibromoethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Chlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Ethylbenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
m-Xylene & p-Xylene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Xylenes, Total	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
o-Xylene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Styrene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Bromoform	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Isopropylbenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
1,3-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
1,4-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
1,2-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
1,2-Dibromo-3-Chloropropane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
1,2,4-Trichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*61 - 130*	*08/08/20 15:31*	*08/10/20 21:31*	*1*
Dibromofluoromethane	*74*		*68 - 140*	*08/08/20 15:31*	*08/10/20 21:31*	*1*
Toluene-d8 (Surr)	*93*		*50 - 130*	*08/08/20 15:31*	*08/10/20 21:31*	*1*
4-Bromofluorobenzene	*84*		*57 - 140*	*08/08/20 15:31*	*08/10/20 21:31*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/11/20 08:53	08/11/20 15:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*91*		*70 - 130*	*08/11/20 08:53*	*08/11/20 15:38*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		30		mg/Kg	☼	08/17/20 12:40	08/18/20 22:34	1
C28-C36	ND		30		mg/Kg	☼	08/17/20 12:40	08/18/20 22:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*106*		*60 - 140*	*08/17/20 12:40*	*08/18/20 22:34*	*1*

Eurofins TestAmerica, Houston

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-8-6' Lab Sample ID: 600-209487-19

Date Collected: 08/04/20 15:00 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.8**

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	160		4.8		mg/Kg	☼		08/14/20 10:17	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17.2		1.0		%			08/11/20 08:50	1
Percent Solids	82.8		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080420-CN-DP-8-9' Lab Sample ID: 600-209487-20

Date Collected: 08/04/20 15:05 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 72.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Chloromethane	ND		0.014		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Vinyl chloride	ND		0.014		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Bromomethane	ND		0.014		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Chloroethane	ND		0.014		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Trichlorofluoromethane	ND		0.014		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
1,1-Dichloroethene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
trans-1,2-Dichloroethene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Methyl tert-butyl ether	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Acetone	ND	*1	0.014		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Carbon disulfide	ND		0.014		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Methyl acetate	ND	*1	0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Methylene Chloride	ND		0.014		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Vinyl acetate	ND	*1	0.014		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
cis-1,2-Dichloroethene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
1,2-Dichloroethene, Total	ND		0.014		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
2-Butanone (MEK)	ND		0.014		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Chlorobromomethane	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Cyclohexane	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Carbon tetrachloride	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Benzene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
1,2-Dichloroethane	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Trichloroethene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
1,1,1-Trichloroethane	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
1,1-Dichloroethane	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
1,2-Dichloropropane	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Chloroform	ND		0.014		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Bromodichloromethane	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Methylcyclohexane	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
cis-1,3-Dichloropropene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.014		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Toluene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
trans-1,3-Dichloropropene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
1,1,2-Trichloroethane	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Tetrachloroethene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
2-Hexanone	ND	*1	0.014		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-8-9' **Lab Sample ID: 600-209487-20**
Date Collected: 08/04/20 15:05 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 72.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
1,2-Dibromoethane	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Chlorobenzene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Ethylbenzene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
m-Xylene & p-Xylene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Xylenes, Total	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
o-Xylene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Styrene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Bromoform	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Isopropylbenzene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
1,3-Dichlorobenzene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
1,4-Dichlorobenzene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
1,2-Dichlorobenzene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
1,2-Dibromo-3-Chloropropane	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
1,2,4-Trichlorobenzene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*61 - 130*	*08/08/20 15:31*	*08/10/20 21:56*	*1*
Dibromofluoromethane	*73*		*68 - 140*	*08/08/20 15:31*	*08/10/20 21:56*	*1*
Toluene-d8 (Surr)	*90*		*50 - 130*	*08/08/20 15:31*	*08/10/20 21:56*	*1*
4-Bromofluorobenzene	*86*		*57 - 140*	*08/08/20 15:31*	*08/10/20 21:56*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.4		mg/Kg	☼	08/11/20 08:53	08/13/20 07:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*91*		*70 - 130*	*08/11/20 08:53*	*08/13/20 07:54*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		57		mg/Kg	☼	08/17/20 12:40	08/18/20 23:10	1
C28-C36	ND		57		mg/Kg	☼	08/17/20 12:40	08/18/20 23:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*108*		*60 - 140*	*08/17/20 12:40*	*08/18/20 23:10*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**130**		5.5		mg/Kg	☼		08/14/20 10:37	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**27.7**		1.0		%			08/11/20 08:50	1
Percent Solids	**72.3**		1.0		%			08/11/20 08:50	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-9-6' **Lab Sample ID: 600-209487-21**
Date Collected: 08/04/20 15:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 76.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Chloromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Vinyl chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Bromomethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Chloroethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Trichlorofluoromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
1,1-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
trans-1,2-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Methyl tert-butyl ether	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Acetone	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Carbon disulfide	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Methyl acetate	ND	*1	0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Methylene Chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Vinyl acetate	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
cis-1,2-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
1,2-Dichloroethene, Total	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
2-Butanone (MEK)	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Chlorobromomethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Cyclohexane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Carbon tetrachloride	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Benzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
1,2-Dichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Trichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
1,1,1-Trichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
1,1-Dichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
1,2-Dichloropropane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Chloroform	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Bromodichloromethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Methylcyclohexane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
cis-1,3-Dichloropropene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Toluene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
trans-1,3-Dichloropropene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
1,1,2-Trichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Tetrachloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
2-Hexanone	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Dibromochloromethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
1,2-Dibromoethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Chlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Ethylbenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
m-Xylene & p-Xylene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Xylenes, Total	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
o-Xylene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Styrene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Bromoform	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Isopropylbenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
1,3-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-9-6' Lab Sample ID: 600-209487-21

Date Collected: 08/04/20 15:50 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 76.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
1,2-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
1,2-Dibromo-3-Chloropropane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
1,2,4-Trichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*61 - 130*	*08/08/20 15:31*	*08/10/20 22:22*	*1*
Dibromofluoromethane	*74*		*68 - 140*	*08/08/20 15:31*	*08/10/20 22:22*	*1*
Toluene-d8 (Surr)	*91*		*50 - 130*	*08/08/20 15:31*	*08/10/20 22:22*	*1*
4-Bromofluorobenzene	*84*		*57 - 140*	*08/08/20 15:31*	*08/10/20 22:22*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.3		mg/Kg	☼	08/11/20 08:53	08/13/20 08:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*98*		*70 - 130*	*08/11/20 08:53*	*08/13/20 08:19*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		33		mg/Kg	☼	08/12/20 14:58	08/14/20 04:47	1
C28-C36	**83**		33		mg/Kg	☼	08/12/20 14:58	08/14/20 04:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*120*		*60 - 140*	*08/12/20 14:58*	*08/14/20 04:47*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**54**		5.3		mg/Kg	☼		08/14/20 11:38	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**23.8**		1.0		%			08/11/20 08:50	1
Percent Solids	**76.2**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080420-CN-DP-9-9' Lab Sample ID: 600-209487-22

Date Collected: 08/04/20 15:55 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 82.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Chloromethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Vinyl chloride	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Bromomethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Chloroethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Trichlorofluoromethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
1,1-Dichloroethene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
trans-1,2-Dichloroethene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Methyl tert-butyl ether	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Acetone	ND	*1	0.013		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-9-9' **Lab Sample ID: 600-209487-22**
Date Collected: 08/04/20 15:55 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.6**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Methyl acetate	ND	*1	0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Methylene Chloride	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Vinyl acetate	ND	*1	0.013		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
cis-1,2-Dichloroethene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
1,2-Dichloroethene, Total	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
2-Butanone (MEK)	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Chlorobromomethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Cyclohexane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Carbon tetrachloride	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Benzene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
1,2-Dichloroethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Trichloroethene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
1,1,1-Trichloroethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
1,1-Dichloroethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
1,2-Dichloropropane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Chloroform	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Bromodichloromethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Methylcyclohexane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
cis-1,3-Dichloropropene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.013		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Toluene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
trans-1,3-Dichloropropene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
1,1,2-Trichloroethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Tetrachloroethene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
2-Hexanone	ND	*1	0.013		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Dibromochloromethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
1,2-Dibromoethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Chlorobenzene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Ethylbenzene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
m-Xylene & p-Xylene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Xylenes, Total	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
o-Xylene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Styrene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Bromoform	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Isopropylbenzene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
1,3-Dichlorobenzene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
1,4-Dichlorobenzene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
1,2-Dichlorobenzene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
1,2-Dibromo-3-Chloropropane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
1,2,4-Trichlorobenzene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*61 - 130*	*08/08/20 15:31*	*08/10/20 22:47*	*1*
Dibromofluoromethane	*75*		*68 - 140*	*08/08/20 15:31*	*08/10/20 22:47*	*1*
Toluene-d8 (Surr)	*92*		*50 - 130*	*08/08/20 15:31*	*08/10/20 22:47*	*1*
4-Bromofluorobenzene	*81*		*57 - 140*	*08/08/20 15:31*	*08/10/20 22:47*	*1*

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-9-9' Lab Sample ID: 600-209487-22

Date Collected: 08/04/20 15:55 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.6**

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.1		mg/Kg	☼	08/11/20 08:53	08/12/20 16:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*91*		*70 - 130*	*08/11/20 08:53*	*08/12/20 16:27*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		30		mg/Kg	☼	08/12/20 14:58	08/14/20 05:22	1
C28-C36	ND		30		mg/Kg	☼	08/12/20 14:58	08/14/20 05:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*122*		*60 - 140*	*08/12/20 14:58*	*08/14/20 05:22*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		48		mg/Kg	☼		08/14/20 11:59	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**17.4**		1.0		%			08/11/20 08:50	1
Percent Solids	**82.6**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080520-CN-DP-10-5' Lab Sample ID: 600-209487-23

Date Collected: 08/05/20 08:15 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 85.1**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Chloromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Vinyl chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Bromomethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Chloroethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Trichlorofluoromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
1,1-Dichloroethene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
trans-1,2-Dichloroethene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Methyl tert-butyl ether	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Acetone	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Carbon disulfide	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Methyl acetate	ND	*1	0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Methylene Chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Vinyl acetate	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
cis-1,2-Dichloroethene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
1,2-Dichloroethene, Total	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
2-Butanone (MEK)	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Chlorobromomethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Cyclohexane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Carbon tetrachloride	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Benzene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
1,2-Dichloroethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-10-5' **Lab Sample ID: 600-209487-23**
Date Collected: 08/05/20 08:15 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 85.1**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
1,1,1-Trichloroethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
1,1-Dichloroethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
1,2-Dichloropropane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Chloroform	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Bromodichloromethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Methylcyclohexane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
cis-1,3-Dichloropropene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Toluene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
trans-1,3-Dichloropropene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
1,1,2-Trichloroethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Tetrachloroethene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
2-Hexanone	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Dibromochloromethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
1,2-Dibromoethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Chlorobenzene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Ethylbenzene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
m-Xylene & p-Xylene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Xylenes, Total	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
o-Xylene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Styrene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Bromoform	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Isopropylbenzene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
1,3-Dichlorobenzene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
1,4-Dichlorobenzene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
1,2-Dichlorobenzene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
1,2-Dibromo-3-Chloropropane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
1,2,4-Trichlorobenzene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*61 - 130*	*08/08/20 15:31*	*08/10/20 23:12*	*1*
Dibromofluoromethane	*77*		*68 - 140*	*08/08/20 15:31*	*08/10/20 23:12*	*1*
Toluene-d8 (Surr)	*98*		*50 - 130*	*08/08/20 15:31*	*08/10/20 23:12*	*1*
4-Bromofluorobenzene	*89*		*57 - 140*	*08/08/20 15:31*	*08/10/20 23:12*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.1		mg/Kg	☼	08/11/20 08:53	08/12/20 16:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*102*		*70 - 130*	*08/11/20 08:53*	*08/12/20 16:53*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		29		mg/Kg	☼	08/12/20 14:58	08/14/20 06:33	1
C28-C36	ND		29		mg/Kg	☼	08/12/20 14:58	08/14/20 06:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*126*		*60 - 140*	*08/12/20 14:58*	*08/14/20 06:33*	*1*

Eurofins TestAmerica, Houston

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-10-5' Lab Sample ID: 600-209487-23

Date Collected: 08/05/20 08:15 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 85.1**

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	480		240		mg/Kg	☼		08/14/20 13:00	50

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	14.9		1.0		%			08/11/20 08:50	1
Percent Solids	85.1		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080520-CN-DP-10-8' Lab Sample ID: 600-209487-24

Date Collected: 08/05/20 08:20 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 100.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Chloromethane	ND		0.0094		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Vinyl chloride	ND		0.0094		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Bromomethane	ND		0.0094		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Chloroethane	ND		0.0094		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Trichlorofluoromethane	ND		0.0094		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
1,1-Dichloroethene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
trans-1,2-Dichloroethene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Methyl tert-butyl ether	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Acetone	ND	*1	0.0094		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Carbon disulfide	ND		0.0094		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Methyl acetate	ND	*1	0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Methylene Chloride	ND		0.0094		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Vinyl acetate	ND	*1	0.0094		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
cis-1,2-Dichloroethene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
1,2-Dichloroethene, Total	ND		0.0094		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
2-Butanone (MEK)	ND		0.0094		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Chlorobromomethane	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Cyclohexane	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Carbon tetrachloride	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Benzene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
1,2-Dichloroethane	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Trichloroethene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
1,1,1-Trichloroethane	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
1,1-Dichloroethane	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
1,2-Dichloropropane	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Chloroform	ND		0.0094		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Bromodichloromethane	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Methylcyclohexane	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
cis-1,3-Dichloropropene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.0094		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Toluene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
trans-1,3-Dichloropropene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
1,1,2-Trichloroethane	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Tetrachloroethene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
2-Hexanone	ND	*1	0.0094		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-10-8' **Lab Sample ID: 600-209487-24**
Date Collected: 08/05/20 08:20 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 100.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
1,2-Dibromoethane	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Chlorobenzene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Ethylbenzene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
m-Xylene & p-Xylene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Xylenes, Total	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
o-Xylene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Styrene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Bromoform	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Isopropylbenzene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
1,3-Dichlorobenzene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
1,4-Dichlorobenzene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
1,2-Dichlorobenzene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
1,2-Dibromo-3-Chloropropane	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
1,2,4-Trichlorobenzene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*61 - 130*	*08/08/20 15:31*	*08/10/20 23:37*	*1*
Dibromofluoromethane	*79*		*68 - 140*	*08/08/20 15:31*	*08/10/20 23:37*	*1*
Toluene-d8 (Surr)	*98*		*50 - 130*	*08/08/20 15:31*	*08/10/20 23:37*	*1*
4-Bromofluorobenzene	*79*		*57 - 140*	*08/08/20 15:31*	*08/10/20 23:37*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.0		mg/Kg	☼	08/11/20 08:53	08/12/20 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*70 - 130*	*08/11/20 08:53*	*08/12/20 17:18*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		25		mg/Kg	☼	08/12/20 14:58	08/14/20 07:28	1
C28-C36	ND		25		mg/Kg	☼	08/12/20 14:58	08/14/20 07:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*117*		*60 - 140*	*08/12/20 14:58*	*08/14/20 07:28*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**160**		40		mg/Kg	☼		08/14/20 14:01	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**0.0**		1.0		%			08/11/20 08:50	1
Percent Solids	**100.0**		1.0		%			08/11/20 08:50	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-11-5' **Lab Sample ID: 600-209487-25**
Date Collected: 08/05/20 09:00 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 80.6**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Chloromethane	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Vinyl chloride	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Bromomethane	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Chloroethane	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Trichlorofluoromethane	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
1,1-Dichloroethene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
trans-1,2-Dichloroethene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Methyl tert-butyl ether	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Acetone	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Carbon disulfide	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Methyl acetate	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Methylene Chloride	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Vinyl acetate	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
cis-1,2-Dichloroethene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
1,2-Dichloroethene, Total	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
2-Butanone (MEK)	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Chlorobromomethane	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Cyclohexane	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Carbon tetrachloride	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Benzene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
1,2-Dichloroethane	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Trichloroethene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
1,1,1-Trichloroethane	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
1,1-Dichloroethane	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
1,2-Dichloropropane	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Chloroform	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Bromodichloromethane	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Methylcyclohexane	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
cis-1,3-Dichloropropene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
4-Methyl-2-pentanone (MIBK)	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Toluene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
trans-1,3-Dichloropropene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
1,1,2-Trichloroethane	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Tetrachloroethene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
2-Hexanone	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Dibromochloromethane	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
1,2-Dibromoethane	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Chlorobenzene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Ethylbenzene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
m-Xylene & p-Xylene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Xylenes, Total	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
o-Xylene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Styrene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Bromoform	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Isopropylbenzene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
1,1,2,2-Tetrachloroethane	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
1,3-Dichlorobenzene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-11-5' Lab Sample ID: 600-209487-25

Date Collected: 08/05/20 09:00 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 80.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
1,2-Dichlorobenzene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
1,2-Dibromo-3-Chloropropane	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
1,2,4-Trichlorobenzene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*61 - 130*	*08/09/20 12:02*	*08/11/20 18:31*	*1*
Dibromofluoromethane	*83*		*68 - 140*	*08/09/20 12:02*	*08/11/20 18:31*	*1*
Toluene-d8 (Surr)	*91*		*50 - 130*	*08/09/20 12:02*	*08/11/20 18:31*	*1*
4-Bromofluorobenzene	*101*		*57 - 140*	*08/09/20 12:02*	*08/11/20 18:31*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.3		mg/Kg	☼	08/11/20 08:53	08/12/20 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*95*		*70 - 130*	*08/11/20 08:53*	*08/12/20 17:44*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		31		mg/Kg	☼	08/12/20 14:58	08/14/20 10:23	1
C28-C36	ND		31		mg/Kg	☼	08/12/20 14:58	08/14/20 10:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*123*		*60 - 140*	*08/12/20 14:58*	*08/14/20 10:23*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**180**		50		mg/Kg	☼		08/14/20 14:22	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**19.4**		1.0		%			08/11/20 08:50	1
Percent Solids	**80.6**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080520-CN-DP-11-8 Lab Sample ID: 600-209487-26

Date Collected: 08/05/20 09:05 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 91.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Chloromethane	ND		0.011		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Vinyl chloride	ND		0.011		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Bromomethane	ND		0.011		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Chloroethane	ND		0.011		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Trichlorofluoromethane	ND		0.011		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
1,1-Dichloroethene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
trans-1,2-Dichloroethene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Methyl tert-butyl ether	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Acetone	ND		0.011		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-11-8 **Lab Sample ID: 600-209487-26**
Date Collected: 08/05/20 09:05 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 91.1**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		0.011		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Methyl acetate	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Methylene Chloride	ND		0.011		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Vinyl acetate	ND		0.011		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
cis-1,2-Dichloroethene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
1,2-Dichloroethene, Total	ND		0.011		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
2-Butanone (MEK)	ND		0.011		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Chlorobromomethane	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Cyclohexane	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Carbon tetrachloride	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Benzene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
1,2-Dichloroethane	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Trichloroethene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
1,1,1-Trichloroethane	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
1,1-Dichloroethane	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
1,2-Dichloropropane	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Chloroform	ND		0.011		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Bromodichloromethane	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Methylcyclohexane	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
cis-1,3-Dichloropropene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
4-Methyl-2-pentanone (MIBK)	ND		0.011		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Toluene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
trans-1,3-Dichloropropene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
1,1,2-Trichloroethane	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Tetrachloroethene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
2-Hexanone	ND		0.011		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Dibromochloromethane	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
1,2-Dibromoethane	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Chlorobenzene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Ethylbenzene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
m-Xylene & p-Xylene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Xylenes, Total	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
o-Xylene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Styrene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Bromoform	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Isopropylbenzene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
1,1,2,2-Tetrachloroethane	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
1,3-Dichlorobenzene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
1,4-Dichlorobenzene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
1,2-Dichlorobenzene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
1,2-Dibromo-3-Chloropropane	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
1,2,4-Trichlorobenzene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*61 - 130*	*08/08/20 15:31*	*08/11/20 11:22*	*1*
Dibromofluoromethane	*93*		*68 - 140*	*08/08/20 15:31*	*08/11/20 11:22*	*1*
Toluene-d8 (Surr)	*94*		*50 - 130*	*08/08/20 15:31*	*08/11/20 11:22*	*1*
4-Bromofluorobenzene	*110*		*57 - 140*	*08/08/20 15:31*	*08/11/20 11:22*	*1*

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-11-8 Lab Sample ID: 600-209487-26

Date Collected: 08/05/20 09:05 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 91.1**

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.0		mg/Kg	☼	08/11/20 08:53	08/13/20 08:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*102*		*70 - 130*	*08/11/20 08:53*	*08/13/20 08:44*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		27		mg/Kg	☼	08/12/20 14:58	08/14/20 08:02	1
C28-C36	ND		27		mg/Kg	☼	08/12/20 14:58	08/14/20 08:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*123*		*60 - 140*	*08/12/20 14:58*	*08/14/20 08:02*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**130**		44		mg/Kg	☼		08/14/20 14:42	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**8.9**		1.0		%			08/11/20 08:50	1
Percent Solids	**91.1**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080520-CN-DP-12-6' Lab Sample ID: 600-209487-27

Date Collected: 08/05/20 09:45 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 81.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Chloromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Vinyl chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Bromomethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Chloroethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Trichlorofluoromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
1,1-Dichloroethene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
trans-1,2-Dichloroethene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Methyl tert-butyl ether	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Acetone	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Carbon disulfide	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Methyl acetate	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Methylene Chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Vinyl acetate	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
cis-1,2-Dichloroethene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
1,2-Dichloroethene, Total	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
2-Butanone (MEK)	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Chlorobromomethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Cyclohexane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Carbon tetrachloride	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Benzene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
1,2-Dichloroethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-12-6' **Lab Sample ID: 600-209487-27**
Date Collected: 08/05/20 09:45 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 81.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
1,1,1-Trichloroethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
1,1-Dichloroethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
1,2-Dichloropropane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Chloroform	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Bromodichloromethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Methylcyclohexane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
cis-1,3-Dichloropropene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
4-Methyl-2-pentanone (MIBK)	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Toluene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
trans-1,3-Dichloropropene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
1,1,2-Trichloroethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Tetrachloroethene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
2-Hexanone	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Dibromochloromethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
1,2-Dibromoethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Chlorobenzene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Ethylbenzene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
m-Xylene & p-Xylene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Xylenes, Total	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
o-Xylene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Styrene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Bromoform	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Isopropylbenzene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
1,1,2,2-Tetrachloroethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
1,3-Dichlorobenzene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
1,4-Dichlorobenzene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
1,2-Dichlorobenzene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
1,2-Dibromo-3-Chloropropane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
1,2,4-Trichlorobenzene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*61 - 130*	*08/08/20 15:31*	*08/11/20 11:45*	*1*
Dibromofluoromethane	*86*		*68 - 140*	*08/08/20 15:31*	*08/11/20 11:45*	*1*
Toluene-d8 (Surr)	*91*		*50 - 130*	*08/08/20 15:31*	*08/11/20 11:45*	*1*
4-Bromofluorobenzene	*109*		*57 - 140*	*08/08/20 15:31*	*08/11/20 11:45*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/11/20 08:53	08/13/20 09:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*94*		*70 - 130*	*08/11/20 08:53*	*08/13/20 09:08*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		31		mg/Kg	☼	08/12/20 14:58	08/14/20 11:12	1
C28-C36	ND		31		mg/Kg	☼	08/12/20 14:58	08/14/20 11:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*123*		*60 - 140*	*08/12/20 14:58*	*08/14/20 11:12*	*1*

Eurofins TestAmerica, Houston

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-12-6' Lab Sample ID: 600-209487-27

Date Collected: 08/05/20 09:45 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 81.2**

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		99		mg/Kg	☼		08/14/20 15:02	20

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18.8		1.0		%			08/11/20 08:50	1
Percent Solids	81.2		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080520-CN-DP-12-9' Lab Sample ID: 600-209487-28

Date Collected: 08/05/20 09:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 84.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Chloromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Vinyl chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Bromomethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Chloroethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Trichlorofluoromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
1,1-Dichloroethene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
trans-1,2-Dichloroethene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Methyl tert-butyl ether	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Acetone	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Carbon disulfide	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Methyl acetate	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Methylene Chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Vinyl acetate	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
cis-1,2-Dichloroethene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
1,2-Dichloroethene, Total	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
2-Butanone (MEK)	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Chlorobromomethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Cyclohexane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Carbon tetrachloride	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Benzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
1,2-Dichloroethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Trichloroethene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
1,1,1-Trichloroethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
1,1-Dichloroethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
1,2-Dichloropropane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Chloroform	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Bromodichloromethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Methylcyclohexane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
cis-1,3-Dichloropropene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
4-Methyl-2-pentanone (MIBK)	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Toluene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
trans-1,3-Dichloropropene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
1,1,2-Trichloroethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Tetrachloroethene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
2-Hexanone	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-12-9' **Lab Sample ID: 600-209487-28**
Date Collected: 08/05/20 09:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 84.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
1,2-Dibromoethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Chlorobenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Ethylbenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
m-Xylene & p-Xylene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Xylenes, Total	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
o-Xylene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Styrene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Bromoform	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Isopropylbenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
1,1,2,2-Tetrachloroethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
1,3-Dichlorobenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
1,4-Dichlorobenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
1,2-Dichlorobenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
1,2-Dibromo-3-Chloropropane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
1,2,4-Trichlorobenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*61 - 130*	*08/08/20 15:31*	*08/11/20 12:08*	*1*
Dibromofluoromethane	*86*		*68 - 140*	*08/08/20 15:31*	*08/11/20 12:08*	*1*
Toluene-d8 (Surr)	*91*		*50 - 130*	*08/08/20 15:31*	*08/11/20 12:08*	*1*
4-Bromofluorobenzene	*104*		*57 - 140*	*08/08/20 15:31*	*08/11/20 12:08*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/11/20 08:53	08/13/20 09:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*97*		*70 - 130*	*08/11/20 08:53*	*08/13/20 09:33*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		30		mg/Kg	☼	08/12/20 14:58	08/14/20 08:37	1
C28-C36	ND		30		mg/Kg	☼	08/12/20 14:58	08/14/20 08:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*126*		*60 - 140*	*08/12/20 14:58*	*08/14/20 08:37*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		48		mg/Kg	☼		08/14/20 15:23	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**16.0**		1.0		%			08/11/20 08:50	1
Percent Solids	**84.0**		1.0		%			08/11/20 08:50	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-13-6' **Lab Sample ID: 600-209487-29**
Date Collected: 08/05/20 10:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.4**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Chloromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Vinyl chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Bromomethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Chloroethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Trichlorofluoromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
1,1-Dichloroethene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
trans-1,2-Dichloroethene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Methyl tert-butyl ether	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Acetone	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Carbon disulfide	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Methyl acetate	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Methylene Chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Vinyl acetate	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
cis-1,2-Dichloroethene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
1,2-Dichloroethene, Total	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
2-Butanone (MEK)	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Chlorobromomethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Cyclohexane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Carbon tetrachloride	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Benzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
1,2-Dichloroethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Trichloroethene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
1,1,1-Trichloroethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
1,1-Dichloroethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
1,2-Dichloropropane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Chloroform	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Bromodichloromethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Methylcyclohexane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
cis-1,3-Dichloropropene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
4-Methyl-2-pentanone (MIBK)	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Toluene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
trans-1,3-Dichloropropene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
1,1,2-Trichloroethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Tetrachloroethene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
2-Hexanone	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Dibromochloromethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
1,2-Dibromoethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Chlorobenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Ethylbenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
m-Xylene & p-Xylene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Xylenes, Total	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
o-Xylene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Styrene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Bromoform	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Isopropylbenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
1,1,2,2-Tetrachloroethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
1,3-Dichlorobenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-13-6' Lab Sample ID: 600-209487-29

Date Collected: 08/05/20 10:50 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 83.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
1,2-Dichlorobenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
1,2-Dibromo-3-Chloropropane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
1,2,4-Trichlorobenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*61 - 130*	*08/08/20 15:31*	*08/11/20 13:43*	*1*
Dibromofluoromethane	*87*		*68 - 140*	*08/08/20 15:31*	*08/11/20 13:43*	*1*
Toluene-d8 (Surr)	*94*		*50 - 130*	*08/08/20 15:31*	*08/11/20 13:43*	*1*
4-Bromofluorobenzene	*105*		*57 - 140*	*08/08/20 15:31*	*08/11/20 13:43*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/11/20 08:53	08/13/20 09:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*94*		*70 - 130*	*08/11/20 08:53*	*08/13/20 09:58*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		30		mg/Kg	☼	08/12/20 14:58	08/14/20 11:48	1
C28-C36	**130**		30		mg/Kg	☼	08/12/20 14:58	08/14/20 11:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*117*		*60 - 140*	*08/12/20 14:58*	*08/14/20 11:48*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**640**		48		mg/Kg	☼		08/18/20 11:12	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**16.6**		1.0		%			08/11/20 08:50	1
Percent Solids	**83.4**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080520-CN-DP-13-9' Lab Sample ID: 600-209487-30

Date Collected: 08/05/20 10:55 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 76.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Chloromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Vinyl chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Bromomethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Chloroethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Trichlorofluoromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
1,1-Dichloroethene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
trans-1,2-Dichloroethene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Methyl tert-butyl ether	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Acetone	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-13-9' **Lab Sample ID: 600-209487-30**
Date Collected: 08/05/20 10:55 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 76.5**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Methyl acetate	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Methylene Chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Vinyl acetate	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
cis-1,2-Dichloroethene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
1,2-Dichloroethene, Total	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
2-Butanone (MEK)	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Chlorobromomethane	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Cyclohexane	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Carbon tetrachloride	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Benzene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
1,2-Dichloroethane	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Trichloroethene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
1,1,1-Trichloroethane	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
1,1-Dichloroethane	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
1,2-Dichloropropane	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Chloroform	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Bromodichloromethane	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Methylcyclohexane	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
cis-1,3-Dichloropropene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
4-Methyl-2-pentanone (MIBK)	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Toluene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
trans-1,3-Dichloropropene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
1,1,2-Trichloroethane	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Tetrachloroethene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
2-Hexanone	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Dibromochloromethane	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
1,2-Dibromoethane	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Chlorobenzene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Ethylbenzene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
m-Xylene & p-Xylene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Xylenes, Total	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
o-Xylene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Styrene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Bromoform	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Isopropylbenzene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
1,1,2,2-Tetrachloroethane	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
1,3-Dichlorobenzene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
1,4-Dichlorobenzene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
1,2-Dichlorobenzene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
1,2-Dibromo-3-Chloropropane	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
1,2,4-Trichlorobenzene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*61 - 130*	*08/08/20 15:31*	*08/11/20 14:07*	*1*
Dibromofluoromethane	*89*		*68 - 140*	*08/08/20 15:31*	*08/11/20 14:07*	*1*
Toluene-d8 (Surr)	*93*		*50 - 130*	*08/08/20 15:31*	*08/11/20 14:07*	*1*
4-Bromofluorobenzene	*109*		*57 - 140*	*08/08/20 15:31*	*08/11/20 14:07*	*1*

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-13-9' Lab Sample ID: 600-209487-30

Date Collected: 08/05/20 10:55 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 76.5**

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.3		mg/Kg	☼	08/11/20 08:53	08/13/20 10:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*94*		*70 - 130*	*08/11/20 08:53*	*08/13/20 10:23*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		32		mg/Kg	☼	08/12/20 14:58	08/14/20 09:12	1
C28-C36	ND		32		mg/Kg	☼	08/12/20 14:58	08/14/20 09:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*111*		*60 - 140*	*08/12/20 14:58*	*08/14/20 09:12*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**22**		5.2		mg/Kg	☼		08/18/20 12:13	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**23.5**		1.0		%			08/11/20 08:50	1
Percent Solids	**76.5**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080520-CN-DP-14-6' Lab Sample ID: 600-209487-31

Date Collected: 08/05/20 11:25 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Chloromethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Vinyl chloride	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Bromomethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Chloroethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Trichlorofluoromethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
1,1-Dichloroethene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
trans-1,2-Dichloroethene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Methyl tert-butyl ether	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Acetone	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Carbon disulfide	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Methyl acetate	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Methylene Chloride	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Vinyl acetate	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
cis-1,2-Dichloroethene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
1,2-Dichloroethene, Total	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
2-Butanone (MEK)	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Chlorobromomethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Cyclohexane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Carbon tetrachloride	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Benzene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
1,2-Dichloroethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-14-6' **Lab Sample ID: 600-209487-31**
Date Collected: 08/05/20 11:25 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
1,1,1-Trichloroethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
1,1-Dichloroethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
1,2-Dichloropropane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Chloroform	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Bromodichloromethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Methylcyclohexane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
cis-1,3-Dichloropropene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
4-Methyl-2-pentanone (MIBK)	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Toluene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
trans-1,3-Dichloropropene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
1,1,2-Trichloroethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Tetrachloroethene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
2-Hexanone	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Dibromochloromethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
1,2-Dibromoethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Chlorobenzene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Ethylbenzene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
m-Xylene & p-Xylene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Xylenes, Total	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
o-Xylene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Styrene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Bromoform	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Isopropylbenzene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
1,1,2,2-Tetrachloroethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
1,3-Dichlorobenzene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
1,4-Dichlorobenzene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
1,2-Dichlorobenzene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
1,2-Dibromo-3-Chloropropane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
1,2,4-Trichlorobenzene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*61 - 130*	*08/08/20 15:31*	*08/11/20 14:31*	*1*
Dibromofluoromethane	*83*		*68 - 140*	*08/08/20 15:31*	*08/11/20 14:31*	*1*
Toluene-d8 (Surr)	*91*		*50 - 130*	*08/08/20 15:31*	*08/11/20 14:31*	*1*
4-Bromofluorobenzene	*107*		*57 - 140*	*08/08/20 15:31*	*08/11/20 14:31*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/11/20 08:53	08/12/20 16:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*91*		*70 - 130*	*08/11/20 08:53*	*08/12/20 16:01*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		15		mg/Kg	☼	08/12/20 14:58	08/14/20 12:24	1
C28-C36	**64**		15		mg/Kg	☼	08/12/20 14:58	08/14/20 12:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*110*		*60 - 140*	*08/12/20 14:58*	*08/14/20 12:24*	*1*

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-14-6' Lab Sample ID: 600-209487-31

Date Collected: 08/05/20 11:25 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.3**

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		4.8		mg/Kg	☼		08/18/20 12:34	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16.7		1.0		%			08/11/20 08:50	1
Percent Solids	83.3		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080520-CN-DP-14-9' Lab Sample ID: 600-209487-32

Date Collected: 08/05/20 11:30 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 79.4**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Chloromethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Vinyl chloride	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Bromomethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Chloroethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Trichlorofluoromethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
1,1-Dichloroethene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
trans-1,2-Dichloroethene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Methyl tert-butyl ether	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Acetone	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Carbon disulfide	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Methyl acetate	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Methylene Chloride	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Vinyl acetate	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
cis-1,2-Dichloroethene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
1,2-Dichloroethene, Total	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
2-Butanone (MEK)	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Chlorobromomethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Cyclohexane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Carbon tetrachloride	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Benzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
1,2-Dichloroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Trichloroethene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
1,1,1-Trichloroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
1,1-Dichloroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
1,2-Dichloropropane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Chloroform	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Bromodichloromethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Methylcyclohexane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
cis-1,3-Dichloropropene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
4-Methyl-2-pentanone (MIBK)	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Toluene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
trans-1,3-Dichloropropene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
1,1,2-Trichloroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Tetrachloroethene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
2-Hexanone	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-14-9' **Lab Sample ID: 600-209487-32**
Date Collected: 08/05/20 11:30 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 79.4**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
1,2-Dibromoethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Chlorobenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Ethylbenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
m-Xylene & p-Xylene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Xylenes, Total	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
o-Xylene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Styrene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Bromoform	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Isopropylbenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
1,1,2,2-Tetrachloroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
1,3-Dichlorobenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
1,4-Dichlorobenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
1,2-Dichlorobenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
1,2-Dibromo-3-Chloropropane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
1,2,4-Trichlorobenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*61 - 130*	*08/08/20 15:31*	*08/11/20 14:55*	*1*
Dibromofluoromethane	*86*		*68 - 140*	*08/08/20 15:31*	*08/11/20 14:55*	*1*
Toluene-d8 (Surr)	*89*		*50 - 130*	*08/08/20 15:31*	*08/11/20 14:55*	*1*
4-Bromofluorobenzene	*105*		*57 - 140*	*08/08/20 15:31*	*08/11/20 14:55*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.3		mg/Kg	☼	08/08/20 15:03	08/12/20 09:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*84*		*70 - 130*	*08/08/20 15:03*	*08/12/20 09:32*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		31		mg/Kg	☼	08/12/20 14:58	08/14/20 14:20	1
C28-C36	ND		31		mg/Kg	☼	08/12/20 14:58	08/14/20 14:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*106*		*60 - 140*	*08/12/20 14:58*	*08/14/20 14:20*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**68**		25		mg/Kg	☼		08/18/20 12:54	5

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**20.6**		1.0		%			08/11/20 08:50	1
Percent Solids	**79.4**		1.0		%			08/11/20 08:50	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-15-5' **Lab Sample ID: 600-209487-33**
Date Collected: 08/05/20 12:10 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Chloromethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Vinyl chloride	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Bromomethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Chloroethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Trichlorofluoromethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
1,1-Dichloroethene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
trans-1,2-Dichloroethene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Methyl tert-butyl ether	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Acetone	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Carbon disulfide	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Methyl acetate	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Methylene Chloride	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Vinyl acetate	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
cis-1,2-Dichloroethene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
1,2-Dichloroethene, Total	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
2-Butanone (MEK)	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Chlorobromomethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Cyclohexane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Carbon tetrachloride	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Benzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
1,2-Dichloroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Trichloroethene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
1,1,1-Trichloroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
1,1-Dichloroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
1,2-Dichloropropane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Chloroform	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Bromodichloromethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Methylcyclohexane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
cis-1,3-Dichloropropene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
4-Methyl-2-pentanone (MIBK)	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Toluene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
trans-1,3-Dichloropropene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
1,1,2-Trichloroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Tetrachloroethene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
2-Hexanone	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Dibromochloromethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
1,2-Dibromoethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Chlorobenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Ethylbenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
m-Xylene & p-Xylene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Xylenes, Total	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
o-Xylene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Styrene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Bromoform	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Isopropylbenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
1,1,2,2-Tetrachloroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
1,3-Dichlorobenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-15-5' Lab Sample ID: 600-209487-33

Date Collected: 08/05/20 12:10 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 82.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
1,2-Dichlorobenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
1,2-Dibromo-3-Chloropropane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
1,2,4-Trichlorobenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*61 - 130*	*08/08/20 15:31*	*08/11/20 15:19*	*1*
Dibromofluoromethane	*91*		*68 - 140*	*08/08/20 15:31*	*08/11/20 15:19*	*1*
Toluene-d8 (Surr)	*93*		*50 - 130*	*08/08/20 15:31*	*08/11/20 15:19*	*1*
4-Bromofluorobenzene	*107*		*57 - 140*	*08/08/20 15:31*	*08/11/20 15:19*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/08/20 15:03	08/12/20 10:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*86*		*70 - 130*	*08/08/20 15:03*	*08/12/20 10:00*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		30		mg/Kg	☼	08/12/20 14:58	08/14/20 14:58	1
C28-C36	**110**		30		mg/Kg	☼	08/12/20 14:58	08/14/20 14:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*114*		*60 - 140*	*08/12/20 14:58*	*08/14/20 14:58*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.8**		4.8		mg/Kg	☼		08/18/20 13:15	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**17.2**		1.0		%			08/11/20 08:50	1
Percent Solids	**82.8**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080520-CN-DP-15-11' Lab Sample ID: 600-209487-34

Date Collected: 08/05/20 17:15 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 79.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Chloromethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Vinyl chloride	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Bromomethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Chloroethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Trichlorofluoromethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
1,1-Dichloroethene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
trans-1,2-Dichloroethene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Methyl tert-butyl ether	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Acetone	**0.062**		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-15-11' **Lab Sample ID: 600-209487-34**
Date Collected: 08/05/20 17:15 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 79.4**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	**0.023**		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Methyl acetate	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Methylene Chloride	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Vinyl acetate	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
cis-1,2-Dichloroethene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
1,2-Dichloroethene, Total	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
2-Butanone (MEK)	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Chlorobromomethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Cyclohexane	**0.0074**		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Carbon tetrachloride	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Benzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
1,2-Dichloroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Trichloroethene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
1,1,1-Trichloroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
1,1-Dichloroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
1,2-Dichloropropane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Chloroform	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Bromodichloromethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Methylcyclohexane	**0.017**		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
cis-1,3-Dichloropropene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
4-Methyl-2-pentanone (MIBK)	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Toluene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
trans-1,3-Dichloropropene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
1,1,2-Trichloroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Tetrachloroethene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
2-Hexanone	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Dibromochloromethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
1,2-Dibromoethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Chlorobenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Ethylbenzene	**0.089**		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Styrene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Bromoform	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Isopropylbenzene	**0.13**		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
1,1,2,2-Tetrachloroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
1,3-Dichlorobenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
1,4-Dichlorobenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
1,2-Dichlorobenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
1,2-Dibromo-3-Chloropropane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
1,2,4-Trichlorobenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*61 - 130*	*08/08/20 15:31*	*08/11/20 15:43*	*1*
Dibromofluoromethane	*86*		*68 - 140*	*08/08/20 15:31*	*08/11/20 15:43*	*1*
Toluene-d8 (Surr)	*109*		*50 - 130*	*08/08/20 15:31*	*08/11/20 15:43*	*1*
4-Bromofluorobenzene	*71*		*57 - 140*	*08/08/20 15:31*	*08/11/20 15:43*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	**0.40**		0.037		mg/Kg	☼	08/09/20 12:02	08/12/20 11:17	1
Xylenes, Total	**0.40**		0.037		mg/Kg	☼	08/09/20 12:02	08/12/20 11:17	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-15-11' Lab Sample ID: 600-209487-34

Date Collected: 08/05/20 17:15 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 79.4**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		0.037		mg/Kg	☼	08/09/20 12:02	08/12/20 11:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*61 - 130*	*08/09/20 12:02*	*08/12/20 11:17*	*1*
Dibromofluoromethane	*86*		*68 - 140*	*08/09/20 12:02*	*08/12/20 11:17*	*1*
Toluene-d8 (Surr)	*105*		*50 - 130*	*08/09/20 12:02*	*08/12/20 11:17*	*1*
4-Bromofluorobenzene	*86*		*57 - 140*	*08/09/20 12:02*	*08/12/20 11:17*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	**870**		590		mg/Kg	☼	08/08/20 15:03	08/13/20 10:47	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*501*	*X*	*70 - 130*	*08/08/20 15:03*	*08/13/20 10:47*	*500*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**690**		31		mg/Kg	☼	08/12/20 14:58	08/14/20 15:36	1
C28-C36	**120**		31		mg/Kg	☼	08/12/20 14:58	08/14/20 15:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*132*		*60 - 140*	*08/12/20 14:58*	*08/14/20 15:36*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**13**		5.0		mg/Kg	☼		08/18/20 13:35	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**20.6**		1.0		%			08/11/20 08:50	1
Percent Solids	**79.4**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080520-CN-DP-15-20' Lab Sample ID: 600-209487-35

Date Collected: 08/05/20 17:20 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 71.7**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Chloromethane	ND		0.015		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Vinyl chloride	ND		0.015		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Bromomethane	ND		0.015		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Chloroethane	ND		0.015		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Trichlorofluoromethane	ND		0.015		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
1,1-Dichloroethene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
trans-1,2-Dichloroethene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Methyl tert-butyl ether	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Acetone	ND		0.015		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Carbon disulfide	ND		0.015		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Methyl acetate	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-15-20' **Lab Sample ID: 600-209487-35**
Date Collected: 08/05/20 17:20 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 71.7**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		0.015		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Vinyl acetate	ND		0.015		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
cis-1,2-Dichloroethene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
1,2-Dichloroethene, Total	ND		0.015		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
2-Butanone (MEK)	ND		0.015		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Chlorobromomethane	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Cyclohexane	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Carbon tetrachloride	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Benzene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
1,2-Dichloroethane	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Trichloroethene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
1,1,1-Trichloroethane	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
1,1-Dichloroethane	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
1,2-Dichloropropane	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Chloroform	ND		0.015		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Bromodichloromethane	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Methylcyclohexane	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
cis-1,3-Dichloropropene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
4-Methyl-2-pentanone (MIBK)	ND		0.015		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Toluene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
trans-1,3-Dichloropropene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
1,1,2-Trichloroethane	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Tetrachloroethene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
2-Hexanone	ND		0.015		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Dibromochloromethane	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
1,2-Dibromoethane	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Chlorobenzene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Ethylbenzene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
m-Xylene & p-Xylene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Xylenes, Total	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
o-Xylene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Styrene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Bromoform	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Isopropylbenzene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
1,1,2,2-Tetrachloroethane	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
1,3-Dichlorobenzene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
1,4-Dichlorobenzene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
1,2-Dichlorobenzene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
1,2-Dibromo-3-Chloropropane	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
1,2,4-Trichlorobenzene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*61 - 130*	*08/09/20 12:02*	*08/11/20 16:07*	*1*
Dibromofluoromethane	*83*		*68 - 140*	*08/09/20 12:02*	*08/11/20 16:07*	*1*
Toluene-d8 (Surr)	*93*		*50 - 130*	*08/09/20 12:02*	*08/11/20 16:07*	*1*
4-Bromofluorobenzene	*96*		*57 - 140*	*08/09/20 12:02*	*08/11/20 16:07*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.4		mg/Kg	☼	08/08/20 15:03	08/12/20 14:16	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-15-20' Lab Sample ID: 600-209487-35

Date Collected: 08/05/20 17:20 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 71.7**

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*82*		*70 - 130*	*08/08/20 15:03*	*08/12/20 14:16*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		35		mg/Kg	☼	08/12/20 14:58	08/14/20 16:14	1
C28-C36	**110**		35		mg/Kg	☼	08/12/20 14:58	08/14/20 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*61*		*60 - 140*	*08/12/20 14:58*	*08/14/20 16:14*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**40**	**^**	5.6		mg/Kg	☼		08/20/20 13:44	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**28.3**		1.0		%			08/11/20 08:50	1
Percent Solids	**71.7**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080520-CN-DP-16-5' Lab Sample ID: 600-209487-36

Date Collected: 08/05/20 14:45 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Chloromethane	ND		0.012		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Vinyl chloride	ND		0.012		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Bromomethane	ND		0.012		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Chloroethane	ND		0.012		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Trichlorofluoromethane	ND		0.012		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
1,1-Dichloroethene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
trans-1,2-Dichloroethene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Methyl tert-butyl ether	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Acetone	ND		0.012		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Carbon disulfide	ND		0.012		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Methyl acetate	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Methylene Chloride	ND		0.012		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Vinyl acetate	ND		0.012		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
cis-1,2-Dichloroethene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
1,2-Dichloroethene, Total	ND		0.012		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
2-Butanone (MEK)	ND		0.012		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Chlorobromomethane	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Cyclohexane	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Carbon tetrachloride	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Benzene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
1,2-Dichloroethane	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Trichloroethene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
1,1,1-Trichloroethane	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
1,1-Dichloroethane	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-16-5' **Lab Sample ID: 600-209487-36**
Date Collected: 08/05/20 14:45 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Chloroform	ND		0.012		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Bromodichloromethane	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Methylcyclohexane	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
cis-1,3-Dichloropropene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
4-Methyl-2-pentanone (MIBK)	ND		0.012		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Toluene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
trans-1,3-Dichloropropene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
1,1,2-Trichloroethane	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Tetrachloroethene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
2-Hexanone	ND		0.012		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Dibromochloromethane	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
1,2-Dibromoethane	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Chlorobenzene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Ethylbenzene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
m-Xylene & p-Xylene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Xylenes, Total	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
o-Xylene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Styrene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Bromoform	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Isopropylbenzene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
1,1,2,2-Tetrachloroethane	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
1,3-Dichlorobenzene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
1,4-Dichlorobenzene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
1,2-Dichlorobenzene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
1,2-Dibromo-3-Chloropropane	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
1,2,4-Trichlorobenzene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*61 - 130*	*08/09/20 12:02*	*08/11/20 16:31*	*1*
Dibromofluoromethane	*85*		*68 - 140*	*08/09/20 12:02*	*08/11/20 16:31*	*1*
Toluene-d8 (Surr)	*92*		*50 - 130*	*08/09/20 12:02*	*08/11/20 16:31*	*1*
4-Bromofluorobenzene	*101*		*57 - 140*	*08/09/20 12:02*	*08/11/20 16:31*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/08/20 15:03	08/12/20 14:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*84*		*70 - 130*	*08/08/20 15:03*	*08/12/20 14:44*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		30		mg/Kg	☼	08/12/20 14:58	08/14/20 16:52	1
C28-C36	**100**		30		mg/Kg	☼	08/12/20 14:58	08/14/20 16:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*125*		*60 - 140*	*08/12/20 14:58*	*08/14/20 16:52*	*1*

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-16-5' Lab Sample ID: 600-209487-36

Date Collected: 08/05/20 14:45 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.0**

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23	^	4.8		mg/Kg	☼		08/20/20 14:45	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17.0		1.0		%			08/11/20 08:50	1
Percent Solids	83.0		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080520-CN-DP-16-8' Lab Sample ID: 600-209487-37

Date Collected: 08/05/20 14:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 78.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Chloromethane	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Vinyl chloride	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Bromomethane	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Chloroethane	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Trichlorofluoromethane	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
1,1-Dichloroethene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
trans-1,2-Dichloroethene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Methyl tert-butyl ether	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Acetone	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Carbon disulfide	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Methyl acetate	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Methylene Chloride	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Vinyl acetate	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
cis-1,2-Dichloroethene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
1,2-Dichloroethene, Total	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
2-Butanone (MEK)	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Chlorobromomethane	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Cyclohexane	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Carbon tetrachloride	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Benzene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
1,2-Dichloroethane	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Trichloroethene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
1,1,1-Trichloroethane	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
1,1-Dichloroethane	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
1,2-Dichloropropane	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Chloroform	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Bromodichloromethane	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Methylcyclohexane	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
cis-1,3-Dichloropropene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
4-Methyl-2-pentanone (MIBK)	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Toluene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
trans-1,3-Dichloropropene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
1,1,2-Trichloroethane	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Tetrachloroethene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
2-Hexanone	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-16-8' **Lab Sample ID: 600-209487-37**
Date Collected: 08/05/20 14:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 78.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
1,2-Dibromoethane	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Chlorobenzene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Ethylbenzene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
m-Xylene & p-Xylene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Xylenes, Total	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
o-Xylene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Styrene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Bromoform	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Isopropylbenzene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
1,1,2,2-Tetrachloroethane	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
1,3-Dichlorobenzene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
1,4-Dichlorobenzene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
1,2-Dichlorobenzene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
1,2-Dibromo-3-Chloropropane	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
1,2,4-Trichlorobenzene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*61 - 130*	*08/09/20 12:02*	*08/11/20 16:55*	*1*
Dibromofluoromethane	*87*		*68 - 140*	*08/09/20 12:02*	*08/11/20 16:55*	*1*
Toluene-d8 (Surr)	*92*		*50 - 130*	*08/09/20 12:02*	*08/11/20 16:55*	*1*
4-Bromofluorobenzene	*103*		*57 - 140*	*08/09/20 12:02*	*08/11/20 16:55*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.3		mg/Kg	☼	08/08/20 15:03	08/12/20 15:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*95*		*70 - 130*	*08/08/20 15:03*	*08/12/20 15:35*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		32		mg/Kg	☼	08/12/20 14:58	08/14/20 17:30	1
C28-C36	ND		32		mg/Kg	☼	08/12/20 14:58	08/14/20 17:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*113*		*60 - 140*	*08/12/20 14:58*	*08/14/20 17:30*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**28**	**^**	5.1		mg/Kg	☼		08/20/20 15:05	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**21.2**		1.0		%			08/11/20 08:50	1
Percent Solids	**78.8**		1.0		%			08/11/20 08:50	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-17-5' **Lab Sample ID: 600-209487-38**
Date Collected: 08/05/20 15:35 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 93.6**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Chloromethane	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Vinyl chloride	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Bromomethane	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Chloroethane	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Trichlorofluoromethane	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
1,1-Dichloroethene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
trans-1,2-Dichloroethene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Methyl tert-butyl ether	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Acetone	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Carbon disulfide	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Methyl acetate	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Methylene Chloride	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Vinyl acetate	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
cis-1,2-Dichloroethene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
1,2-Dichloroethene, Total	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
2-Butanone (MEK)	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Chlorobromomethane	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Cyclohexane	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Carbon tetrachloride	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Benzene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
1,2-Dichloroethane	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Trichloroethene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
1,1,1-Trichloroethane	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
1,1-Dichloroethane	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
1,2-Dichloropropane	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Chloroform	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Bromodichloromethane	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Methylcyclohexane	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
cis-1,3-Dichloropropene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
4-Methyl-2-pentanone (MIBK)	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Toluene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
trans-1,3-Dichloropropene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
1,1,2-Trichloroethane	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Tetrachloroethene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
2-Hexanone	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Dibromochloromethane	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
1,2-Dibromoethane	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Chlorobenzene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Ethylbenzene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
m-Xylene & p-Xylene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Xylenes, Total	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
o-Xylene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Styrene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Bromoform	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Isopropylbenzene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
1,1,2,2-Tetrachloroethane	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
1,3-Dichlorobenzene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-17-5' Lab Sample ID: 600-209487-38

Date Collected: 08/05/20 15:35 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 93.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
1,2-Dichlorobenzene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
1,2-Dibromo-3-Chloropropane	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
1,2,4-Trichlorobenzene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*61 - 130*	*08/09/20 12:02*	*08/11/20 17:19*	*1*
Dibromofluoromethane	*85*		*68 - 140*	*08/09/20 12:02*	*08/11/20 17:19*	*1*
Toluene-d8 (Surr)	*97*		*50 - 130*	*08/09/20 12:02*	*08/11/20 17:19*	*1*
4-Bromofluorobenzene	*107*		*57 - 140*	*08/09/20 12:02*	*08/11/20 17:19*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.1		mg/Kg	☼	08/08/20 15:03	08/12/20 12:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*90*		*70 - 130*	*08/08/20 15:03*	*08/12/20 12:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		27		mg/Kg	☼	08/12/20 14:58	08/14/20 18:08	1
C28-C36	**82**		27		mg/Kg	☼	08/12/20 14:58	08/14/20 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*135*		*60 - 140*	*08/12/20 14:58*	*08/14/20 18:08*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**20**	^	4.3		mg/Kg	☼		08/20/20 15:26	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**6.4**		1.0		%			08/11/20 08:50	1
Percent Solids	**93.6**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080520-CN-DP-17-8' Lab Sample ID: 600-209487-39

Date Collected: 08/05/20 15:40 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 79.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Chloromethane	ND		0.014		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Vinyl chloride	ND		0.014		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Bromomethane	ND		0.014		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Chloroethane	ND		0.014		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Trichlorofluoromethane	ND		0.014		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
1,1-Dichloroethene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
trans-1,2-Dichloroethene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Methyl tert-butyl ether	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Acetone	ND		0.014		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-17-8' **Lab Sample ID: 600-209487-39**
Date Collected: 08/05/20 15:40 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 79.1**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		0.014		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Methyl acetate	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Methylene Chloride	ND		0.014		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Vinyl acetate	ND		0.014		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
cis-1,2-Dichloroethene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
1,2-Dichloroethene, Total	ND		0.014		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
2-Butanone (MEK)	ND		0.014		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Chlorobromomethane	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Cyclohexane	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Carbon tetrachloride	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Benzene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
1,2-Dichloroethane	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Trichloroethene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
1,1,1-Trichloroethane	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
1,1-Dichloroethane	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
1,2-Dichloropropane	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Chloroform	ND		0.014		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Bromodichloromethane	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Methylcyclohexane	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
cis-1,3-Dichloropropene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
4-Methyl-2-pentanone (MIBK)	ND		0.014		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Toluene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
trans-1,3-Dichloropropene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
1,1,2-Trichloroethane	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Tetrachloroethene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
2-Hexanone	ND		0.014		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Dibromochloromethane	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
1,2-Dibromoethane	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Chlorobenzene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Ethylbenzene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
m-Xylene & p-Xylene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Xylenes, Total	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
o-Xylene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Styrene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Bromoform	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Isopropylbenzene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
1,1,2,2-Tetrachloroethane	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
1,3-Dichlorobenzene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
1,4-Dichlorobenzene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
1,2-Dichlorobenzene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
1,2-Dibromo-3-Chloropropane	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
1,2,4-Trichlorobenzene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*61 - 130*	*08/09/20 12:02*	*08/11/20 17:43*	*1*
Dibromofluoromethane	*84*		*68 - 140*	*08/09/20 12:02*	*08/11/20 17:43*	*1*
Toluene-d8 (Surr)	*91*		*50 - 130*	*08/09/20 12:02*	*08/11/20 17:43*	*1*
4-Bromofluorobenzene	*103*		*57 - 140*	*08/09/20 12:02*	*08/11/20 17:43*	*1*

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-17-8' Lab Sample ID: 600-209487-39

Date Collected: 08/05/20 15:40 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 79.1**

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/08/20 15:03	08/12/20 12:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*87*		*70 - 130*	*08/08/20 15:03*	*08/12/20 12:52*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**60**		52		mg/Kg	☼	08/12/20 14:58	08/14/20 18:45	1
C28-C36	**160**		52		mg/Kg	☼	08/12/20 14:58	08/14/20 18:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*119*		*60 - 140*	*08/12/20 14:58*	*08/14/20 18:45*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**51**	^	5.1		mg/Kg	☼		08/20/20 15:46	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**20.9**		1.0		%			08/11/20 08:50	1
Percent Solids	**79.1**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080520-CN-DPW-15-8' Lab Sample ID: 600-209487-41

Date Collected: 08/05/20 12:15 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 79.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Chloromethane	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Vinyl chloride	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Bromomethane	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Chloroethane	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Trichlorofluoromethane	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
1,1-Dichloroethene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
trans-1,2-Dichloroethene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Methyl tert-butyl ether	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Acetone	**0.025**		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Carbon disulfide	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Methyl acetate	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Methylene Chloride	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Vinyl acetate	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
cis-1,2-Dichloroethene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
1,2-Dichloroethene, Total	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
2-Butanone (MEK)	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Chlorobromomethane	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Cyclohexane	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Carbon tetrachloride	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Benzene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
1,2-Dichloroethane	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DPW-15-8' **Lab Sample ID: 600-209487-41**
Date Collected: 08/05/20 12:15 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 79.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
1,1,1-Trichloroethane	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
1,1-Dichloroethane	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
1,2-Dichloropropane	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Chloroform	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Bromodichloromethane	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Methylcyclohexane	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
cis-1,3-Dichloropropene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
4-Methyl-2-pentanone (MIBK)	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Toluene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
trans-1,3-Dichloropropene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
1,1,2-Trichloroethane	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Tetrachloroethene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
2-Hexanone	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Dibromochloromethane	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
1,2-Dibromoethane	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Chlorobenzene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Ethylbenzene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
m-Xylene & p-Xylene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Xylenes, Total	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
o-Xylene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Styrene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Bromoform	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Isopropylbenzene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
1,1,2,2-Tetrachloroethane	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
1,3-Dichlorobenzene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
1,4-Dichlorobenzene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
1,2-Dichlorobenzene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
1,2-Dibromo-3-Chloropropane	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
1,2,4-Trichlorobenzene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*61 - 130*	*08/09/20 12:02*	*08/11/20 18:07*	*1*
Dibromofluoromethane	*88*		*68 - 140*	*08/09/20 12:02*	*08/11/20 18:07*	*1*
Toluene-d8 (Surr)	*98*		*50 - 130*	*08/09/20 12:02*	*08/11/20 18:07*	*1*
4-Bromofluorobenzene	*98*		*57 - 140*	*08/09/20 12:02*	*08/11/20 18:07*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	**36**		31		mg/Kg	☼	08/08/20 15:03	08/13/20 11:12	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*114*		*70 - 130*	*08/08/20 15:03*	*08/13/20 11:12*	*25*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**170**		31		mg/Kg	☼	08/12/20 14:58	08/14/20 19:23	1
C28-C36	ND		31		mg/Kg	☼	08/12/20 14:58	08/14/20 19:23	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DPW-15-8' **Lab Sample ID: 600-209487-41**
Date Collected: 08/05/20 12:15 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 79.8**

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*119*		*60 - 140*	*08/12/20 14:58*	*08/14/20 19:23*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18	^	5.0		mg/Kg	☼		08/20/20 16:06	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20.2		1.0		%			08/11/20 08:50	1
Percent Solids	79.8		1.0		%			08/11/20 08:50	1

Definitions/Glossary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.

GC VOA

Qualifier	Qualifier Description
X	Surrogate recovery exceeds control limits

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
X	Surrogate recovery exceeds control limits

HPLC/IC

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits

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

Surrogate Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCA (61-130)	DBFM (68-140)	TOL (50-130)	BFB (57-140)
600-209487-1	S-11213301-080320-CN-DP-1-5	86	84	94	105
600-209487-2	S-11213301-080320-CN-DP-1-12'	90	85	96	121
600-209487-3	S-11213301-080320-CN-DP-1-15'	90	87	94	104
600-209487-4	S-11213301-080320-CN-DP-2-5'	83	84	91	102
600-209487-5	S-11213301-080320-CN-DP-2-10'	80	83	97	104
600-209487-6	S-11213301-080320-CN-DP-2-11'	106	87	94	86
600-209487-7	S-11213301-080420-CN-DP-3-5'	108	87	89	85
600-209487-8	S-11213301-080420-CN-DP-3-10'	105	85	96	92
600-209487-9	S-11213301-080420-CN-DP-3-15'	101	83	87	85
600-209487-10	S-11213301-080420-CN-DP-4.5'	112	88	94	94
600-209487-11	S-11213301-080420-CN-DP-4-10'	108	83	87	83
600-209487-12	S-11213301-080420-CN-DP-4-15'	106	84	91	92
600-209487-13	S-11213301-080420-CN-DP-5-5'	99	79	89	82
600-209487-14	S-11213301-080420-CN-DP-5-8'	97	79	91	83
600-209487-15	S-11213301-080420-CN-DP-6-5'	100	77	94	93
600-209487-16	S-11213301-080420-CN-DP-6-8'	97	78	97	80
600-209487-17	S-11213301-080420-CN-DP-7-6'	104	78	91	84
600-209487-18	S-11213301-080420-CN-DP-7-9'	99	79	100	85
600-209487-19	S-11213301-080420-CN-DP-8-6'	100	74	93	84
600-209487-20	S-11213301-080420-CN-DP-8-9'	103	73	90	86
600-209487-21	S-11213301-080420-CN-DP-9-6'	103	74	91	84
600-209487-22	S-11213301-080420-CN-DP-9-9'	97	75	92	81
600-209487-23	S-11213301-080520-CN-DP-10-5'	98	77	98	89
600-209487-24	S-11213301-080520-CN-DP-10-8'	98	79	98	79
600-209487-25	S-11213301-080520-CN-DP-11-5'	81	83	91	101
600-209487-26	S-11213301-080520-CN-DP-11-8	98	93	94	110
600-209487-27	S-11213301-080520-CN-DP-12-6'	84	86	91	109
600-209487-28	S-11213301-080520-CN-DP-12-9'	92	86	91	104

Surrogate Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCA (61-130)	DBFM (68-140)	TOL (50-130)	BFB (57-140)
600-209487-29	S-11213301-080520-CN-DP-13-	91	87	94	105
600-209487-30	S-11213301-080520-CN-DP-13-9'	89	89	93	109
600-209487-31	S-11213301-080520-CN-DP-14-6'	93	83	91	107
600-209487-32	S-11213301-080520-CN-DP-14-9'	92	86	89	105
600-209487-33	S-11213301-080520-CN-DP-15-5'	96	91	93	107
600-209487-34	S-11213301-080520-CN-DP-15-11'	92	86	109	71
600-209487-34 - DL	S-11213301-080520-CN-DP-15-11'	88	86	105	86
600-209487-35	S-11213301-080520-CN-DP-15-20'	83	83	93	96
600-209487-36	S-11213301-080520-CN-DP-16-5'	85	85	92	101
600-209487-37	S-11213301-080520-CN-DP-16-8'	90	87	92	103
600-209487-38	S-11213301-080520-CN-DP-17-5'	83	85	97	107
600-209487-39	S-11213301-080520-CN-DP-17-8'	85	84	91	103
600-209487-41	S-11213301-080520-CN-DPW-15-8'	86	88	98	98
LCS 600-300707/3	Lab Control Sample	90	88	95	110
LCS 600-300771/4	Lab Control Sample	101	91	91	88
LCS 600-300850/3	Lab Control Sample	85	87	94	111
LCS 600-300952/3	Lab Control Sample	80	86	100	109
LCSD 600-300707/4	Lab Control Sample Dup	89	88	91	107
LCSD 600-300771/5	Lab Control Sample Dup	85	79	85	85
LCSD 600-300850/4	Lab Control Sample Dup	86	88	93	106
LCSD 600-300952/4	Lab Control Sample Dup	77	83	95	106
MB 600-300707/6	Method Blank	108	87	92	113
MB 600-300771/7	Method Blank	100	87	97	87
MB 600-300850/6	Method Blank	103	92	97	105
MB 600-300952/6	Method Blank	95	88	99	103

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8015B - Gasoline Range Organics - (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	TFT1 (70-130)
600-209487-1	S-11213301-080320-CN-DP-1-5	92
600-209487-2	S-11213301-080320-CN-DP-1-12'	117

Surrogate Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	TFT1 (70-130)							
600-209487-3	S-11213301-080320-CN-DP-1-1	99							
600-209487-4	S-11213301-080320-CN-DP-2-5'	100							
600-209487-5	S-11213301-080320-CN-DP-2-10'	103							
600-209487-6	S-11213301-080320-CN-DP-2-11'	102							
600-209487-7	S-11213301-080420-CN-DP-3-5'	101							
600-209487-8	S-11213301-080420-CN-DP-3-10'	101							
600-209487-9	S-11213301-080420-CN-DP-3-15'	98							
600-209487-10	S-11213301-080420-CN-DP-4.5'	101							
600-209487-11	S-11213301-080420-CN-DP-4-10'	96							
600-209487-12	S-11213301-080420-CN-DP-4-15'	79							
600-209487-13	S-11213301-080420-CN-DP-5-5'	81							
600-209487-14	S-11213301-080420-CN-DP-5-8'	96							
600-209487-15	S-11213301-080420-CN-DP-6-5'	95							
600-209487-16	S-11213301-080420-CN-DP-6-8'	95							
600-209487-17	S-11213301-080420-CN-DP-7-6'	96							
600-209487-18	S-11213301-080420-CN-DP-7-9'	101							
600-209487-19	S-11213301-080420-CN-DP-8-6'	91							
600-209487-20	S-11213301-080420-CN-DP-8-9'	91							
600-209487-21	S-11213301-080420-CN-DP-9-6'	98							
600-209487-22	S-11213301-080420-CN-DP-9-9'	91							
600-209487-23	S-11213301-080520-CN-DP-10-5'	102							
600-209487-24	S-11213301-080520-CN-DP-10-8'	96							
600-209487-25	S-11213301-080520-CN-DP-11-5'	95							
600-209487-26	S-11213301-080520-CN-DP-11-8	102							
600-209487-27	S-11213301-080520-CN-DP-12-6'	94							
600-209487-28	S-11213301-080520-CN-DP-12-9'	97							
600-209487-29	S-11213301-080520-CN-DP-13-6'	94							
600-209487-30	S-11213301-080520-CN-DP-13-9'	94							
600-209487-31	S-11213301-080520-CN-DP-14-6'	91							

Surrogate Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	TFT1 (70-130)
600-209487-32	S-11213301-080520-CN-DP-14-	84
600-209487-33	S-11213301-080520-CN-DP-15 -5'	86
600-209487-34	S-11213301-080520-CN-DP-15 -11'	501 X
600-209487-35	S-11213301-080520-CN-DP-15 -20'	82
600-209487-36	S-11213301-080520-CN-DP-16 -5'	84
600-209487-37	S-11213301-080520-CN-DP-16 -8'	95
600-209487-38	S-11213301-080520-CN-DP-17 -5'	90
600-209487-39	S-11213301-080520-CN-DP-17 -8'	87
600-209487-41	S-11213301-080520-CN-DPW- 15-8'	114
LCS 600-300708/1-A	Lab Control Sample	96
LCS 600-300717/1-A	Lab Control Sample	94
LCS 600-300863/1-A	Lab Control Sample	90
LCSD 600-300708/2-A	Lab Control Sample Dup	96
LCSD 600-300717/2-A	Lab Control Sample Dup	93
LCSD 600-300863/2-A	Lab Control Sample Dup	89
MB 600-300708/3-A	Method Blank	95
MB 600-300717/3-A	Method Blank	89
MB 600-300863/3-A	Method Blank	87

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	OTPH (60-140)
600-209487-1	S-11213301-080320-CN-DP-1-5	75
600-209487-2	S-11213301-080320-CN-DP-1- 12'	96
600-209487-3	S-11213301-080320-CN-DP-1- 15'	75
600-209487-4	S-11213301-080320-CN-DP-2- 5'	97
600-209487-5	S-11213301-080320-CN-DP-2- 10'	68
600-209487-6	S-11213301-080320-CN-DP-2- 11'	109
600-209487-7	S-11213301-080420-CN-DP-3- 5'	80
600-209487-8	S-11213301-080420-CN-DP-3- 10'	112
600-209487-9	S-11213301-080420-CN-DP-3- 15'	101
600-209487-10	S-11213301-080420-CN-DP-4. 5'	73

Surrogate Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	OTPH (60-140)
600-209487-11	S-11213301-080420-CN-DP-4-1	112
600-209487-12	S-11213301-080420-CN-DP-4-15'	118
600-209487-13	S-11213301-080420-CN-DP-5-5'	117
600-209487-13 MS	S-11213301-080420-CN-DP-5-5'	91
600-209487-13 MSD	S-11213301-080420-CN-DP-5-5'	41 X
600-209487-14	S-11213301-080420-CN-DP-5-8'	117
600-209487-15	S-11213301-080420-CN-DP-6-5'	119
600-209487-16	S-11213301-080420-CN-DP-6-8'	99
600-209487-17	S-11213301-080420-CN-DP-7-6'	60
600-209487-18	S-11213301-080420-CN-DP-7-9'	78
600-209487-19	S-11213301-080420-CN-DP-8-6'	106
600-209487-20	S-11213301-080420-CN-DP-8-9'	108
600-209487-21	S-11213301-080420-CN-DP-9-6'	120
600-209487-22	S-11213301-080420-CN-DP-9-9'	122
600-209487-23	S-11213301-080520-CN-DP-10-5'	126
600-209487-24	S-11213301-080520-CN-DP-10-8'	117
600-209487-25	S-11213301-080520-CN-DP-11-5'	123
600-209487-26	S-11213301-080520-CN-DP-11-8	123
600-209487-27	S-11213301-080520-CN-DP-12-6'	123
600-209487-28	S-11213301-080520-CN-DP-12-9'	126
600-209487-29	S-11213301-080520-CN-DP-13-6'	117
600-209487-30	S-11213301-080520-CN-DP-13-9'	111
600-209487-31	S-11213301-080520-CN-DP-14-6'	110
600-209487-31 MS	S-11213301-080520-CN-DP-14-6'	138
600-209487-31 MSD	S-11213301-080520-CN-DP-14-6'	137
600-209487-32	S-11213301-080520-CN-DP-14-9'	106
600-209487-33	S-11213301-080520-CN-DP-15-5'	114
600-209487-34	S-11213301-080520-CN-DP-15-11'	132
600-209487-35	S-11213301-080520-CN-DP-15-20'	61

Surrogate Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	OTPH (60-140)								
600-209487-36	S-11213301-080520-CN-DP-16-	125								
600-209487-37	S-11213301-080520-CN-DP-16-8'	113								
600-209487-38	S-11213301-080520-CN-DP-17-5'	135								
600-209487-39	S-11213301-080520-CN-DP-17-8'	119								
600-209487-41	S-11213301-080520-CN-DPW-15-8'	119								
LCS 600-300964/2-A	Lab Control Sample	119								
LCS 600-301022/2-A	Lab Control Sample	136								
LCS 600-301371/2-A	Lab Control Sample	135								
LCSD 600-301371/3-A	Lab Control Sample Dup	139								
MB 600-300964/1-A	Method Blank	103								
MB 600-301022/1-A	Method Blank	127								
MB 600-301371/1-A	Method Blank	120								

Surrogate Legend

OTPH = o-Terphenyl

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: MB 600-300707/6
Matrix: Solid
Analysis Batch: 300707

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0050		mg/Kg			08/08/20 09:03	1
Chloromethane	ND		0.010		mg/Kg			08/08/20 09:03	1
Vinyl chloride	ND		0.010		mg/Kg			08/08/20 09:03	1
Bromomethane	ND		0.010		mg/Kg			08/08/20 09:03	1
Chloroethane	ND		0.010		mg/Kg			08/08/20 09:03	1
Trichlorofluoromethane	ND		0.010		mg/Kg			08/08/20 09:03	1
1,1-Dichloroethene	ND		0.0050		mg/Kg			08/08/20 09:03	1
trans-1,2-Dichloroethene	ND		0.0050		mg/Kg			08/08/20 09:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0050		mg/Kg			08/08/20 09:03	1
Methyl tert-butyl ether	ND		0.0050		mg/Kg			08/08/20 09:03	1
Acetone	ND		0.010		mg/Kg			08/08/20 09:03	1
Carbon disulfide	ND		0.010		mg/Kg			08/08/20 09:03	1
Methyl acetate	ND		0.0050		mg/Kg			08/08/20 09:03	1
Methylene Chloride	ND		0.010		mg/Kg			08/08/20 09:03	1
Vinyl acetate	ND		0.010		mg/Kg			08/08/20 09:03	1
cis-1,2-Dichloroethene	ND		0.0050		mg/Kg			08/08/20 09:03	1
1,2-Dichloroethene, Total	ND		0.010		mg/Kg			08/08/20 09:03	1
2-Butanone (MEK)	ND		0.010		mg/Kg			08/08/20 09:03	1
Chlorobromomethane	ND		0.0050		mg/Kg			08/08/20 09:03	1
Cyclohexane	ND		0.0050		mg/Kg			08/08/20 09:03	1
Carbon tetrachloride	ND		0.0050		mg/Kg			08/08/20 09:03	1
Benzene	ND		0.0050		mg/Kg			08/08/20 09:03	1
1,2-Dichloroethane	ND		0.0050		mg/Kg			08/08/20 09:03	1
Trichloroethene	ND		0.0050		mg/Kg			08/08/20 09:03	1
1,1,1-Trichloroethane	ND		0.0050		mg/Kg			08/08/20 09:03	1
1,1-Dichloroethane	ND		0.0050		mg/Kg			08/08/20 09:03	1
1,2-Dichloropropane	ND		0.0050		mg/Kg			08/08/20 09:03	1
Chloroform	ND		0.010		mg/Kg			08/08/20 09:03	1
Bromodichloromethane	ND		0.0050		mg/Kg			08/08/20 09:03	1
Methylcyclohexane	ND		0.0050		mg/Kg			08/08/20 09:03	1
cis-1,3-Dichloropropene	ND		0.0050		mg/Kg			08/08/20 09:03	1
4-Methyl-2-pentanone (MIBK)	ND		0.010		mg/Kg			08/08/20 09:03	1
Toluene	ND		0.0050		mg/Kg			08/08/20 09:03	1
trans-1,3-Dichloropropene	ND		0.0050		mg/Kg			08/08/20 09:03	1
1,1,2-Trichloroethane	ND		0.0050		mg/Kg			08/08/20 09:03	1
Tetrachloroethene	ND		0.0050		mg/Kg			08/08/20 09:03	1
2-Hexanone	ND		0.010		mg/Kg			08/08/20 09:03	1
Dibromochloromethane	ND		0.0050		mg/Kg			08/08/20 09:03	1
1,2-Dibromoethane	ND		0.0050		mg/Kg			08/08/20 09:03	1
Chlorobenzene	ND		0.0050		mg/Kg			08/08/20 09:03	1
Ethylbenzene	ND		0.0050		mg/Kg			08/08/20 09:03	1
m-Xylene & p-Xylene	ND		0.0050		mg/Kg			08/08/20 09:03	1
Xylenes, Total	ND		0.0050		mg/Kg			08/08/20 09:03	1
o-Xylene	ND		0.0050		mg/Kg			08/08/20 09:03	1
Styrene	ND		0.0050		mg/Kg			08/08/20 09:03	1
Bromoform	ND		0.0050		mg/Kg			08/08/20 09:03	1
Isopropylbenzene	ND		0.0050		mg/Kg			08/08/20 09:03	1
1,1,2,2-Tetrachloroethane	ND		0.0050		mg/Kg			08/08/20 09:03	1

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: MB 600-300707/6 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300707

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		0.0050		mg/Kg			08/08/20 09:03	1
1,4-Dichlorobenzene	ND		0.0050		mg/Kg			08/08/20 09:03	1
1,2-Dichlorobenzene	ND		0.0050		mg/Kg			08/08/20 09:03	1
1,2-Dibromo-3-Chloropropane	ND		0.0050		mg/Kg			08/08/20 09:03	1
1,2,4-Trichlorobenzene	ND		0.0050		mg/Kg			08/08/20 09:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*61 - 130*		*08/08/20 09:03*	*1*
Dibromofluoromethane	*87*		*68 - 140*		*08/08/20 09:03*	*1*
Toluene-d8 (Surr)	*92*		*50 - 130*		*08/08/20 09:03*	*1*
4-Bromofluorobenzene	*113*		*57 - 140*		*08/08/20 09:03*	*1*

Lab Sample ID: LCS 600-300707/3 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300707

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	0.0500	0.0643		mg/Kg		129	24 - 147
Chloromethane	0.0500	0.0682		mg/Kg		136	44 - 141
Vinyl chloride	0.0500	0.0567		mg/Kg		113	40 - 148
Bromomethane	0.0500	0.0480		mg/Kg		96	37 - 147
Chloroethane	0.0500	0.0496		mg/Kg		99	40 - 150
Trichlorofluoromethane	0.0500	0.0579		mg/Kg		116	53 - 134
1,1-Dichloroethene	0.0500	0.0446		mg/Kg		89	62 - 142
trans-1,2-Dichloroethene	0.0500	0.0478		mg/Kg		96	69 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0426		mg/Kg		85	48 - 150
Methyl tert-butyl ether	0.0500	0.0506		mg/Kg		101	63 - 132
Acetone	0.100	0.0992		mg/Kg		99	13 - 150
Carbon disulfide	0.0500	0.0419		mg/Kg		84	51 - 141
Methyl acetate	0.100	0.106		mg/Kg		106	10 - 150
Methylene Chloride	0.0500	0.0467		mg/Kg		93	61 - 150
Vinyl acetate	0.100	0.121		mg/Kg		121	40 - 150
cis-1,2-Dichloroethene	0.0500	0.0439		mg/Kg		88	70 - 130
1,2-Dichloroethene, Total	0.100	0.0917		mg/Kg		92	70 - 130
2-Butanone (MEK)	0.100	0.0818		mg/Kg		82	33 - 150
Chlorobromomethane	0.0500	0.0416		mg/Kg		83	70 - 132
Cyclohexane	0.0500	0.0441		mg/Kg		88	54 - 130
Carbon tetrachloride	0.0500	0.0508		mg/Kg		102	58 - 130
Benzene	0.0500	0.0455		mg/Kg		91	70 - 131
1,2-Dichloroethane	0.0500	0.0535		mg/Kg		107	58 - 137
Trichloroethene	0.0500	0.0416		mg/Kg		83	63 - 135
1,1,1-Trichloroethane	0.0500	0.0523		mg/Kg		105	59 - 130
1,1-Dichloroethane	0.0500	0.0511		mg/Kg		102	63 - 140
1,2-Dichloropropane	0.0500	0.0471		mg/Kg		94	70 - 130
Chloroform	0.0500	0.0500		mg/Kg		100	69 - 130
Bromodichloromethane	0.0500	0.0503		mg/Kg		101	67 - 138
Methylcyclohexane	0.0500	0.0434		mg/Kg		87	51 - 137
cis-1,3-Dichloropropene	0.0500	0.0488		mg/Kg		98	65 - 130

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: LCS 600-300707/3 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300707

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
4-Methyl-2-pentanone (MIBK)			0.100	0.106		mg/Kg		106	21 - 150		
Toluene			0.0500	0.0460		mg/Kg		92	67 - 130		
trans-1,3-Dichloropropene			0.0500	0.0492		mg/Kg		98	70 - 130		
1,1,2-Trichloroethane			0.0500	0.0451		mg/Kg		90	67 - 134		
Tetrachloroethene			0.0500	0.0433		mg/Kg		87	43 - 143		
2-Hexanone			0.100	0.101		mg/Kg		101	35 - 150		
Dibromochloromethane			0.0500	0.0466		mg/Kg		93	65 - 134		
1,2-Dibromoethane			0.0500	0.0432		mg/Kg		86	65 - 136		
Chlorobenzene			0.0500	0.0453		mg/Kg		91	63 - 131		
Ethylbenzene			0.0500	0.0444		mg/Kg		89	66 - 130		
m-Xylene & p-Xylene			0.0500	0.0465		mg/Kg		93	64 - 130		
Xylenes, Total			0.100	0.0914		mg/Kg		91	63 - 130		
o-Xylene			0.0500	0.0449		mg/Kg		90	62 - 130		
Styrene			0.0500	0.0442		mg/Kg		88	65 - 133		
Bromoform			0.0500	0.0482		mg/Kg		96	43 - 150		
Isopropylbenzene			0.0500	0.0534		mg/Kg		107	64 - 131		
1,1,2,2-Tetrachloroethane			0.0500	0.0476		mg/Kg		95	61 - 138		
1,3-Dichlorobenzene			0.0500	0.0485		mg/Kg		97	63 - 132		
1,4-Dichlorobenzene			0.0500	0.0493		mg/Kg		99	65 - 131		
1,2-Dichlorobenzene			0.0500	0.0496		mg/Kg		99	61 - 131		
1,2-Dibromo-3-Chloropropane			0.0500	0.0460		mg/Kg		92	29 - 150		
1,2,4-Trichlorobenzene			0.0500	0.0492		mg/Kg		98	53 - 136		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*61 - 130*
Dibromofluoromethane	*88*		*68 - 140*
Toluene-d8 (Surr)	*95*		*50 - 130*
4-Bromofluorobenzene	*110*		*57 - 140*

Lab Sample ID: LCSD 600-300707/4 **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300707

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dichlorodifluoromethane			0.0500	0.0566		mg/Kg		113	24 - 147	13	30
Chloromethane			0.0500	0.0578		mg/Kg		116	44 - 141	16	30
Vinyl chloride			0.0500	0.0484		mg/Kg		97	40 - 148	16	30
Bromomethane			0.0500	0.0345	*1	mg/Kg		69	37 - 147	33	30
Chloroethane			0.0500	0.0451		mg/Kg		90	40 - 150	10	30
Trichlorofluoromethane			0.0500	0.0533		mg/Kg		107	53 - 134	8	30
1,1-Dichloroethene			0.0500	0.0399		mg/Kg		80	62 - 142	11	30
trans-1,2-Dichloroethene			0.0500	0.0431		mg/Kg		86	69 - 130	10	30
1,1,2-Trichloro-1,2,2-trifluoroethane			0.0500	0.0380		mg/Kg		76	48 - 150	11	30
Methyl tert-butyl ether			0.0500	0.0491		mg/Kg		98	63 - 132	3	30
Acetone			0.100	0.0672	*1	mg/Kg		67	13 - 150	38	30
Carbon disulfide			0.0500	0.0343		mg/Kg		69	51 - 141	20	30
Methyl acetate			0.100	0.0835		mg/Kg		84	10 - 150	24	30
Methylene Chloride			0.0500	0.0408		mg/Kg		82	61 - 150	13	30

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: LCSD 600-300707/4 **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300707

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vinyl acetate			0.100	0.113		mg/Kg		113	40 - 150	7	30
cis-1,2-Dichloroethene			0.0500	0.0437		mg/Kg		87	70 - 130	0	30
1,2-Dichloroethene, Total			0.100	0.0868		mg/Kg		87	70 - 130	5	30
2-Butanone (MEK)			0.100	0.0572	*1	mg/Kg		57	33 - 150	35	30
Chlorobromomethane			0.0500	0.0403		mg/Kg		81	70 - 132	3	30
Cyclohexane			0.0500	0.0415		mg/Kg		83	54 - 130	6	30
Carbon tetrachloride			0.0500	0.0487		mg/Kg		97	58 - 130	4	30
Benzene			0.0500	0.0440		mg/Kg		88	70 - 131	3	30
1,2-Dichloroethane			0.0500	0.0511		mg/Kg		102	58 - 137	5	30
Trichloroethene			0.0500	0.0402		mg/Kg		80	63 - 135	4	30
1,1,1-Trichloroethane			0.0500	0.0505		mg/Kg		101	59 - 130	4	30
1,1-Dichloroethane			0.0500	0.0484		mg/Kg		97	63 - 140	6	30
1,2-Dichloropropane			0.0500	0.0457		mg/Kg		91	70 - 130	3	30
Chloroform			0.0500	0.0479		mg/Kg		96	69 - 130	4	30
Bromodichloromethane			0.0500	0.0477		mg/Kg		95	67 - 138	5	30
Methylcyclohexane			0.0500	0.0418		mg/Kg		84	51 - 137	4	30
cis-1,3-Dichloropropene			0.0500	0.0454		mg/Kg		91	65 - 130	7	30
4-Methyl-2-pentanone (MIBK)			0.100	0.0881		mg/Kg		88	21 - 150	18	30
Toluene			0.0500	0.0433		mg/Kg		87	67 - 130	6	30
trans-1,3-Dichloropropene			0.0500	0.0463		mg/Kg		93	70 - 130	6	30
1,1,2-Trichloroethane			0.0500	0.0418		mg/Kg		84	67 - 134	8	30
Tetrachloroethene			0.0500	0.0418		mg/Kg		84	43 - 143	3	30
2-Hexanone			0.100	0.0789		mg/Kg		79	35 - 150	24	30
Dibromochloromethane			0.0500	0.0437		mg/Kg		87	65 - 134	6	30
1,2-Dibromoethane			0.0500	0.0404		mg/Kg		81	65 - 136	7	30
Chlorobenzene			0.0500	0.0432		mg/Kg		86	63 - 131	5	30
Ethylbenzene			0.0500	0.0423		mg/Kg		85	66 - 130	5	30
m-Xylene & p-Xylene			0.0500	0.0447		mg/Kg		89	64 - 130	4	30
Xylenes, Total			0.100	0.0879		mg/Kg		88	63 - 130	4	30
o-Xylene			0.0500	0.0432		mg/Kg		86	62 - 130	4	30
Styrene			0.0500	0.0428		mg/Kg		86	65 - 133	3	30
Bromoform			0.0500	0.0447		mg/Kg		89	43 - 150	8	30
Isopropylbenzene			0.0500	0.0501		mg/Kg		100	64 - 131	6	30
1,1,2,2-Tetrachloroethane			0.0500	0.0419		mg/Kg		84	61 - 138	13	30
1,3-Dichlorobenzene			0.0500	0.0462		mg/Kg		92	63 - 132	5	30
1,4-Dichlorobenzene			0.0500	0.0470		mg/Kg		94	65 - 131	5	30
1,2-Dichlorobenzene			0.0500	0.0469		mg/Kg		94	61 - 131	6	30
1,2-Dibromo-3-Chloropropane			0.0500	0.0412		mg/Kg		82	29 - 150	11	30
1,2,4-Trichlorobenzene			0.0500	0.0456		mg/Kg		91	53 - 136	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*61 - 130*
Dibromofluoromethane	*88*		*68 - 140*
Toluene-d8 (Surr)	*91*		*50 - 130*
4-Bromofluorobenzene	*107*		*57 - 140*

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: MB 600-300771/7
Matrix: Solid
Analysis Batch: 300771

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0050		mg/Kg			08/10/20 15:30	1
Chloromethane	ND		0.010		mg/Kg			08/10/20 15:30	1
Vinyl chloride	ND		0.010		mg/Kg			08/10/20 15:30	1
Bromomethane	ND		0.010		mg/Kg			08/10/20 15:30	1
Chloroethane	ND		0.010		mg/Kg			08/10/20 15:30	1
Trichlorofluoromethane	ND		0.010		mg/Kg			08/10/20 15:30	1
1,1-Dichloroethene	ND		0.0050		mg/Kg			08/10/20 15:30	1
trans-1,2-Dichloroethene	ND		0.0050		mg/Kg			08/10/20 15:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0050		mg/Kg			08/10/20 15:30	1
Methyl tert-butyl ether	ND		0.0050		mg/Kg			08/10/20 15:30	1
Acetone	ND		0.010		mg/Kg			08/10/20 15:30	1
Carbon disulfide	ND		0.010		mg/Kg			08/10/20 15:30	1
Methyl acetate	ND		0.0050		mg/Kg			08/10/20 15:30	1
Methylene Chloride	ND		0.010		mg/Kg			08/10/20 15:30	1
Vinyl acetate	ND		0.010		mg/Kg			08/10/20 15:30	1
cis-1,2-Dichloroethene	ND		0.0050		mg/Kg			08/10/20 15:30	1
1,2-Dichloroethene, Total	ND		0.010		mg/Kg			08/10/20 15:30	1
2-Butanone (MEK)	ND		0.010		mg/Kg			08/10/20 15:30	1
Chlorobromomethane	ND		0.0050		mg/Kg			08/10/20 15:30	1
Cyclohexane	ND		0.0050		mg/Kg			08/10/20 15:30	1
Carbon tetrachloride	ND		0.0050		mg/Kg			08/10/20 15:30	1
Benzene	ND		0.0050		mg/Kg			08/10/20 15:30	1
1,2-Dichloroethane	ND		0.0050		mg/Kg			08/10/20 15:30	1
Trichloroethene	ND		0.0050		mg/Kg			08/10/20 15:30	1
1,1,1-Trichloroethane	ND		0.0050		mg/Kg			08/10/20 15:30	1
1,1-Dichloroethane	ND		0.0050		mg/Kg			08/10/20 15:30	1
1,2-Dichloropropane	ND		0.0050		mg/Kg			08/10/20 15:30	1
Chloroform	ND		0.010		mg/Kg			08/10/20 15:30	1
Bromodichloromethane	ND		0.0050		mg/Kg			08/10/20 15:30	1
Methylcyclohexane	ND		0.0050		mg/Kg			08/10/20 15:30	1
cis-1,3-Dichloropropene	ND		0.0050		mg/Kg			08/10/20 15:30	1
4-Methyl-2-pentanone (MIBK)	ND		0.010		mg/Kg			08/10/20 15:30	1
Toluene	ND		0.0050		mg/Kg			08/10/20 15:30	1
trans-1,3-Dichloropropene	ND		0.0050		mg/Kg			08/10/20 15:30	1
1,1,2-Trichloroethane	ND		0.0050		mg/Kg			08/10/20 15:30	1
Tetrachloroethene	ND		0.0050		mg/Kg			08/10/20 15:30	1
2-Hexanone	ND		0.010		mg/Kg			08/10/20 15:30	1
Dibromochloromethane	ND		0.0050		mg/Kg			08/10/20 15:30	1
1,2-Dibromoethane	ND		0.0050		mg/Kg			08/10/20 15:30	1
Chlorobenzene	ND		0.0050		mg/Kg			08/10/20 15:30	1
Ethylbenzene	ND		0.0050		mg/Kg			08/10/20 15:30	1
m-Xylene & p-Xylene	ND		0.0050		mg/Kg			08/10/20 15:30	1
Xylenes, Total	ND		0.0050		mg/Kg			08/10/20 15:30	1
o-Xylene	ND		0.0050		mg/Kg			08/10/20 15:30	1
Styrene	ND		0.0050		mg/Kg			08/10/20 15:30	1
Bromoform	ND		0.0050		mg/Kg			08/10/20 15:30	1
Isopropylbenzene	ND		0.0050		mg/Kg			08/10/20 15:30	1
1,1,2,2-Tetrachloroethane	ND		0.0050		mg/Kg			08/10/20 15:30	1

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: MB 600-300771/7 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300771

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		0.0050		mg/Kg			08/10/20 15:30	1
1,4-Dichlorobenzene	ND		0.0050		mg/Kg			08/10/20 15:30	1
1,2-Dichlorobenzene	ND		0.0050		mg/Kg			08/10/20 15:30	1
1,2-Dibromo-3-Chloropropane	ND		0.0050		mg/Kg			08/10/20 15:30	1
1,2,4-Trichlorobenzene	ND		0.0050		mg/Kg			08/10/20 15:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*61 - 130*		*08/10/20 15:30*	*1*
Dibromofluoromethane	*87*		*68 - 140*		*08/10/20 15:30*	*1*
Toluene-d8 (Surr)	*97*		*50 - 130*		*08/10/20 15:30*	*1*
4-Bromofluorobenzene	*87*		*57 - 140*		*08/10/20 15:30*	*1*

Lab Sample ID: LCS 600-300771/4 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300771

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	0.0500	0.0361		mg/Kg		72	24 - 147
Chloromethane	0.0500	0.0556		mg/Kg		111	44 - 141
Vinyl chloride	0.0500	0.0474		mg/Kg		95	40 - 148
Bromomethane	0.0500	0.0488		mg/Kg		98	37 - 147
Chloroethane	0.0500	0.0448		mg/Kg		90	40 - 150
Trichlorofluoromethane	0.0500	0.0400		mg/Kg		80	53 - 134
1,1-Dichloroethene	0.0500	0.0409		mg/Kg		82	62 - 142
trans-1,2-Dichloroethene	0.0500	0.0482		mg/Kg		96	69 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0431		mg/Kg		86	48 - 150
Methyl tert-butyl ether	0.0500	0.0534		mg/Kg		107	63 - 132
Acetone	0.100	0.150		mg/Kg		150	13 - 150
Carbon disulfide	0.0500	0.0400		mg/Kg		80	51 - 141
Methyl acetate	0.100	0.129		mg/Kg		129	10 - 150
Methylene Chloride	0.0500	0.0674		mg/Kg		135	61 - 150
Vinyl acetate	0.100	0.147		mg/Kg		147	40 - 150
cis-1,2-Dichloroethene	0.0500	0.0520		mg/Kg		104	70 - 130
1,2-Dichloroethene, Total	0.100	0.100		mg/Kg		100	70 - 130
2-Butanone (MEK)	0.100	0.110		mg/Kg		110	33 - 150
Chlorobromomethane	0.0500	0.0559		mg/Kg		112	70 - 132
Cyclohexane	0.0500	0.0441		mg/Kg		88	54 - 130
Carbon tetrachloride	0.0500	0.0454		mg/Kg		91	58 - 130
Benzene	0.0500	0.0522		mg/Kg		104	70 - 131
1,2-Dichloroethane	0.0500	0.0562		mg/Kg		112	58 - 137
Trichloroethene	0.0500	0.0500		mg/Kg		100	63 - 135
1,1,1-Trichloroethane	0.0500	0.0467		mg/Kg		93	59 - 130
1,1-Dichloroethane	0.0500	0.0513		mg/Kg		103	63 - 140
1,2-Dichloropropane	0.0500	0.0551		mg/Kg		110	70 - 130
Chloroform	0.0500	0.0511		mg/Kg		102	69 - 130
Bromodichloromethane	0.0500	0.0565		mg/Kg		113	67 - 138
Methylcyclohexane	0.0500	0.0448		mg/Kg		90	51 - 137
cis-1,3-Dichloropropene	0.0500	0.0591		mg/Kg		118	65 - 130

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: LCS 600-300771/4 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300771

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Methyl-2-pentanone (MIBK)	0.100	0.120		mg/Kg		120	21 - 150
Toluene	0.0500	0.0529		mg/Kg		106	67 - 130
trans-1,3-Dichloropropene	0.0500	0.0596		mg/Kg		119	70 - 130
1,1,2-Trichloroethane	0.0500	0.0591		mg/Kg		118	67 - 134
Tetrachloroethene	0.0500	0.0494		mg/Kg		99	43 - 143
2-Hexanone	0.100	0.130		mg/Kg		130	35 - 150
Dibromochloromethane	0.0500	0.0589		mg/Kg		118	65 - 134
1,2-Dibromoethane	0.0500	0.0619		mg/Kg		124	65 - 136
Chlorobenzene	0.0500	0.0541		mg/Kg		108	63 - 131
Ethylbenzene	0.0500	0.0510		mg/Kg		102	66 - 130
m-Xylene & p-Xylene	0.0500	0.0522		mg/Kg		104	64 - 130
Xylenes, Total	0.100	0.106		mg/Kg		106	63 - 130
o-Xylene	0.0500	0.0534		mg/Kg		107	62 - 130
Styrene	0.0500	0.0582		mg/Kg		116	65 - 133
Bromoform	0.0500	0.0506		mg/Kg		101	43 - 150
Isopropylbenzene	0.0500	0.0451		mg/Kg		90	64 - 131
1,1,2,2-Tetrachloroethane	0.0500	0.0617		mg/Kg		123	61 - 138
1,3-Dichlorobenzene	0.0500	0.0523		mg/Kg		105	63 - 132
1,4-Dichlorobenzene	0.0500	0.0506		mg/Kg		101	65 - 131
1,2-Dichlorobenzene	0.0500	0.0531		mg/Kg		106	61 - 131
1,2-Dibromo-3-Chloropropane	0.0500	0.0585		mg/Kg		117	29 - 150
1,2,4-Trichlorobenzene	0.0500	0.0556		mg/Kg		111	53 - 136

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*61 - 130*
Dibromofluoromethane	*91*		*68 - 140*
Toluene-d8 (Surr)	*91*		*50 - 130*
4-Bromofluorobenzene	*88*		*57 - 140*

Lab Sample ID: LCSD 600-300771/5 **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300771

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dichlorodifluoromethane	0.0500	0.0478		mg/Kg		96	24 - 147	28	30
Chloromethane	0.0500	0.0597		mg/Kg		119	44 - 141	7	30
Vinyl chloride	0.0500	0.0522		mg/Kg		104	40 - 148	10	30
Bromomethane	0.0500	0.0524		mg/Kg		105	37 - 147	7	30
Chloroethane	0.0500	0.0475		mg/Kg		95	40 - 150	6	30
Trichlorofluoromethane	0.0500	0.0427		mg/Kg		85	53 - 134	6	30
1,1-Dichloroethene	0.0500	0.0346		mg/Kg		69	62 - 142	17	30
trans-1,2-Dichloroethene	0.0500	0.0394		mg/Kg		79	69 - 130	20	30
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0386		mg/Kg		77	48 - 150	11	30
Methyl tert-butyl ether	0.0500	0.0412		mg/Kg		82	63 - 132	26	30
Acetone	0.100	0.102	*1	mg/Kg		102	13 - 150	38	30
Carbon disulfide	0.0500	0.0341		mg/Kg		68	51 - 141	16	30
Methyl acetate	0.100	0.0877	*1	mg/Kg		88	10 - 150	38	30
Methylene Chloride	0.0500	0.0514		mg/Kg		103	61 - 150	27	30

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: LCSD 600-300771/5 **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300771

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vinyl acetate			0.100	0.106	*1	mg/Kg		106	40 - 150	32	30
cis-1,2-Dichloroethene			0.0500	0.0418		mg/Kg		84	70 - 130	22	30
1,2-Dichloroethene, Total			0.100	0.0812		mg/Kg		81	70 - 130	21	30
2-Butanone (MEK)			0.100	0.0858		mg/Kg		86	33 - 150	25	30
Chlorobromomethane			0.0500	0.0430		mg/Kg		86	70 - 132	26	30
Cyclohexane			0.0500	0.0375		mg/Kg		75	54 - 130	16	30
Carbon tetrachloride			0.0500	0.0398		mg/Kg		80	58 - 130	13	30
Benzene			0.0500	0.0441		mg/Kg		88	70 - 131	17	30
1,2-Dichloroethane			0.0500	0.0444		mg/Kg		89	58 - 137	23	30
Trichloroethene			0.0500	0.0429		mg/Kg		86	63 - 135	15	30
1,1,1-Trichloroethane			0.0500	0.0404		mg/Kg		81	59 - 130	14	30
1,1-Dichloroethane			0.0500	0.0425		mg/Kg		85	63 - 140	19	30
1,2-Dichloropropane			0.0500	0.0470		mg/Kg		94	70 - 130	16	30
Chloroform			0.0500	0.0421		mg/Kg		84	69 - 130	19	30
Bromodichloromethane			0.0500	0.0455		mg/Kg		91	67 - 138	22	30
Methylcyclohexane			0.0500	0.0396		mg/Kg		79	51 - 137	12	30
cis-1,3-Dichloropropene			0.0500	0.0464		mg/Kg		93	65 - 130	24	30
4-Methyl-2-pentanone (MIBK)			0.100	0.0842	*1	mg/Kg		84	21 - 150	35	30
Toluene			0.0500	0.0449		mg/Kg		90	67 - 130	16	30
trans-1,3-Dichloropropene			0.0500	0.0471		mg/Kg		94	70 - 130	24	30
1,1,2-Trichloroethane			0.0500	0.0445		mg/Kg		89	67 - 134	28	30
Tetrachloroethene			0.0500	0.0413		mg/Kg		83	43 - 143	18	30
2-Hexanone			0.100	0.0922	*1	mg/Kg		92	35 - 150	34	30
Dibromochloromethane			0.0500	0.0449		mg/Kg		90	65 - 134	27	30
1,2-Dibromoethane			0.0500	0.0459		mg/Kg		92	65 - 136	30	30
Chlorobenzene			0.0500	0.0444		mg/Kg		89	63 - 131	20	30
Ethylbenzene			0.0500	0.0440		mg/Kg		88	66 - 130	15	30
m-Xylene & p-Xylene			0.0500	0.0441		mg/Kg		88	64 - 130	17	30
Xylenes, Total			0.100	0.0885		mg/Kg		89	63 - 130	18	30
o-Xylene			0.0500	0.0444		mg/Kg		89	62 - 130	18	30
Styrene			0.0500	0.0486		mg/Kg		97	65 - 133	18	30
Bromoform			0.0500	0.0416		mg/Kg		83	43 - 150	20	30
Isopropylbenzene			0.0500	0.0400		mg/Kg		80	64 - 131	12	30
1,1,2,2-Tetrachloroethane			0.0500	0.0436	*1	mg/Kg		87	61 - 138	34	30
1,3-Dichlorobenzene			0.0500	0.0452		mg/Kg		90	63 - 132	15	30
1,4-Dichlorobenzene			0.0500	0.0434		mg/Kg		87	65 - 131	15	30
1,2-Dichlorobenzene			0.0500	0.0456		mg/Kg		91	61 - 131	15	30
1,2-Dibromo-3-Chloropropane			0.0500	0.0439		mg/Kg		88	29 - 150	28	30
1,2,4-Trichlorobenzene			0.0500	0.0476		mg/Kg		95	53 - 136	16	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*85*		*61 - 130*
Dibromofluoromethane	*79*		*68 - 140*
Toluene-d8 (Surr)	*85*		*50 - 130*
4-Bromofluorobenzene	*85*		*57 - 140*

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: MB 600-300850/6 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300850

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0050		mg/Kg			08/11/20 10:50	1
Chloromethane	ND		0.010		mg/Kg			08/11/20 10:50	1
Vinyl chloride	ND		0.010		mg/Kg			08/11/20 10:50	1
Bromomethane	ND		0.010		mg/Kg			08/11/20 10:50	1
Chloroethane	ND		0.010		mg/Kg			08/11/20 10:50	1
Trichlorofluoromethane	ND		0.010		mg/Kg			08/11/20 10:50	1
1,1-Dichloroethene	ND		0.0050		mg/Kg			08/11/20 10:50	1
trans-1,2-Dichloroethene	ND		0.0050		mg/Kg			08/11/20 10:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0050		mg/Kg			08/11/20 10:50	1
Methyl tert-butyl ether	ND		0.0050		mg/Kg			08/11/20 10:50	1
Acetone	ND		0.010		mg/Kg			08/11/20 10:50	1
Carbon disulfide	ND		0.010		mg/Kg			08/11/20 10:50	1
Methyl acetate	ND		0.0050		mg/Kg			08/11/20 10:50	1
Methylene Chloride	ND		0.010		mg/Kg			08/11/20 10:50	1
Vinyl acetate	ND		0.010		mg/Kg			08/11/20 10:50	1
cis-1,2-Dichloroethene	ND		0.0050		mg/Kg			08/11/20 10:50	1
1,2-Dichloroethene, Total	ND		0.010		mg/Kg			08/11/20 10:50	1
2-Butanone (MEK)	ND		0.010		mg/Kg			08/11/20 10:50	1
Chlorobromomethane	ND		0.0050		mg/Kg			08/11/20 10:50	1
Cyclohexane	ND		0.0050		mg/Kg			08/11/20 10:50	1
Carbon tetrachloride	ND		0.0050		mg/Kg			08/11/20 10:50	1
Benzene	ND		0.0050		mg/Kg			08/11/20 10:50	1
1,2-Dichloroethane	ND		0.0050		mg/Kg			08/11/20 10:50	1
Trichloroethene	ND		0.0050		mg/Kg			08/11/20 10:50	1
1,1,1-Trichloroethane	ND		0.0050		mg/Kg			08/11/20 10:50	1
1,1-Dichloroethane	ND		0.0050		mg/Kg			08/11/20 10:50	1
1,2-Dichloropropane	ND		0.0050		mg/Kg			08/11/20 10:50	1
Chloroform	ND		0.010		mg/Kg			08/11/20 10:50	1
Bromodichloromethane	ND		0.0050		mg/Kg			08/11/20 10:50	1
Methylcyclohexane	ND		0.0050		mg/Kg			08/11/20 10:50	1
cis-1,3-Dichloropropene	ND		0.0050		mg/Kg			08/11/20 10:50	1
4-Methyl-2-pentanone (MIBK)	ND		0.010		mg/Kg			08/11/20 10:50	1
Toluene	ND		0.0050		mg/Kg			08/11/20 10:50	1
trans-1,3-Dichloropropene	ND		0.0050		mg/Kg			08/11/20 10:50	1
1,1,2-Trichloroethane	ND		0.0050		mg/Kg			08/11/20 10:50	1
Tetrachloroethene	ND		0.0050		mg/Kg			08/11/20 10:50	1
2-Hexanone	ND		0.010		mg/Kg			08/11/20 10:50	1
Dibromochloromethane	ND		0.0050		mg/Kg			08/11/20 10:50	1
1,2-Dibromoethane	ND		0.0050		mg/Kg			08/11/20 10:50	1
Chlorobenzene	ND		0.0050		mg/Kg			08/11/20 10:50	1
Ethylbenzene	ND		0.0050		mg/Kg			08/11/20 10:50	1
m-Xylene & p-Xylene	ND		0.0050		mg/Kg			08/11/20 10:50	1
Xylenes, Total	ND		0.0050		mg/Kg			08/11/20 10:50	1
o-Xylene	ND		0.0050		mg/Kg			08/11/20 10:50	1
Styrene	ND		0.0050		mg/Kg			08/11/20 10:50	1
Bromoform	ND		0.0050		mg/Kg			08/11/20 10:50	1
Isopropylbenzene	ND		0.0050		mg/Kg			08/11/20 10:50	1
1,1,2,2-Tetrachloroethane	ND		0.0050		mg/Kg			08/11/20 10:50	1

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: MB 600-300850/6 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300850

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		0.0050		mg/Kg			08/11/20 10:50	1
1,4-Dichlorobenzene	ND		0.0050		mg/Kg			08/11/20 10:50	1
1,2-Dichlorobenzene	ND		0.0050		mg/Kg			08/11/20 10:50	1
1,2-Dibromo-3-Chloropropane	ND		0.0050		mg/Kg			08/11/20 10:50	1
1,2,4-Trichlorobenzene	ND		0.0050		mg/Kg			08/11/20 10:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*61 - 130*		*08/11/20 10:50*	*1*
Dibromofluoromethane	*92*		*68 - 140*		*08/11/20 10:50*	*1*
Toluene-d8 (Surr)	*97*		*50 - 130*		*08/11/20 10:50*	*1*
4-Bromofluorobenzene	*105*		*57 - 140*		*08/11/20 10:50*	*1*

Lab Sample ID: LCS 600-300850/3 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300850

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	0.0500	0.0585		mg/Kg		117	24 - 147
Chloromethane	0.0500	0.0561		mg/Kg		112	44 - 141
Vinyl chloride	0.0500	0.0528		mg/Kg		106	40 - 148
Bromomethane	0.0500	0.0468		mg/Kg		94	37 - 147
Chloroethane	0.0500	0.0482		mg/Kg		96	40 - 150
Trichlorofluoromethane	0.0500	0.0563		mg/Kg		113	53 - 134
1,1-Dichloroethene	0.0500	0.0370		mg/Kg		74	62 - 142
trans-1,2-Dichloroethene	0.0500	0.0383		mg/Kg		77	69 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0372		mg/Kg		74	48 - 150
Methyl tert-butyl ether	0.0500	0.0462		mg/Kg		92	63 - 132
Acetone	0.100	0.0943		mg/Kg		94	13 - 150
Carbon disulfide	0.0500	0.0329		mg/Kg		66	51 - 141
Methyl acetate	0.100	0.0989		mg/Kg		99	10 - 150
Methylene Chloride	0.0500	0.0400		mg/Kg		80	61 - 150
Vinyl acetate	0.100	0.108		mg/Kg		108	40 - 150
cis-1,2-Dichloroethene	0.0500	0.0401		mg/Kg		80	70 - 130
1,2-Dichloroethene, Total	0.100	0.0784		mg/Kg		78	70 - 130
2-Butanone (MEK)	0.100	0.0873		mg/Kg		87	33 - 150
Chlorobromomethane	0.0500	0.0402		mg/Kg		80	70 - 132
Cyclohexane	0.0500	0.0384		mg/Kg		77	54 - 130
Carbon tetrachloride	0.0500	0.0440		mg/Kg		88	58 - 130
Benzene	0.0500	0.0409		mg/Kg		82	70 - 131
1,2-Dichloroethane	0.0500	0.0485		mg/Kg		97	58 - 137
Trichloroethene	0.0500	0.0376		mg/Kg		75	63 - 135
1,1,1-Trichloroethane	0.0500	0.0439		mg/Kg		88	59 - 130
1,1-Dichloroethane	0.0500	0.0435		mg/Kg		87	63 - 140
1,2-Dichloropropane	0.0500	0.0415		mg/Kg		83	70 - 130
Chloroform	0.0500	0.0430		mg/Kg		86	69 - 130
Bromodichloromethane	0.0500	0.0441		mg/Kg		88	67 - 138
Methylcyclohexane	0.0500	0.0374		mg/Kg		75	51 - 137
cis-1,3-Dichloropropene	0.0500	0.0447		mg/Kg		89	65 - 130

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: LCS 600-300850/3 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300850

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
4-Methyl-2-pentanone (MIBK)			0.100	0.0957		mg/Kg		96	21 - 150		
Toluene			0.0500	0.0431		mg/Kg		86	67 - 130		
trans-1,3-Dichloropropene			0.0500	0.0464		mg/Kg		93	70 - 130		
1,1,2-Trichloroethane			0.0500	0.0439		mg/Kg		88	67 - 134		
Tetrachloroethene			0.0500	0.0409		mg/Kg		82	43 - 143		
2-Hexanone			0.100	0.0993		mg/Kg		99	35 - 150		
Dibromochloromethane			0.0500	0.0451		mg/Kg		90	65 - 134		
1,2-Dibromoethane			0.0500	0.0430		mg/Kg		86	65 - 136		
Chlorobenzene			0.0500	0.0420		mg/Kg		84	63 - 131		
Ethylbenzene			0.0500	0.0411		mg/Kg		82	66 - 130		
m-Xylene & p-Xylene			0.0500	0.0419		mg/Kg		84	64 - 130		
Xylenes, Total			0.100	0.0826		mg/Kg		83	63 - 130		
o-Xylene			0.0500	0.0407		mg/Kg		81	62 - 130		
Styrene			0.0500	0.0411		mg/Kg		82	65 - 133		
Bromoform			0.0500	0.0479		mg/Kg		96	43 - 150		
Isopropylbenzene			0.0500	0.0472		mg/Kg		94	64 - 131		
1,1,2,2-Tetrachloroethane			0.0500	0.0485		mg/Kg		97	61 - 138		
1,3-Dichlorobenzene			0.0500	0.0452		mg/Kg		90	63 - 132		
1,4-Dichlorobenzene			0.0500	0.0447		mg/Kg		89	65 - 131		
1,2-Dichlorobenzene			0.0500	0.0458		mg/Kg		92	61 - 131		
1,2-Dibromo-3-Chloropropane			0.0500	0.0461		mg/Kg		92	29 - 150		
1,2,4-Trichlorobenzene			0.0500	0.0408		mg/Kg		82	53 - 136		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*85*		*61 - 130*
Dibromofluoromethane	*87*		*68 - 140*
Toluene-d8 (Surr)	*94*		*50 - 130*
4-Bromofluorobenzene	*111*		*57 - 140*

Lab Sample ID: LCSD 600-300850/4 **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300850

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dichlorodifluoromethane			0.0500	0.0614		mg/Kg		123	24 - 147	5	30
Chloromethane			0.0500	0.0610		mg/Kg		122	44 - 141	8	30
Vinyl chloride			0.0500	0.0544		mg/Kg		109	40 - 148	3	30
Bromomethane			0.0500	0.0518		mg/Kg		104	37 - 147	10	30
Chloroethane			0.0500	0.0510		mg/Kg		102	40 - 150	6	30
Trichlorofluoromethane			0.0500	0.0576		mg/Kg		115	53 - 134	2	30
1,1-Dichloroethene			0.0500	0.0353		mg/Kg		71	62 - 142	5	30
trans-1,2-Dichloroethene			0.0500	0.0360		mg/Kg		72	69 - 130	6	30
1,1,2-Trichloro-1,2,2-trifluoroethane			0.0500	0.0342		mg/Kg		68	48 - 150	9	30
Methyl tert-butyl ether			0.0500	0.0452		mg/Kg		90	63 - 132	2	30
Acetone			0.100	0.0948		mg/Kg		95	13 - 150	1	30
Carbon disulfide			0.0500	0.0310		mg/Kg		62	51 - 141	6	30
Methyl acetate			0.100	0.103		mg/Kg		103	10 - 150	5	30
Methylene Chloride			0.0500	0.0393		mg/Kg		79	61 - 150	2	30

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: LCSD 600-300850/4 **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300850

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vinyl acetate			0.100	0.110		mg/Kg		110	40 - 150	2	30
cis-1,2-Dichloroethene			0.0500	0.0386		mg/Kg		77	70 - 130	4	30
1,2-Dichloroethene, Total			0.100	0.0746		mg/Kg		75	70 - 130	5	30
2-Butanone (MEK)			0.100	0.0914		mg/Kg		91	33 - 150	5	30
Chlorobromomethane			0.0500	0.0393		mg/Kg		79	70 - 132	2	30
Cyclohexane			0.0500	0.0351		mg/Kg		70	54 - 130	9	30
Carbon tetrachloride			0.0500	0.0406		mg/Kg		81	58 - 130	8	30
Benzene			0.0500	0.0387		mg/Kg		77	70 - 131	5	30
1,2-Dichloroethane			0.0500	0.0474		mg/Kg		95	58 - 137	2	30
Trichloroethene			0.0500	0.0357		mg/Kg		71	63 - 135	5	30
1,1,1-Trichloroethane			0.0500	0.0424		mg/Kg		85	59 - 130	3	30
1,1-Dichloroethane			0.0500	0.0409		mg/Kg		82	63 - 140	6	30
1,2-Dichloropropane			0.0500	0.0415		mg/Kg		83	70 - 130	0	30
Chloroform			0.0500	0.0416		mg/Kg		83	69 - 130	3	30
Bromodichloromethane			0.0500	0.0440		mg/Kg		88	67 - 138	0	30
Methylcyclohexane			0.0500	0.0345		mg/Kg		69	51 - 137	8	30
cis-1,3-Dichloropropene			0.0500	0.0426		mg/Kg		85	65 - 130	5	30
4-Methyl-2-pentanone (MIBK)			0.100	0.103		mg/Kg		103	21 - 150	7	30
Toluene			0.0500	0.0399		mg/Kg		80	67 - 130	8	30
trans-1,3-Dichloropropene			0.0500	0.0460		mg/Kg		92	70 - 130	1	30
1,1,2-Trichloroethane			0.0500	0.0424		mg/Kg		85	67 - 134	3	30
Tetrachloroethene			0.0500	0.0374		mg/Kg		75	43 - 143	9	30
2-Hexanone			0.100	0.105		mg/Kg		105	35 - 150	5	30
Dibromochloromethane			0.0500	0.0439		mg/Kg		88	65 - 134	3	30
1,2-Dibromoethane			0.0500	0.0432		mg/Kg		86	65 - 136	0	30
Chlorobenzene			0.0500	0.0407		mg/Kg		81	63 - 131	3	30
Ethylbenzene			0.0500	0.0375		mg/Kg		75	66 - 130	9	30
m-Xylene & p-Xylene			0.0500	0.0395		mg/Kg		79	64 - 130	6	30
Xylenes, Total			0.100	0.0771		mg/Kg		77	63 - 130	7	30
o-Xylene			0.0500	0.0376		mg/Kg		75	62 - 130	8	30
Styrene			0.0500	0.0392		mg/Kg		78	65 - 133	5	30
Bromoform			0.0500	0.0477		mg/Kg		95	43 - 150	0	30
Isopropylbenzene			0.0500	0.0433		mg/Kg		87	64 - 131	9	30
1,1,2,2-Tetrachloroethane			0.0500	0.0474		mg/Kg		95	61 - 138	2	30
1,3-Dichlorobenzene			0.0500	0.0433		mg/Kg		87	63 - 132	4	30
1,4-Dichlorobenzene			0.0500	0.0428		mg/Kg		86	65 - 131	4	30
1,2-Dichlorobenzene			0.0500	0.0438		mg/Kg		88	61 - 131	5	30
1,2-Dibromo-3-Chloropropane			0.0500	0.0523		mg/Kg		105	29 - 150	13	30
1,2,4-Trichlorobenzene			0.0500	0.0433		mg/Kg		87	53 - 136	6	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*86*		*61 - 130*
Dibromofluoromethane	*88*		*68 - 140*
Toluene-d8 (Surr)	*93*		*50 - 130*
4-Bromofluorobenzene	*106*		*57 - 140*

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: MB 600-300952/6 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300952

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0050		mg/Kg			08/12/20 08:50	1
Chloromethane	ND		0.010		mg/Kg			08/12/20 08:50	1
Vinyl chloride	ND		0.010		mg/Kg			08/12/20 08:50	1
Bromomethane	ND		0.010		mg/Kg			08/12/20 08:50	1
Chloroethane	ND		0.010		mg/Kg			08/12/20 08:50	1
Trichlorofluoromethane	ND		0.010		mg/Kg			08/12/20 08:50	1
1,1-Dichloroethene	ND		0.0050		mg/Kg			08/12/20 08:50	1
trans-1,2-Dichloroethene	ND		0.0050		mg/Kg			08/12/20 08:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0050		mg/Kg			08/12/20 08:50	1
Methyl tert-butyl ether	ND		0.0050		mg/Kg			08/12/20 08:50	1
Acetone	ND		0.010		mg/Kg			08/12/20 08:50	1
Carbon disulfide	ND		0.010		mg/Kg			08/12/20 08:50	1
Methyl acetate	ND		0.0050		mg/Kg			08/12/20 08:50	1
Methylene Chloride	ND		0.010		mg/Kg			08/12/20 08:50	1
Vinyl acetate	ND		0.010		mg/Kg			08/12/20 08:50	1
cis-1,2-Dichloroethene	ND		0.0050		mg/Kg			08/12/20 08:50	1
1,2-Dichloroethene, Total	ND		0.010		mg/Kg			08/12/20 08:50	1
2-Butanone (MEK)	ND		0.010		mg/Kg			08/12/20 08:50	1
Chlorobromomethane	ND		0.0050		mg/Kg			08/12/20 08:50	1
Cyclohexane	ND		0.0050		mg/Kg			08/12/20 08:50	1
Carbon tetrachloride	ND		0.0050		mg/Kg			08/12/20 08:50	1
Benzene	ND		0.0050		mg/Kg			08/12/20 08:50	1
1,2-Dichloroethane	ND		0.0050		mg/Kg			08/12/20 08:50	1
Trichloroethene	ND		0.0050		mg/Kg			08/12/20 08:50	1
1,1,1-Trichloroethane	ND		0.0050		mg/Kg			08/12/20 08:50	1
1,1-Dichloroethane	ND		0.0050		mg/Kg			08/12/20 08:50	1
1,2-Dichloropropane	ND		0.0050		mg/Kg			08/12/20 08:50	1
Chloroform	ND		0.010		mg/Kg			08/12/20 08:50	1
Bromodichloromethane	ND		0.0050		mg/Kg			08/12/20 08:50	1
Methylcyclohexane	ND		0.0050		mg/Kg			08/12/20 08:50	1
cis-1,3-Dichloropropene	ND		0.0050		mg/Kg			08/12/20 08:50	1
4-Methyl-2-pentanone (MIBK)	ND		0.010		mg/Kg			08/12/20 08:50	1
Toluene	ND		0.0050		mg/Kg			08/12/20 08:50	1
trans-1,3-Dichloropropene	ND		0.0050		mg/Kg			08/12/20 08:50	1
1,1,2-Trichloroethane	ND		0.0050		mg/Kg			08/12/20 08:50	1
Tetrachloroethene	ND		0.0050		mg/Kg			08/12/20 08:50	1
2-Hexanone	ND		0.010		mg/Kg			08/12/20 08:50	1
Dibromochloromethane	ND		0.0050		mg/Kg			08/12/20 08:50	1
1,2-Dibromoethane	ND		0.0050		mg/Kg			08/12/20 08:50	1
Chlorobenzene	ND		0.0050		mg/Kg			08/12/20 08:50	1
Ethylbenzene	ND		0.0050		mg/Kg			08/12/20 08:50	1
m-Xylene & p-Xylene	ND		0.0050		mg/Kg			08/12/20 08:50	1
Xylenes, Total	ND		0.0050		mg/Kg			08/12/20 08:50	1
o-Xylene	ND		0.0050		mg/Kg			08/12/20 08:50	1
Styrene	ND		0.0050		mg/Kg			08/12/20 08:50	1
Bromoform	ND		0.0050		mg/Kg			08/12/20 08:50	1
Isopropylbenzene	ND		0.0050		mg/Kg			08/12/20 08:50	1
1,1,2,2-Tetrachloroethane	ND		0.0050		mg/Kg			08/12/20 08:50	1

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: MB 600-300952/6 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300952

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		0.0050		mg/Kg			08/12/20 08:50	1
1,4-Dichlorobenzene	ND		0.0050		mg/Kg			08/12/20 08:50	1
1,2-Dichlorobenzene	ND		0.0050		mg/Kg			08/12/20 08:50	1
1,2-Dibromo-3-Chloropropane	ND		0.0050		mg/Kg			08/12/20 08:50	1
1,2,4-Trichlorobenzene	ND		0.0050		mg/Kg			08/12/20 08:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*61 - 130*		*08/12/20 08:50*	*1*
Dibromofluoromethane	*88*		*68 - 140*		*08/12/20 08:50*	*1*
Toluene-d8 (Surr)	*99*		*50 - 130*		*08/12/20 08:50*	*1*
4-Bromofluorobenzene	*103*		*57 - 140*		*08/12/20 08:50*	*1*

Lab Sample ID: LCS 600-300952/3 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300952

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	0.0500	0.0620		mg/Kg		124	24 - 147
Chloromethane	0.0500	0.0559		mg/Kg		112	44 - 141
Vinyl chloride	0.0500	0.0575		mg/Kg		115	40 - 148
Bromomethane	0.0500	0.0541		mg/Kg		108	37 - 147
Chloroethane	0.0500	0.0537		mg/Kg		107	40 - 150
Trichlorofluoromethane	0.0500	0.0567		mg/Kg		113	53 - 134
1,1-Dichloroethene	0.0500	0.0504		mg/Kg		101	62 - 142
trans-1,2-Dichloroethene	0.0500	0.0481		mg/Kg		96	69 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0493		mg/Kg		99	48 - 150
Methyl tert-butyl ether	0.0500	0.0501		mg/Kg		100	63 - 132
Acetone	0.100	0.0823		mg/Kg		82	13 - 150
Carbon disulfide	0.0500	0.0427		mg/Kg		85	51 - 141
Methyl acetate	0.100	0.0935		mg/Kg		93	10 - 150
Methylene Chloride	0.0500	0.0503		mg/Kg		101	61 - 150
Vinyl acetate	0.100	0.110		mg/Kg		110	40 - 150
cis-1,2-Dichloroethene	0.0500	0.0492		mg/Kg		98	70 - 130
1,2-Dichloroethene, Total	0.100	0.0973		mg/Kg		97	70 - 130
2-Butanone (MEK)	0.100	0.0972		mg/Kg		97	33 - 150
Chlorobromomethane	0.0500	0.0474		mg/Kg		95	70 - 132
Cyclohexane	0.0500	0.0494		mg/Kg		99	54 - 130
Carbon tetrachloride	0.0500	0.0507		mg/Kg		101	58 - 130
Benzene	0.0500	0.0508		mg/Kg		102	70 - 131
1,2-Dichloroethane	0.0500	0.0514		mg/Kg		103	58 - 137
Trichloroethene	0.0500	0.0476		mg/Kg		95	63 - 135
1,1,1-Trichloroethane	0.0500	0.0533		mg/Kg		107	59 - 130
1,1-Dichloroethane	0.0500	0.0484		mg/Kg		97	63 - 140
1,2-Dichloropropane	0.0500	0.0512		mg/Kg		102	70 - 130
Chloroform	0.0500	0.0511		mg/Kg		102	69 - 130
Bromodichloromethane	0.0500	0.0497		mg/Kg		99	67 - 138
Methylcyclohexane	0.0500	0.0478		mg/Kg		96	51 - 137
cis-1,3-Dichloropropene	0.0500	0.0546		mg/Kg		109	65 - 130

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: LCS 600-300952/3 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300952

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
4-Methyl-2-pentanone (MIBK)			0.100	0.0958		mg/Kg		96	21 - 150		
Toluene			0.0500	0.0539		mg/Kg		108	67 - 130		
trans-1,3-Dichloropropene			0.0500	0.0550		mg/Kg		110	70 - 130		
1,1,2-Trichloroethane			0.0500	0.0520		mg/Kg		104	67 - 134		
Tetrachloroethene			0.0500	0.0535		mg/Kg		107	43 - 143		
2-Hexanone			0.100	0.0984		mg/Kg		98	35 - 150		
Dibromochloromethane			0.0500	0.0533		mg/Kg		107	65 - 134		
1,2-Dibromoethane			0.0500	0.0500		mg/Kg		100	65 - 136		
Chlorobenzene			0.0500	0.0534		mg/Kg		107	63 - 131		
Ethylbenzene			0.0500	0.0527		mg/Kg		105	66 - 130		
m-Xylene & p-Xylene			0.0500	0.0533		mg/Kg		107	64 - 130		
Xylenes, Total			0.100	0.105		mg/Kg		105	63 - 130		
o-Xylene			0.0500	0.0512		mg/Kg		102	62 - 130		
Styrene			0.0500	0.0515		mg/Kg		103	65 - 133		
Bromoform			0.0500	0.0541		mg/Kg		108	43 - 150		
Isopropylbenzene			0.0500	0.0577		mg/Kg		115	64 - 131		
1,1,2,2-Tetrachloroethane			0.0500	0.0540		mg/Kg		108	61 - 138		
1,3-Dichlorobenzene			0.0500	0.0553		mg/Kg		111	63 - 132		
1,4-Dichlorobenzene			0.0500	0.0542		mg/Kg		108	65 - 131		
1,2-Dichlorobenzene			0.0500	0.0547		mg/Kg		109	61 - 131		
1,2-Dibromo-3-Chloropropane			0.0500	0.0527		mg/Kg		105	29 - 150		
1,2,4-Trichlorobenzene			0.0500	0.0542		mg/Kg		108	53 - 136		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*80*		*61 - 130*
Dibromofluoromethane	*86*		*68 - 140*
Toluene-d8 (Surr)	*100*		*50 - 130*
4-Bromofluorobenzene	*109*		*57 - 140*

Lab Sample ID: LCSD 600-300952/4 **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300952

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dichlorodifluoromethane			0.0500	0.0674		mg/Kg		135	24 - 147	8	30
Chloromethane			0.0500	0.0604		mg/Kg		121	44 - 141	8	30
Vinyl chloride			0.0500	0.0622		mg/Kg		124	40 - 148	8	30
Bromomethane			0.0500	0.0567		mg/Kg		113	37 - 147	5	30
Chloroethane			0.0500	0.0566		mg/Kg		113	40 - 150	5	30
Trichlorofluoromethane			0.0500	0.0613		mg/Kg		123	53 - 134	8	30
1,1-Dichloroethene			0.0500	0.0508		mg/Kg		102	62 - 142	1	30
trans-1,2-Dichloroethene			0.0500	0.0504		mg/Kg		101	69 - 130	5	30
1,1,2-Trichloro-1,2,2-trifluoroethane			0.0500	0.0500		mg/Kg		100	48 - 150	1	30
Methyl tert-butyl ether			0.0500	0.0555		mg/Kg		111	63 - 132	10	30
Acetone			0.100	0.102		mg/Kg		102	13 - 150	22	30
Carbon disulfide			0.0500	0.0457		mg/Kg		91	51 - 141	7	30
Methyl acetate			0.100	0.114		mg/Kg		114	10 - 150	20	30
Methylene Chloride			0.0500	0.0520		mg/Kg		104	61 - 150	3	30

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: LCSD 600-300952/4 **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300952

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vinyl acetate	0.100	0.126		mg/Kg		126	40 - 150	14	30
cis-1,2-Dichloroethene	0.0500	0.0519		mg/Kg		104	70 - 130	5	30
1,2-Dichloroethene, Total	0.100	0.102		mg/Kg		102	70 - 130	5	30
2-Butanone (MEK)	0.100	0.112		mg/Kg		112	33 - 150	15	30
Chlorobromomethane	0.0500	0.0515		mg/Kg		103	70 - 132	8	30
Cyclohexane	0.0500	0.0504		mg/Kg		101	54 - 130	2	30
Carbon tetrachloride	0.0500	0.0536		mg/Kg		107	58 - 130	6	30
Benzene	0.0500	0.0541		mg/Kg		108	70 - 131	6	30
1,2-Dichloroethane	0.0500	0.0571		mg/Kg		114	58 - 137	11	30
Trichloroethene	0.0500	0.0502		mg/Kg		100	63 - 135	5	30
1,1,1-Trichloroethane	0.0500	0.0566		mg/Kg		113	59 - 130	6	30
1,1-Dichloroethane	0.0500	0.0554		mg/Kg		111	63 - 140	13	30
1,2-Dichloropropane	0.0500	0.0559		mg/Kg		112	70 - 130	9	30
Chloroform	0.0500	0.0538		mg/Kg		108	69 - 130	5	30
Bromodichloromethane	0.0500	0.0534		mg/Kg		107	67 - 138	7	30
Methylcyclohexane	0.0500	0.0496		mg/Kg		99	51 - 137	4	30
cis-1,3-Dichloropropene	0.0500	0.0577		mg/Kg		115	65 - 130	5	30
4-Methyl-2-pentanone (MIBK)	0.100	0.115		mg/Kg		115	21 - 150	18	30
Toluene	0.0500	0.0565		mg/Kg		113	67 - 130	5	30
trans-1,3-Dichloropropene	0.0500	0.0586		mg/Kg		117	70 - 130	6	30
1,1,2-Trichloroethane	0.0500	0.0573		mg/Kg		115	67 - 134	10	30
Tetrachloroethene	0.0500	0.0541		mg/Kg		108	43 - 143	1	30
2-Hexanone	0.100	0.119		mg/Kg		119	35 - 150	19	30
Dibromochloromethane	0.0500	0.0580		mg/Kg		116	65 - 134	8	30
1,2-Dibromoethane	0.0500	0.0559		mg/Kg		112	65 - 136	11	30
Chlorobenzene	0.0500	0.0561		mg/Kg		112	63 - 131	5	30
Ethylbenzene	0.0500	0.0531		mg/Kg		106	66 - 130	1	30
m-Xylene & p-Xylene	0.0500	0.0547		mg/Kg		109	64 - 130	3	30
Xylenes, Total	0.100	0.107		mg/Kg		107	63 - 130	3	30
o-Xylene	0.0500	0.0527		mg/Kg		105	62 - 130	3	30
Styrene	0.0500	0.0535		mg/Kg		107	65 - 133	4	30
Bromoform	0.0500	0.0607		mg/Kg		121	43 - 150	11	30
Isopropylbenzene	0.0500	0.0583		mg/Kg		117	64 - 131	1	30
1,1,2,2-Tetrachloroethane	0.0500	0.0608		mg/Kg		122	61 - 138	12	30
1,3-Dichlorobenzene	0.0500	0.0563		mg/Kg		113	63 - 132	2	30
1,4-Dichlorobenzene	0.0500	0.0558		mg/Kg		112	65 - 131	3	30
1,2-Dichlorobenzene	0.0500	0.0570		mg/Kg		114	61 - 131	4	30
1,2-Dibromo-3-Chloropropane	0.0500	0.0629		mg/Kg		126	29 - 150	18	30
1,2,4-Trichlorobenzene	0.0500	0.0547		mg/Kg		109	53 - 136	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*77*		*61 - 130*
Dibromofluoromethane	*83*		*68 - 140*
Toluene-d8 (Surr)	*95*		*50 - 130*
4-Bromofluorobenzene	*106*		*57 - 140*

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 600-300708/3-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 300709 — **Prep Batch: 300708**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.0		mg/Kg		08/08/20 07:14	08/08/20 09:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*95*		*70 - 130*	*08/08/20 07:14*	*08/08/20 09:47*	*1*

Lab Sample ID: LCS 600-300708/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 300709 — **Prep Batch: 300708**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics [C6 - C10]	5.04	5.07		mg/Kg		101	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*96*		*70 - 130*

Lab Sample ID: LCSD 600-300708/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 300709 — **Prep Batch: 300708**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	5.04	5.42		mg/Kg		108	70 - 130	7	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*96*		*70 - 130*

Lab Sample ID: MB 600-300717/3-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 300953 — **Prep Batch: 300717**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.0		mg/Kg		08/08/20 15:03	08/12/20 09:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*89*		*70 - 130*	*08/08/20 15:03*	*08/12/20 09:04*	*1*

Lab Sample ID: LCS 600-300717/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 300953 — **Prep Batch: 300717**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics [C6 - C10]	5.04	5.29		mg/Kg		105	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*94*		*70 - 130*

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Lab Sample ID: LCSD 600-300717/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 300953 — **Prep Batch: 300717**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]			5.04	5.74		mg/Kg		114	70 - 130	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*93*		*70 - 130*

Lab Sample ID: MB 600-300863/3-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 300851 — **Prep Batch: 300863**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.0		mg/Kg		08/11/20 08:53	08/11/20 10:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*87*		*70 - 130*	*08/11/20 08:53*	*08/11/20 10:41*	*1*

Lab Sample ID: LCS 600-300863/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 300851 — **Prep Batch: 300863**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics [C6 - C10]			5.04	5.10		mg/Kg		101	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*90*		*70 - 130*

Lab Sample ID: LCSD 600-300863/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 300851 — **Prep Batch: 300863**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]			5.04	4.86		mg/Kg		96	70 - 130	5	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*89*		*70 - 130*

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

Lab Sample ID: MB 600-300964/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 301085 — **Prep Batch: 300964**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.3		mg/Kg		08/12/20 08:32	08/14/20 20:37	1
C28-C36	ND		8.3		mg/Kg		08/12/20 08:32	08/14/20 20:37	1

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: MB 600-300964/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 301085 **Prep Batch: 300964**

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	103		60 - 140	08/12/20 08:32	08/14/20 20:37	1

Lab Sample ID: LCS 600-300964/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 301085 **Prep Batch: 300964**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	66.8	49.7		mg/Kg		74	66 - 134

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl	119		60 - 140

Lab Sample ID: 600-209487-13 MS **Client Sample ID: S-11213301-080420-CN-DP-5-5'**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 301085 **Prep Batch: 300964**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	ND	F2 F1	124	110		mg/Kg	☼	88	66 - 134

Surrogate	MS %Recovery	MS Qualifier	Limits
o-Terphenyl	91		60 - 140

Lab Sample ID: 600-209487-13 MSD **Client Sample ID: S-11213301-080420-CN-DP-5-5'**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 301085 **Prep Batch: 300964**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	ND	F2 F1	124	18.5	F2 F1	mg/Kg	☼	15	66 - 134	142	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl	41	X	60 - 140

Lab Sample ID: MB 600-301022/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 301085 **Prep Batch: 301022**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.3		mg/Kg		08/12/20 14:58	08/14/20 03:36	1
C28-C36	ND		8.3		mg/Kg		08/12/20 14:58	08/14/20 03:36	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	127		60 - 140	08/12/20 14:58	08/14/20 03:36	1

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: LCS 600-301022/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 301085 — **Prep Batch: 301022**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			66.8	64.0		mg/Kg		96	66 - 134		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*136*		*60 - 140*

Lab Sample ID: 600-209487-31 MS — **Client Sample ID: S-11213301-080520-CN-DP-14-6'**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 301085 — **Prep Batch: 301022**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]	ND		120	116		mg/Kg	☼	87	66 - 134		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
o-Terphenyl	*138*		*60 - 140*

Lab Sample ID: 600-209487-31 MSD — **Client Sample ID: S-11213301-080520-CN-DP-14-6'**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 301085 — **Prep Batch: 301022**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	ND		120	114		mg/Kg	☼	86	66 - 134	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
o-Terphenyl	*137*		*60 - 140*

Lab Sample ID: MB 600-301371/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 301452 — **Prep Batch: 301371**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.3		mg/Kg		08/17/20 12:40	08/18/20 14:04	1
C28-C36	ND		8.3		mg/Kg		08/17/20 12:40	08/18/20 14:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*120*		*60 - 140*	*08/17/20 12:40*	*08/18/20 14:04*	*1*

Lab Sample ID: LCS 600-301371/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 301452 — **Prep Batch: 301371**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			66.8	56.9		mg/Kg		85	66 - 134		

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: LCS 600-301371/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 301452 — **Prep Batch: 301371**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl	135		60 - 140

Lab Sample ID: LCSD 600-301371/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 301452 — **Prep Batch: 301371**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			66.7	61.0		mg/Kg		91	66 - 134	7	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
o-Terphenyl	139		60 - 140

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-301125/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 301062

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		4.0		mg/Kg			08/13/20 12:30	1

Lab Sample ID: MB 600-301125/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 301062

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		4.0		mg/Kg			08/14/20 10:58	1

Lab Sample ID: LCS 600-301125/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 301062

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride			200	186		mg/Kg		93	90 - 110

Lab Sample ID: LCS 600-301125/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 301062

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride			200	191		mg/Kg		96	90 - 110

Lab Sample ID: 600-209487-1 MS — **Client Sample ID: S-11213301-080320-CN-DP-1-5'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 301062

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	80	F2 F1	120	193		mg/Kg	☼	95	80 - 120

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 600-209487-1 MSD — **Client Sample ID: S-11213301-080320-CN-DP-1-5'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 301062

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	80	F2 F1	120	239	F1 F2	mg/Kg	☼	133	80 - 120	21	20

Lab Sample ID: 600-209487-11 MS — **Client Sample ID: S-11213301-080420-CN-DP-4-10'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 301062

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	84		1390	1250		mg/Kg	☼	84	80 - 120

Lab Sample ID: 600-209487-11 MSD — **Client Sample ID: S-11213301-080420-CN-DP-4-10'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 301062

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	84		1390	1240		mg/Kg	☼	84	80 - 120	1	20

Lab Sample ID: 600-209487-23 MS — **Client Sample ID: S-11213301-080520-CN-DP-10-5'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 301062

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	480		5880	5730		mg/Kg	☼	89	80 - 120

Lab Sample ID: 600-209487-23 MSD — **Client Sample ID: S-11213301-080520-CN-DP-10-5'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 301062

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	480		5880	5670		mg/Kg	☼	88	80 - 120	1	20

Lab Sample ID: MB 600-301125/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 301426

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		4.0		mg/Kg			08/18/20 09:23	1

Lab Sample ID: LCS 600-301125/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 301426

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	200	182		mg/Kg		91	90 - 110

Lab Sample ID: 600-209487-29 MS — **Client Sample ID: S-11213301-080520-CN-DP-13-6'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 301426

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	640		1200	1780		mg/Kg	☼	95	80 - 120

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 600-209487-29 MSD — **Client Sample ID: S-11213301-080520-CN-DP-13-6'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 301426

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	640		1200	1720		mg/Kg	☼	90	80 - 120	3	20

Lab Sample ID: 600-209487-39 MS — **Client Sample ID: S-11213301-080520-CN-DP-17-8'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 301426

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	43		126	158		mg/Kg	☼	91	80 - 120

Lab Sample ID: 600-209487-39 MSD — **Client Sample ID: S-11213301-080520-CN-DP-17-8'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 301426

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	43		126	158		mg/Kg	☼	91	80 - 120	0	20

Lab Sample ID: MB 600-301125/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 301663

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		4.0		mg/Kg			08/20/20 13:03	1

Lab Sample ID: LCS 600-301125/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 301663

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	200	185		mg/Kg		92	90 - 110

Lab Sample ID: 600-209487-35 MS — **Client Sample ID: S-11213301-080520-CN-DP-15-20'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 301663

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	40	^	139	204		mg/Kg	☼	118	80 - 120

Lab Sample ID: 600-209487-35 MSD — **Client Sample ID: S-11213301-080520-CN-DP-15-20'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 301663

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	40	^	139	193		mg/Kg	☼	110	80 - 120	6	20

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Method: 2540G - SM 2540G

Lab Sample ID: 600-209487-1 DU **Client Sample ID: S-11213301-080320-CN-DP-1-5'**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300861

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	16.4			16.6		%				1	20
Percent Solids	83.6			83.4		%				0.2	20

Lab Sample ID: 600-209487-11 DU **Client Sample ID: S-11213301-080420-CN-DP-4-10'**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300861

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	27.9			30.5		%				9	20
Percent Solids	72.1			69.5		%				4	20

Lab Sample ID: 600-209487-21 DU **Client Sample ID: S-11213301-080420-CN-DP-9-6'**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300861

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	23.8			22.0		%				8	20
Percent Solids	76.2			78.0		%				2	20

Lab Sample ID: 600-209487-31 DU **Client Sample ID: S-11213301-080520-CN-DP-14-6'**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300861

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	16.7			17.5		%				5	20
Percent Solids	83.3			82.5		%				0.9	20

QC Association Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

GC/MS VOA

Analysis Batch: 300707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-1	S-11213301-080320-CN-DP-1-5'	Total/NA	Solid	8260B	300714
600-209487-2	S-11213301-080320-CN-DP-1-12'	Total/NA	Solid	8260B	300714
600-209487-3	S-11213301-080320-CN-DP-1-15'	Total/NA	Solid	8260B	300714
600-209487-4	S-11213301-080320-CN-DP-2-5'	Total/NA	Solid	8260B	300714
600-209487-5	S-11213301-080320-CN-DP-2-10'	Total/NA	Solid	8260B	300714
MB 600-300707/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-300707/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-300707/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 300714

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-1	S-11213301-080320-CN-DP-1-5'	Total/NA	Solid	5030B	
600-209487-2	S-11213301-080320-CN-DP-1-12'	Total/NA	Solid	5030B	
600-209487-3	S-11213301-080320-CN-DP-1-15'	Total/NA	Solid	5030B	
600-209487-4	S-11213301-080320-CN-DP-2-5'	Total/NA	Solid	5030B	
600-209487-5	S-11213301-080320-CN-DP-2-10'	Total/NA	Solid	5030B	
600-209487-6	S-11213301-080320-CN-DP-2-11'	Total/NA	Solid	5030B	
600-209487-7	S-11213301-080420-CN-DP-3-5'	Total/NA	Solid	5030B	
600-209487-8	S-11213301-080420-CN-DP-3-10'	Total/NA	Solid	5030B	
600-209487-9	S-11213301-080420-CN-DP-3-15'	Total/NA	Solid	5030B	
600-209487-10	S-11213301-080420-CN-DP-4.5'	Total/NA	Solid	5030B	
600-209487-11	S-11213301-080420-CN-DP-4-10'	Total/NA	Solid	5030B	
600-209487-12	S-11213301-080420-CN-DP-4-15'	Total/NA	Solid	5030B	
600-209487-13	S-11213301-080420-CN-DP-5-5'	Total/NA	Solid	5030B	
600-209487-14	S-11213301-080420-CN-DP-5-8'	Total/NA	Solid	5030B	

Prep Batch: 300718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-15	S-11213301-080420-CN-DP-6-5'	Total/NA	Solid	5030B	
600-209487-16	S-11213301-080420-CN-DP-6-8'	Total/NA	Solid	5030B	
600-209487-17	S-11213301-080420-CN-DP-7-6'	Total/NA	Solid	5030B	
600-209487-18	S-11213301-080420-CN-DP-7-9'	Total/NA	Solid	5030B	
600-209487-19	S-11213301-080420-CN-DP-8-6'	Total/NA	Solid	5030B	
600-209487-20	S-11213301-080420-CN-DP-8-9'	Total/NA	Solid	5030B	
600-209487-21	S-11213301-080420-CN-DP-9-6'	Total/NA	Solid	5030B	
600-209487-22	S-11213301-080420-CN-DP-9-9'	Total/NA	Solid	5030B	
600-209487-23	S-11213301-080520-CN-DP-10-5'	Total/NA	Solid	5030B	
600-209487-24	S-11213301-080520-CN-DP-10-8'	Total/NA	Solid	5030B	
600-209487-26	S-11213301-080520-CN-DP-11-8	Total/NA	Solid	5030B	
600-209487-27	S-11213301-080520-CN-DP-12-6'	Total/NA	Solid	5030B	
600-209487-28	S-11213301-080520-CN-DP-12-9'	Total/NA	Solid	5030B	
600-209487-29	S-11213301-080520-CN-DP-13-6'	Total/NA	Solid	5030B	
600-209487-30	S-11213301-080520-CN-DP-13-9'	Total/NA	Solid	5030B	
600-209487-31	S-11213301-080520-CN-DP-14-6'	Total/NA	Solid	5030B	
600-209487-32	S-11213301-080520-CN-DP-14-9'	Total/NA	Solid	5030B	
600-209487-33	S-11213301-080520-CN-DP-15-5'	Total/NA	Solid	5030B	
600-209487-34	S-11213301-080520-CN-DP-15-11'	Total/NA	Solid	5030B	

Prep Batch: 300721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-25	S-11213301-080520-CN-DP-11-5'	Total/NA	Solid	5030B	

QC Association Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

GC/MS VOA (Continued)

Prep Batch: 300721 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-34 - DL	S-11213301-080520-CN-DP-15-11'	Total/NA	Solid	5030B	
600-209487-35	S-11213301-080520-CN-DP-15-20'	Total/NA	Solid	5030B	
600-209487-36	S-11213301-080520-CN-DP-16-5'	Total/NA	Solid	5030B	
600-209487-37	S-11213301-080520-CN-DP-16-8'	Total/NA	Solid	5030B	
600-209487-38	S-11213301-080520-CN-DP-17-5'	Total/NA	Solid	5030B	
600-209487-39	S-11213301-080520-CN-DP-17-8'	Total/NA	Solid	5030B	
600-209487-41	S-11213301-080520-CN-DPW-15-8'	Total/NA	Solid	5030B	

Analysis Batch: 300771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-6	S-11213301-080320-CN-DP-2-11'	Total/NA	Solid	8260B	300714
600-209487-7	S-11213301-080420-CN-DP-3-5'	Total/NA	Solid	8260B	300714
600-209487-8	S-11213301-080420-CN-DP-3-10'	Total/NA	Solid	8260B	300714
600-209487-9	S-11213301-080420-CN-DP-3-15'	Total/NA	Solid	8260B	300714
600-209487-10	S-11213301-080420-CN-DP-4.5'	Total/NA	Solid	8260B	300714
600-209487-11	S-11213301-080420-CN-DP-4-10'	Total/NA	Solid	8260B	300714
600-209487-12	S-11213301-080420-CN-DP-4-15'	Total/NA	Solid	8260B	300714
600-209487-13	S-11213301-080420-CN-DP-5-5'	Total/NA	Solid	8260B	300714
600-209487-14	S-11213301-080420-CN-DP-5-8'	Total/NA	Solid	8260B	300714
600-209487-15	S-11213301-080420-CN-DP-6-5'	Total/NA	Solid	8260B	300718
600-209487-16	S-11213301-080420-CN-DP-6-8'	Total/NA	Solid	8260B	300718
600-209487-17	S-11213301-080420-CN-DP-7-6'	Total/NA	Solid	8260B	300718
600-209487-18	S-11213301-080420-CN-DP-7-9'	Total/NA	Solid	8260B	300718
600-209487-19	S-11213301-080420-CN-DP-8-6'	Total/NA	Solid	8260B	300718
600-209487-20	S-11213301-080420-CN-DP-8-9'	Total/NA	Solid	8260B	300718
600-209487-21	S-11213301-080420-CN-DP-9-6'	Total/NA	Solid	8260B	300718
600-209487-22	S-11213301-080420-CN-DP-9-9'	Total/NA	Solid	8260B	300718
600-209487-23	S-11213301-080520-CN-DP-10-5'	Total/NA	Solid	8260B	300718
600-209487-24	S-11213301-080520-CN-DP-10-8'	Total/NA	Solid	8260B	300718
MB 600-300771/7	Method Blank	Total/NA	Solid	8260B	
LCS 600-300771/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-300771/5	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 300850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-25	S-11213301-080520-CN-DP-11-5'	Total/NA	Solid	8260B	300721
600-209487-26	S-11213301-080520-CN-DP-11-8	Total/NA	Solid	8260B	300718
600-209487-27	S-11213301-080520-CN-DP-12-6'	Total/NA	Solid	8260B	300718
600-209487-28	S-11213301-080520-CN-DP-12-9'	Total/NA	Solid	8260B	300718
600-209487-29	S-11213301-080520-CN-DP-13-6'	Total/NA	Solid	8260B	300718
600-209487-30	S-11213301-080520-CN-DP-13-9'	Total/NA	Solid	8260B	300718
600-209487-31	S-11213301-080520-CN-DP-14-6'	Total/NA	Solid	8260B	300718
600-209487-32	S-11213301-080520-CN-DP-14-9'	Total/NA	Solid	8260B	300718
600-209487-33	S-11213301-080520-CN-DP-15-5'	Total/NA	Solid	8260B	300718
600-209487-34	S-11213301-080520-CN-DP-15-11'	Total/NA	Solid	8260B	300718
600-209487-35	S-11213301-080520-CN-DP-15-20'	Total/NA	Solid	8260B	300721
600-209487-36	S-11213301-080520-CN-DP-16-5'	Total/NA	Solid	8260B	300721
600-209487-37	S-11213301-080520-CN-DP-16-8'	Total/NA	Solid	8260B	300721
600-209487-38	S-11213301-080520-CN-DP-17-5'	Total/NA	Solid	8260B	300721
600-209487-39	S-11213301-080520-CN-DP-17-8'	Total/NA	Solid	8260B	300721
600-209487-41	S-11213301-080520-CN-DPW-15-8'	Total/NA	Solid	8260B	300721

QC Association Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

GC/MS VOA (Continued)

Analysis Batch: 300850 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-300850/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-300850/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-300850/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 300952

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-34 - DL	S-11213301-080520-CN-DP-15-11'	Total/NA	Solid	8260B	300721
MB 600-300952/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-300952/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-300952/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

GC VOA

Prep Batch: 300708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-1	S-11213301-080320-CN-DP-1-5'	Total/NA	Solid	5030B	
600-209487-2	S-11213301-080320-CN-DP-1-12'	Total/NA	Solid	5030B	
600-209487-3	S-11213301-080320-CN-DP-1-15'	Total/NA	Solid	5030B	
600-209487-4	S-11213301-080320-CN-DP-2-5'	Total/NA	Solid	5030B	
600-209487-5	S-11213301-080320-CN-DP-2-10'	Total/NA	Solid	5030B	
600-209487-6	S-11213301-080320-CN-DP-2-11'	Total/NA	Solid	5030B	
600-209487-7	S-11213301-080420-CN-DP-3-5'	Total/NA	Solid	5030B	
600-209487-8	S-11213301-080420-CN-DP-3-10'	Total/NA	Solid	5030B	
600-209487-9	S-11213301-080420-CN-DP-3-15'	Total/NA	Solid	5030B	
600-209487-10	S-11213301-080420-CN-DP-4.5'	Total/NA	Solid	5030B	
600-209487-11	S-11213301-080420-CN-DP-4-10'	Total/NA	Solid	5030B	
MB 600-300708/3-A	Method Blank	Total/NA	Solid	5030B	
LCS 600-300708/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 600-300708/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Analysis Batch: 300709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-1	S-11213301-080320-CN-DP-1-5'	Total/NA	Solid	8015B	300708
600-209487-2	S-11213301-080320-CN-DP-1-12'	Total/NA	Solid	8015B	300708
600-209487-3	S-11213301-080320-CN-DP-1-15'	Total/NA	Solid	8015B	300708
600-209487-4	S-11213301-080320-CN-DP-2-5'	Total/NA	Solid	8015B	300708
600-209487-5	S-11213301-080320-CN-DP-2-10'	Total/NA	Solid	8015B	300708
600-209487-6	S-11213301-080320-CN-DP-2-11'	Total/NA	Solid	8015B	300708
600-209487-7	S-11213301-080420-CN-DP-3-5'	Total/NA	Solid	8015B	300708
600-209487-8	S-11213301-080420-CN-DP-3-10'	Total/NA	Solid	8015B	300708
600-209487-9	S-11213301-080420-CN-DP-3-15'	Total/NA	Solid	8015B	300708
600-209487-10	S-11213301-080420-CN-DP-4.5'	Total/NA	Solid	8015B	300708
600-209487-11	S-11213301-080420-CN-DP-4-10'	Total/NA	Solid	8015B	300708
MB 600-300708/3-A	Method Blank	Total/NA	Solid	8015B	300708
LCS 600-300708/1-A	Lab Control Sample	Total/NA	Solid	8015B	300708
LCSD 600-300708/2-A	Lab Control Sample Dup	Total/NA	Solid	8015B	300708

Prep Batch: 300717

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-32	S-11213301-080520-CN-DP-14-9'	Total/NA	Solid	5030B	
600-209487-33	S-11213301-080520-CN-DP-15-5'	Total/NA	Solid	5030B	

QC Association Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

GC VOA (Continued)

Prep Batch: 300717 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-34	S-11213301-080520-CN-DP-15-11'	Total/NA	Solid	5030B	
600-209487-35	S-11213301-080520-CN-DP-15-20'	Total/NA	Solid	5030B	
600-209487-36	S-11213301-080520-CN-DP-16-5'	Total/NA	Solid	5030B	
600-209487-37	S-11213301-080520-CN-DP-16-8'	Total/NA	Solid	5030B	
600-209487-38	S-11213301-080520-CN-DP-17-5'	Total/NA	Solid	5030B	
600-209487-39	S-11213301-080520-CN-DP-17-8'	Total/NA	Solid	5030B	
600-209487-41	S-11213301-080520-CN-DPW-15-8'	Total/NA	Solid	5030B	
MB 600-300717/3-A	Method Blank	Total/NA	Solid	5030B	
LCS 600-300717/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 600-300717/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Analysis Batch: 300851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-12	S-11213301-080420-CN-DP-4-15'	Total/NA	Solid	8015B	300863
600-209487-13	S-11213301-080420-CN-DP-5-5'	Total/NA	Solid	8015B	300863
600-209487-14	S-11213301-080420-CN-DP-5-8'	Total/NA	Solid	8015B	300863
600-209487-15	S-11213301-080420-CN-DP-6-5'	Total/NA	Solid	8015B	300863
600-209487-16	S-11213301-080420-CN-DP-6-8'	Total/NA	Solid	8015B	300863
600-209487-17	S-11213301-080420-CN-DP-7-6'	Total/NA	Solid	8015B	300863
600-209487-18	S-11213301-080420-CN-DP-7-9'	Total/NA	Solid	8015B	300863
600-209487-19	S-11213301-080420-CN-DP-8-6'	Total/NA	Solid	8015B	300863
MB 600-300863/3-A	Method Blank	Total/NA	Solid	8015B	300863
LCS 600-300863/1-A	Lab Control Sample	Total/NA	Solid	8015B	300863
LCSD 600-300863/2-A	Lab Control Sample Dup	Total/NA	Solid	8015B	300863

Prep Batch: 300863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-12	S-11213301-080420-CN-DP-4-15'	Total/NA	Solid	5030B	
600-209487-13	S-11213301-080420-CN-DP-5-5'	Total/NA	Solid	5030B	
600-209487-14	S-11213301-080420-CN-DP-5-8'	Total/NA	Solid	5030B	
600-209487-15	S-11213301-080420-CN-DP-6-5'	Total/NA	Solid	5030B	
600-209487-16	S-11213301-080420-CN-DP-6-8'	Total/NA	Solid	5030B	
600-209487-17	S-11213301-080420-CN-DP-7-6'	Total/NA	Solid	5030B	
600-209487-18	S-11213301-080420-CN-DP-7-9'	Total/NA	Solid	5030B	
600-209487-19	S-11213301-080420-CN-DP-8-6'	Total/NA	Solid	5030B	
600-209487-20	S-11213301-080420-CN-DP-8-9'	Total/NA	Solid	5030B	
600-209487-21	S-11213301-080420-CN-DP-9-6'	Total/NA	Solid	5030B	
600-209487-22	S-11213301-080420-CN-DP-9-9'	Total/NA	Solid	5030B	
600-209487-23	S-11213301-080520-CN-DP-10-5'	Total/NA	Solid	5030B	
600-209487-24	S-11213301-080520-CN-DP-10-8'	Total/NA	Solid	5030B	
600-209487-25	S-11213301-080520-CN-DP-11-5'	Total/NA	Solid	5030B	
600-209487-26	S-11213301-080520-CN-DP-11-8	Total/NA	Solid	5030B	
600-209487-27	S-11213301-080520-CN-DP-12-6'	Total/NA	Solid	5030B	
600-209487-28	S-11213301-080520-CN-DP-12-9'	Total/NA	Solid	5030B	
600-209487-29	S-11213301-080520-CN-DP-13-6'	Total/NA	Solid	5030B	
600-209487-30	S-11213301-080520-CN-DP-13-9'	Total/NA	Solid	5030B	
600-209487-31	S-11213301-080520-CN-DP-14-6'	Total/NA	Solid	5030B	
MB 600-300863/3-A	Method Blank	Total/NA	Solid	5030B	
LCS 600-300863/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 600-300863/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

QC Association Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

GC VOA

Analysis Batch: 300953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-22	S-11213301-080420-CN-DP-9-9'	Total/NA	Solid	8015B	300863
600-209487-23	S-11213301-080520-CN-DP-10-5'	Total/NA	Solid	8015B	300863
600-209487-24	S-11213301-080520-CN-DP-10-8'	Total/NA	Solid	8015B	300863
600-209487-25	S-11213301-080520-CN-DP-11-5'	Total/NA	Solid	8015B	300863
600-209487-31	S-11213301-080520-CN-DP-14-6'	Total/NA	Solid	8015B	300863
600-209487-32	S-11213301-080520-CN-DP-14-9'	Total/NA	Solid	8015B	300717
600-209487-33	S-11213301-080520-CN-DP-15-5'	Total/NA	Solid	8015B	300717
600-209487-35	S-11213301-080520-CN-DP-15-20'	Total/NA	Solid	8015B	300717
600-209487-36	S-11213301-080520-CN-DP-16-5'	Total/NA	Solid	8015B	300717
600-209487-37	S-11213301-080520-CN-DP-16-8'	Total/NA	Solid	8015B	300717
600-209487-38	S-11213301-080520-CN-DP-17-5'	Total/NA	Solid	8015B	300717
600-209487-39	S-11213301-080520-CN-DP-17-8'	Total/NA	Solid	8015B	300717
MB 600-300717/3-A	Method Blank	Total/NA	Solid	8015B	300717
LCS 600-300717/1-A	Lab Control Sample	Total/NA	Solid	8015B	300717
LCSD 600-300717/2-A	Lab Control Sample Dup	Total/NA	Solid	8015B	300717

Analysis Batch: 301053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-20	S-11213301-080420-CN-DP-8-9'	Total/NA	Solid	8015B	300863
600-209487-21	S-11213301-080420-CN-DP-9-6'	Total/NA	Solid	8015B	300863
600-209487-26	S-11213301-080520-CN-DP-11-8	Total/NA	Solid	8015B	300863
600-209487-27	S-11213301-080520-CN-DP-12-6'	Total/NA	Solid	8015B	300863
600-209487-28	S-11213301-080520-CN-DP-12-9'	Total/NA	Solid	8015B	300863
600-209487-29	S-11213301-080520-CN-DP-13-6'	Total/NA	Solid	8015B	300863
600-209487-30	S-11213301-080520-CN-DP-13-9'	Total/NA	Solid	8015B	300863
600-209487-34	S-11213301-080520-CN-DP-15-11'	Total/NA	Solid	8015B	300717
600-209487-41	S-11213301-080520-CN-DPW-15-8'	Total/NA	Solid	8015B	300717

GC Semi VOA

Prep Batch: 300964

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-1	S-11213301-080320-CN-DP-1-5'	Total/NA	Solid	3546	
600-209487-3	S-11213301-080320-CN-DP-1-15'	Total/NA	Solid	3546	
600-209487-4	S-11213301-080320-CN-DP-2-5'	Total/NA	Solid	3546	
600-209487-5	S-11213301-080320-CN-DP-2-10'	Total/NA	Solid	3546	
600-209487-7	S-11213301-080420-CN-DP-3-5'	Total/NA	Solid	3546	
600-209487-10	S-11213301-080420-CN-DP-4.5'	Total/NA	Solid	3546	
600-209487-17	S-11213301-080420-CN-DP-7-6'	Total/NA	Solid	3546	
600-209487-18	S-11213301-080420-CN-DP-7-9'	Total/NA	Solid	3546	
MB 600-300964/1-A	Method Blank	Total/NA	Solid	3546	
LCS 600-300964/2-A	Lab Control Sample	Total/NA	Solid	3546	
600-209487-13 MS	S-11213301-080420-CN-DP-5-5'	Total/NA	Solid	3546	
600-209487-13 MSD	S-11213301-080420-CN-DP-5-5'	Total/NA	Solid	3546	

Prep Batch: 301022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-21	S-11213301-080420-CN-DP-9-6'	Total/NA	Solid	3546	
600-209487-22	S-11213301-080420-CN-DP-9-9'	Total/NA	Solid	3546	
600-209487-23	S-11213301-080520-CN-DP-10-5'	Total/NA	Solid	3546	
600-209487-24	S-11213301-080520-CN-DP-10-8'	Total/NA	Solid	3546	

QC Association Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

GC Semi VOA (Continued)

Prep Batch: 301022 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-25	S-11213301-080520-CN-DP-11-5'	Total/NA	Solid	3546	
600-209487-26	S-11213301-080520-CN-DP-11-8	Total/NA	Solid	3546	
600-209487-27	S-11213301-080520-CN-DP-12-6'	Total/NA	Solid	3546	
600-209487-28	S-11213301-080520-CN-DP-12-9'	Total/NA	Solid	3546	
600-209487-29	S-11213301-080520-CN-DP-13-6'	Total/NA	Solid	3546	
600-209487-30	S-11213301-080520-CN-DP-13-9'	Total/NA	Solid	3546	
600-209487-31	S-11213301-080520-CN-DP-14-6'	Total/NA	Solid	3546	
600-209487-32	S-11213301-080520-CN-DP-14-9'	Total/NA	Solid	3546	
600-209487-33	S-11213301-080520-CN-DP-15-5'	Total/NA	Solid	3546	
600-209487-34	S-11213301-080520-CN-DP-15-11'	Total/NA	Solid	3546	
600-209487-35	S-11213301-080520-CN-DP-15-20'	Total/NA	Solid	3546	
600-209487-36	S-11213301-080520-CN-DP-16-5'	Total/NA	Solid	3546	
600-209487-37	S-11213301-080520-CN-DP-16-8'	Total/NA	Solid	3546	
600-209487-38	S-11213301-080520-CN-DP-17-5'	Total/NA	Solid	3546	
600-209487-39	S-11213301-080520-CN-DP-17-8'	Total/NA	Solid	3546	
600-209487-41	S-11213301-080520-CN-DPW-15-8'	Total/NA	Solid	3546	
MB 600-301022/1-A	Method Blank	Total/NA	Solid	3546	
LCS 600-301022/2-A	Lab Control Sample	Total/NA	Solid	3546	
600-209487-31 MS	S-11213301-080520-CN-DP-14-6'	Total/NA	Solid	3546	
600-209487-31 MSD	S-11213301-080520-CN-DP-14-6'	Total/NA	Solid	3546	

Analysis Batch: 301085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-1	S-11213301-080320-CN-DP-1-5'	Total/NA	Solid	8015D	300964
600-209487-3	S-11213301-080320-CN-DP-1-15'	Total/NA	Solid	8015D	300964
600-209487-4	S-11213301-080320-CN-DP-2-5'	Total/NA	Solid	8015D	300964
600-209487-5	S-11213301-080320-CN-DP-2-10'	Total/NA	Solid	8015D	300964
600-209487-7	S-11213301-080420-CN-DP-3-5'	Total/NA	Solid	8015D	300964
600-209487-10	S-11213301-080420-CN-DP-4.5'	Total/NA	Solid	8015D	300964
600-209487-17	S-11213301-080420-CN-DP-7-6'	Total/NA	Solid	8015D	300964
600-209487-18	S-11213301-080420-CN-DP-7-9'	Total/NA	Solid	8015D	300964
600-209487-21	S-11213301-080420-CN-DP-9-6'	Total/NA	Solid	8015D	301022
600-209487-22	S-11213301-080420-CN-DP-9-9'	Total/NA	Solid	8015D	301022
600-209487-23	S-11213301-080520-CN-DP-10-5'	Total/NA	Solid	8015D	301022
600-209487-24	S-11213301-080520-CN-DP-10-8'	Total/NA	Solid	8015D	301022
600-209487-25	S-11213301-080520-CN-DP-11-5'	Total/NA	Solid	8015D	301022
600-209487-26	S-11213301-080520-CN-DP-11-8	Total/NA	Solid	8015D	301022
600-209487-27	S-11213301-080520-CN-DP-12-6'	Total/NA	Solid	8015D	301022
600-209487-28	S-11213301-080520-CN-DP-12-9'	Total/NA	Solid	8015D	301022
600-209487-29	S-11213301-080520-CN-DP-13-6'	Total/NA	Solid	8015D	301022
600-209487-30	S-11213301-080520-CN-DP-13-9'	Total/NA	Solid	8015D	301022
600-209487-31	S-11213301-080520-CN-DP-14-6'	Total/NA	Solid	8015D	301022
600-209487-32	S-11213301-080520-CN-DP-14-9'	Total/NA	Solid	8015D	301022
600-209487-33	S-11213301-080520-CN-DP-15-5'	Total/NA	Solid	8015D	301022
600-209487-34	S-11213301-080520-CN-DP-15-11'	Total/NA	Solid	8015D	301022
600-209487-35	S-11213301-080520-CN-DP-15-20'	Total/NA	Solid	8015D	301022
600-209487-36	S-11213301-080520-CN-DP-16-5'	Total/NA	Solid	8015D	301022
600-209487-37	S-11213301-080520-CN-DP-16-8'	Total/NA	Solid	8015D	301022
600-209487-38	S-11213301-080520-CN-DP-17-5'	Total/NA	Solid	8015D	301022
600-209487-39	S-11213301-080520-CN-DP-17-8'	Total/NA	Solid	8015D	301022
600-209487-41	S-11213301-080520-CN-DPW-15-8'	Total/NA	Solid	8015D	301022

QC Association Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

GC Semi VOA (Continued)

Analysis Batch: 301085 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-300964/1-A	Method Blank	Total/NA	Solid	8015D	300964
MB 600-301022/1-A	Method Blank	Total/NA	Solid	8015D	301022
LCS 600-300964/2-A	Lab Control Sample	Total/NA	Solid	8015D	300964
LCS 600-301022/2-A	Lab Control Sample	Total/NA	Solid	8015D	301022
600-209487-13 MS	S-11213301-080420-CN-DP-5-5'	Total/NA	Solid	8015D	300964
600-209487-13 MSD	S-11213301-080420-CN-DP-5-5'	Total/NA	Solid	8015D	300964
600-209487-31 MS	S-11213301-080520-CN-DP-14-6'	Total/NA	Solid	8015D	301022
600-209487-31 MSD	S-11213301-080520-CN-DP-14-6'	Total/NA	Solid	8015D	301022

Prep Batch: 301371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-2	S-11213301-080320-CN-DP-1-12'	Total/NA	Solid	3546	
600-209487-6	S-11213301-080320-CN-DP-2-11'	Total/NA	Solid	3546	
600-209487-8	S-11213301-080420-CN-DP-3-10'	Total/NA	Solid	3546	
600-209487-9	S-11213301-080420-CN-DP-3-15'	Total/NA	Solid	3546	
600-209487-11	S-11213301-080420-CN-DP-4-10'	Total/NA	Solid	3546	
600-209487-12	S-11213301-080420-CN-DP-4-15'	Total/NA	Solid	3546	
600-209487-13	S-11213301-080420-CN-DP-5-5'	Total/NA	Solid	3546	
600-209487-14	S-11213301-080420-CN-DP-5-8'	Total/NA	Solid	3546	
600-209487-15	S-11213301-080420-CN-DP-6-5'	Total/NA	Solid	3546	
600-209487-16	S-11213301-080420-CN-DP-6-8'	Total/NA	Solid	3546	
600-209487-19	S-11213301-080420-CN-DP-8-6'	Total/NA	Solid	3546	
600-209487-20	S-11213301-080420-CN-DP-8-9'	Total/NA	Solid	3546	
MB 600-301371/1-A	Method Blank	Total/NA	Solid	3546	
LCS 600-301371/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 600-301371/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Analysis Batch: 301452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-2	S-11213301-080320-CN-DP-1-12'	Total/NA	Solid	8015D	301371
600-209487-6	S-11213301-080320-CN-DP-2-11'	Total/NA	Solid	8015D	301371
600-209487-8	S-11213301-080420-CN-DP-3-10'	Total/NA	Solid	8015D	301371
600-209487-9	S-11213301-080420-CN-DP-3-15'	Total/NA	Solid	8015D	301371
600-209487-11	S-11213301-080420-CN-DP-4-10'	Total/NA	Solid	8015D	301371
600-209487-12	S-11213301-080420-CN-DP-4-15'	Total/NA	Solid	8015D	301371
600-209487-13	S-11213301-080420-CN-DP-5-5'	Total/NA	Solid	8015D	301371
600-209487-14	S-11213301-080420-CN-DP-5-8'	Total/NA	Solid	8015D	301371
600-209487-15	S-11213301-080420-CN-DP-6-5'	Total/NA	Solid	8015D	301371
600-209487-16	S-11213301-080420-CN-DP-6-8'	Total/NA	Solid	8015D	301371
600-209487-19	S-11213301-080420-CN-DP-8-6'	Total/NA	Solid	8015D	301371
600-209487-20	S-11213301-080420-CN-DP-8-9'	Total/NA	Solid	8015D	301371
MB 600-301371/1-A	Method Blank	Total/NA	Solid	8015D	301371
LCS 600-301371/2-A	Lab Control Sample	Total/NA	Solid	8015D	301371
LCSD 600-301371/3-A	Lab Control Sample Dup	Total/NA	Solid	8015D	301371

HPLC/IC

Analysis Batch: 301062

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-1	S-11213301-080320-CN-DP-1-5'	Soluble	Solid	300.0	301125
600-209487-2	S-11213301-080320-CN-DP-1-12'	Soluble	Solid	300.0	301125

QC Association Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

HPLC/IC (Continued)

Analysis Batch: 301062 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-3	S-11213301-080320-CN-DP-1-15'	Soluble	Solid	300.0	301125
600-209487-4	S-11213301-080320-CN-DP-2-5'	Soluble	Solid	300.0	301125
600-209487-5	S-11213301-080320-CN-DP-2-10'	Soluble	Solid	300.0	301125
600-209487-6	S-11213301-080320-CN-DP-2-11'	Soluble	Solid	300.0	301125
600-209487-7	S-11213301-080420-CN-DP-3-5'	Soluble	Solid	300.0	301125
600-209487-8	S-11213301-080420-CN-DP-3-10'	Soluble	Solid	300.0	301125
600-209487-9	S-11213301-080420-CN-DP-3-15'	Soluble	Solid	300.0	301125
600-209487-10	S-11213301-080420-CN-DP-4.5'	Soluble	Solid	300.0	301125
600-209487-11	S-11213301-080420-CN-DP-4-10'	Soluble	Solid	300.0	301125
600-209487-12	S-11213301-080420-CN-DP-4-15'	Soluble	Solid	300.0	301125
600-209487-13	S-11213301-080420-CN-DP-5-5'	Soluble	Solid	300.0	301125
600-209487-14	S-11213301-080420-CN-DP-5-8'	Soluble	Solid	300.0	301125
600-209487-15	S-11213301-080420-CN-DP-6-5'	Soluble	Solid	300.0	301125
600-209487-16	S-11213301-080420-CN-DP-6-8'	Soluble	Solid	300.0	301125
600-209487-17	S-11213301-080420-CN-DP-7-6'	Soluble	Solid	300.0	301125
600-209487-18	S-11213301-080420-CN-DP-7-9'	Soluble	Solid	300.0	301125
600-209487-19	S-11213301-080420-CN-DP-8-6'	Soluble	Solid	300.0	301125
600-209487-20	S-11213301-080420-CN-DP-8-9'	Soluble	Solid	300.0	301125
600-209487-21	S-11213301-080420-CN-DP-9-6'	Soluble	Solid	300.0	301125
600-209487-22	S-11213301-080420-CN-DP-9-9'	Soluble	Solid	300.0	301125
600-209487-23	S-11213301-080520-CN-DP-10-5'	Soluble	Solid	300.0	301125
600-209487-24	S-11213301-080520-CN-DP-10-8'	Soluble	Solid	300.0	301125
600-209487-25	S-11213301-080520-CN-DP-11-5'	Soluble	Solid	300.0	301125
600-209487-26	S-11213301-080520-CN-DP-11-8	Soluble	Solid	300.0	301125
600-209487-27	S-11213301-080520-CN-DP-12-6'	Soluble	Solid	300.0	301125
600-209487-28	S-11213301-080520-CN-DP-12-9'	Soluble	Solid	300.0	301125
MB 600-301125/1-A	Method Blank	Soluble	Solid	300.0	301125
MB 600-301125/1-A	Method Blank	Soluble	Solid	300.0	301125
LCS 600-301125/2-A	Lab Control Sample	Soluble	Solid	300.0	301125
LCS 600-301125/2-A	Lab Control Sample	Soluble	Solid	300.0	301125
600-209487-1 MS	S-11213301-080320-CN-DP-1-5'	Soluble	Solid	300.0	301125
600-209487-1 MSD	S-11213301-080320-CN-DP-1-5'	Soluble	Solid	300.0	301125
600-209487-11 MS	S-11213301-080420-CN-DP-4-10'	Soluble	Solid	300.0	301125
600-209487-11 MSD	S-11213301-080420-CN-DP-4-10'	Soluble	Solid	300.0	301125
600-209487-23 MS	S-11213301-080520-CN-DP-10-5'	Soluble	Solid	300.0	301125
600-209487-23 MSD	S-11213301-080520-CN-DP-10-5'	Soluble	Solid	300.0	301125

Leach Batch: 301125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-1	S-11213301-080320-CN-DP-1-5'	Soluble	Solid	DI Leach	
600-209487-2	S-11213301-080320-CN-DP-1-12'	Soluble	Solid	DI Leach	
600-209487-3	S-11213301-080320-CN-DP-1-15'	Soluble	Solid	DI Leach	
600-209487-4	S-11213301-080320-CN-DP-2-5'	Soluble	Solid	DI Leach	
600-209487-5	S-11213301-080320-CN-DP-2-10'	Soluble	Solid	DI Leach	
600-209487-6	S-11213301-080320-CN-DP-2-11'	Soluble	Solid	DI Leach	
600-209487-7	S-11213301-080420-CN-DP-3-5'	Soluble	Solid	DI Leach	
600-209487-8	S-11213301-080420-CN-DP-3-10'	Soluble	Solid	DI Leach	
600-209487-9	S-11213301-080420-CN-DP-3-15'	Soluble	Solid	DI Leach	
600-209487-10	S-11213301-080420-CN-DP-4.5'	Soluble	Solid	DI Leach	
600-209487-11	S-11213301-080420-CN-DP-4-10'	Soluble	Solid	DI Leach	
600-209487-12	S-11213301-080420-CN-DP-4-15'	Soluble	Solid	DI Leach	

QC Association Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

HPLC/IC (Continued)

Leach Batch: 301125 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-13	S-11213301-080420-CN-DP-5-5'	Soluble	Solid	DI Leach	
600-209487-14	S-11213301-080420-CN-DP-5-8'	Soluble	Solid	DI Leach	
600-209487-15	S-11213301-080420-CN-DP-6-5'	Soluble	Solid	DI Leach	
600-209487-16	S-11213301-080420-CN-DP-6-8'	Soluble	Solid	DI Leach	
600-209487-17	S-11213301-080420-CN-DP-7-6'	Soluble	Solid	DI Leach	
600-209487-18	S-11213301-080420-CN-DP-7-9'	Soluble	Solid	DI Leach	
600-209487-19	S-11213301-080420-CN-DP-8-6'	Soluble	Solid	DI Leach	
600-209487-20	S-11213301-080420-CN-DP-8-9'	Soluble	Solid	DI Leach	
600-209487-21	S-11213301-080420-CN-DP-9-6'	Soluble	Solid	DI Leach	
600-209487-22	S-11213301-080420-CN-DP-9-9'	Soluble	Solid	DI Leach	
600-209487-23	S-11213301-080520-CN-DP-10-5'	Soluble	Solid	DI Leach	
600-209487-24	S-11213301-080520-CN-DP-10-8'	Soluble	Solid	DI Leach	
600-209487-25	S-11213301-080520-CN-DP-11-5'	Soluble	Solid	DI Leach	
600-209487-26	S-11213301-080520-CN-DP-11-8	Soluble	Solid	DI Leach	
600-209487-27	S-11213301-080520-CN-DP-12-6'	Soluble	Solid	DI Leach	
600-209487-28	S-11213301-080520-CN-DP-12-9'	Soluble	Solid	DI Leach	
600-209487-29	S-11213301-080520-CN-DP-13-6'	Soluble	Solid	DI Leach	
600-209487-30	S-11213301-080520-CN-DP-13-9'	Soluble	Solid	DI Leach	
600-209487-31	S-11213301-080520-CN-DP-14-6'	Soluble	Solid	DI Leach	
600-209487-32	S-11213301-080520-CN-DP-14-9'	Soluble	Solid	DI Leach	
600-209487-33	S-11213301-080520-CN-DP-15-5'	Soluble	Solid	DI Leach	
600-209487-34	S-11213301-080520-CN-DP-15-11'	Soluble	Solid	DI Leach	
600-209487-35	S-11213301-080520-CN-DP-15-20'	Soluble	Solid	DI Leach	
600-209487-36	S-11213301-080520-CN-DP-16-5'	Soluble	Solid	DI Leach	
600-209487-37	S-11213301-080520-CN-DP-16-8'	Soluble	Solid	DI Leach	
600-209487-38	S-11213301-080520-CN-DP-17-5'	Soluble	Solid	DI Leach	
600-209487-39	S-11213301-080520-CN-DP-17-8'	Soluble	Solid	DI Leach	
600-209487-41	S-11213301-080520-CN-DPW-15-8'	Soluble	Solid	DI Leach	
MB 600-301125/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 600-301125/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
600-209487-1 MS	S-11213301-080320-CN-DP-1-5'	Soluble	Solid	DI Leach	
600-209487-1 MSD	S-11213301-080320-CN-DP-1-5'	Soluble	Solid	DI Leach	
600-209487-11 MS	S-11213301-080420-CN-DP-4-10'	Soluble	Solid	DI Leach	
600-209487-11 MSD	S-11213301-080420-CN-DP-4-10'	Soluble	Solid	DI Leach	
600-209487-23 MS	S-11213301-080520-CN-DP-10-5'	Soluble	Solid	DI Leach	
600-209487-23 MSD	S-11213301-080520-CN-DP-10-5'	Soluble	Solid	DI Leach	
600-209487-29 MS	S-11213301-080520-CN-DP-13-6'	Soluble	Solid	DI Leach	
600-209487-29 MSD	S-11213301-080520-CN-DP-13-6'	Soluble	Solid	DI Leach	
600-209487-35 MS	S-11213301-080520-CN-DP-15-20'	Soluble	Solid	DI Leach	
600-209487-35 MSD	S-11213301-080520-CN-DP-15-20'	Soluble	Solid	DI Leach	
600-209487-39 MS	S-11213301-080520-CN-DP-17-8'	Soluble	Solid	DI Leach	
600-209487-39 MSD	S-11213301-080520-CN-DP-17-8'	Soluble	Solid	DI Leach	

Analysis Batch: 301426

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-29	S-11213301-080520-CN-DP-13-6'	Soluble	Solid	300.0	301125
600-209487-30	S-11213301-080520-CN-DP-13-9'	Soluble	Solid	300.0	301125
600-209487-31	S-11213301-080520-CN-DP-14-6'	Soluble	Solid	300.0	301125
600-209487-32	S-11213301-080520-CN-DP-14-9'	Soluble	Solid	300.0	301125
600-209487-33	S-11213301-080520-CN-DP-15-5'	Soluble	Solid	300.0	301125
600-209487-34	S-11213301-080520-CN-DP-15-11'	Soluble	Solid	300.0	301125

QC Association Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

HPLC/IC (Continued)

Analysis Batch: 301426 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-301125/1-A	Method Blank	Soluble	Solid	300.0	301125
LCS 600-301125/2-A	Lab Control Sample	Soluble	Solid	300.0	301125
600-209487-29 MS	S-11213301-080520-CN-DP-13-6'	Soluble	Solid	300.0	301125
600-209487-29 MSD	S-11213301-080520-CN-DP-13-6'	Soluble	Solid	300.0	301125
600-209487-39 MS	S-11213301-080520-CN-DP-17-8'	Soluble	Solid	300.0	301125
600-209487-39 MSD	S-11213301-080520-CN-DP-17-8'	Soluble	Solid	300.0	301125

Analysis Batch: 301663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-35	S-11213301-080520-CN-DP-15-20'	Soluble	Solid	300.0	301125
600-209487-36	S-11213301-080520-CN-DP-16-5'	Soluble	Solid	300.0	301125
600-209487-37	S-11213301-080520-CN-DP-16-8'	Soluble	Solid	300.0	301125
600-209487-38	S-11213301-080520-CN-DP-17-5'	Soluble	Solid	300.0	301125
600-209487-39	S-11213301-080520-CN-DP-17-8'	Soluble	Solid	300.0	301125
600-209487-41	S-11213301-080520-CN-DPW-15-8'	Soluble	Solid	300.0	301125
MB 600-301125/1-A	Method Blank	Soluble	Solid	300.0	301125
LCS 600-301125/2-A	Lab Control Sample	Soluble	Solid	300.0	301125
600-209487-35 MS	S-11213301-080520-CN-DP-15-20'	Soluble	Solid	300.0	301125
600-209487-35 MSD	S-11213301-080520-CN-DP-15-20'	Soluble	Solid	300.0	301125

General Chemistry

Analysis Batch: 300861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-1	S-11213301-080320-CN-DP-1-5'	Total/NA	Solid	2540G	
600-209487-2	S-11213301-080320-CN-DP-1-12'	Total/NA	Solid	2540G	
600-209487-3	S-11213301-080320-CN-DP-1-15'	Total/NA	Solid	2540G	
600-209487-4	S-11213301-080320-CN-DP-2-5'	Total/NA	Solid	2540G	
600-209487-5	S-11213301-080320-CN-DP-2-10'	Total/NA	Solid	2540G	
600-209487-6	S-11213301-080320-CN-DP-2-11'	Total/NA	Solid	2540G	
600-209487-7	S-11213301-080420-CN-DP-3-5'	Total/NA	Solid	2540G	
600-209487-8	S-11213301-080420-CN-DP-3-10'	Total/NA	Solid	2540G	
600-209487-9	S-11213301-080420-CN-DP-3-15'	Total/NA	Solid	2540G	
600-209487-10	S-11213301-080420-CN-DP-4.5'	Total/NA	Solid	2540G	
600-209487-11	S-11213301-080420-CN-DP-4-10'	Total/NA	Solid	2540G	
600-209487-12	S-11213301-080420-CN-DP-4-15'	Total/NA	Solid	2540G	
600-209487-13	S-11213301-080420-CN-DP-5-5'	Total/NA	Solid	2540G	
600-209487-14	S-11213301-080420-CN-DP-5-8'	Total/NA	Solid	2540G	
600-209487-15	S-11213301-080420-CN-DP-6-5'	Total/NA	Solid	2540G	
600-209487-16	S-11213301-080420-CN-DP-6-8'	Total/NA	Solid	2540G	
600-209487-17	S-11213301-080420-CN-DP-7-6'	Total/NA	Solid	2540G	
600-209487-18	S-11213301-080420-CN-DP-7-9'	Total/NA	Solid	2540G	
600-209487-19	S-11213301-080420-CN-DP-8-6'	Total/NA	Solid	2540G	
600-209487-20	S-11213301-080420-CN-DP-8-9'	Total/NA	Solid	2540G	
600-209487-21	S-11213301-080420-CN-DP-9-6'	Total/NA	Solid	2540G	
600-209487-22	S-11213301-080420-CN-DP-9-9'	Total/NA	Solid	2540G	
600-209487-23	S-11213301-080520-CN-DP-10-5'	Total/NA	Solid	2540G	
600-209487-24	S-11213301-080520-CN-DP-10-8'	Total/NA	Solid	2540G	
600-209487-25	S-11213301-080520-CN-DP-11-5'	Total/NA	Solid	2540G	
600-209487-26	S-11213301-080520-CN-DP-11-8	Total/NA	Solid	2540G	
600-209487-27	S-11213301-080520-CN-DP-12-6'	Total/NA	Solid	2540G	

QC Association Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

General Chemistry (Continued)

Analysis Batch: 300861 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-28	S-11213301-080520-CN-DP-12-9'	Total/NA	Solid	2540G	
600-209487-29	S-11213301-080520-CN-DP-13-6'	Total/NA	Solid	2540G	
600-209487-30	S-11213301-080520-CN-DP-13-9'	Total/NA	Solid	2540G	
600-209487-31	S-11213301-080520-CN-DP-14-6'	Total/NA	Solid	2540G	
600-209487-32	S-11213301-080520-CN-DP-14-9'	Total/NA	Solid	2540G	
600-209487-33	S-11213301-080520-CN-DP-15-5'	Total/NA	Solid	2540G	
600-209487-34	S-11213301-080520-CN-DP-15-11'	Total/NA	Solid	2540G	
600-209487-35	S-11213301-080520-CN-DP-15-20'	Total/NA	Solid	2540G	
600-209487-36	S-11213301-080520-CN-DP-16-5'	Total/NA	Solid	2540G	
600-209487-37	S-11213301-080520-CN-DP-16-8'	Total/NA	Solid	2540G	
600-209487-38	S-11213301-080520-CN-DP-17-5'	Total/NA	Solid	2540G	
600-209487-39	S-11213301-080520-CN-DP-17-8'	Total/NA	Solid	2540G	
600-209487-41	S-11213301-080520-CN-DPW-15-8'	Total/NA	Solid	2540G	
600-209487-1 DU	S-11213301-080320-CN-DP-1-5'	Total/NA	Solid	2540G	
600-209487-11 DU	S-11213301-080420-CN-DP-4-10'	Total/NA	Solid	2540G	
600-209487-21 DU	S-11213301-080420-CN-DP-9-6'	Total/NA	Solid	2540G	
600-209487-31 DU	S-11213301-080520-CN-DP-14-6'	Total/NA	Solid	2540G	

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080320-CN-DP-1-5' Lab Sample ID: 600-209487-1
Date Collected: 08/03/20 13:20 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080320-CN-DP-1-5' Lab Sample ID: 600-209487-1
Date Collected: 08/03/20 13:20 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.6**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.86 g	5 mL	300714	08/08/20 10:45	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300707	08/08/20 15:13	WS1	TAL HOU
Total/NA	Prep	5030B			10.30 g	10 mL	300708	08/08/20 07:14	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300709	08/08/20 14:00	WS1	TAL HOU
Total/NA	Prep	3546			10.00 g	1.0 mL	300964	08/12/20 08:32	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 21:49	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301062	08/13/20 14:03	W1N	TAL HOU

Client Sample ID: S-11213301-080320-CN-DP-1-12' Lab Sample ID: 600-209487-2
Date Collected: 08/03/20 13:30 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080320-CN-DP-1-12' Lab Sample ID: 600-209487-2
Date Collected: 08/03/20 13:30 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 80.0**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			0.87 g	5 mL	300714	08/08/20 10:45	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300707	08/08/20 15:37	WS1	TAL HOU
Total/NA	Prep	5030B			9.71 g	10 mL	300708	08/08/20 07:14	WS1	TAL HOU
Total/NA	Analysis	8015B		20	250 uL	5 mL	300709	08/08/20 14:50	WS1	TAL HOU
Total/NA	Prep	3546			5.03 g	1.0 mL	301371	08/17/20 12:40	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301452	08/18/20 15:54	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301062	08/13/20 15:04	W1N	TAL HOU

Client Sample ID: S-11213301-080320-CN-DP-1-15' Lab Sample ID: 600-209487-3
Date Collected: 08/03/20 13:50 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080320-CN-DP-1-15' Lab Sample ID: 600-209487-3

Date Collected: 08/03/20 13:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.2**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.16 g	5 mL	300714	08/08/20 10:45	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300707	08/08/20 16:00	WS1	TAL HOU
Total/NA	Prep	5030B			9.55 g	10 mL	300708	08/08/20 07:14	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300709	08/08/20 15:15	WS1	TAL HOU
Total/NA	Prep	3546			10.06 g	1.0 mL	300964	08/12/20 08:32	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 23:02	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301062	08/13/20 15:24	W1N	TAL HOU

Client Sample ID: S-11213301-080320-CN-DP-2-5' Lab Sample ID: 600-209487-4

Date Collected: 08/03/20 14:40 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080320-CN-DP-2-5' Lab Sample ID: 600-209487-4

Date Collected: 08/03/20 14:40 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.3**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.75 g	5 mL	300714	08/08/20 10:45	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300707	08/08/20 16:24	WS1	TAL HOU
Total/NA	Prep	5030B			10.03 g	10 mL	300708	08/08/20 07:14	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300709	08/08/20 15:41	WS1	TAL HOU
Total/NA	Prep	3546			10.00 g	1.0 mL	300964	08/12/20 08:32	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 23:38	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301062	08/13/20 15:45	W1N	TAL HOU

Client Sample ID: S-11213301-080320-CN-DP-2-10' Lab Sample ID: 600-209487-5

Date Collected: 08/03/20 15:00 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080320-CN-DP-2-10' Lab Sample ID: 600-209487-5

Date Collected: 08/03/20 15:00 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.0**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.68 g	5 mL	300714	08/08/20 10:45	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300707	08/08/20 16:48	WS1	TAL HOU
Total/NA	Prep	5030B			9.99 g	10 mL	300708	08/08/20 07:14	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300709	08/08/20 16:06	WS1	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080320-CN-DP-2-10' Lab Sample ID: 600-209487-5

Date Collected: 08/03/20 15:00 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.0**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			10.02 g	1.0 mL	300964	08/12/20 08:32	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/15/20 00:14	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301062	08/13/20 16:05	W1N	TAL HOU

Client Sample ID: S-11213301-080320-CN-DP-2-11' Lab Sample ID: 600-209487-6

Date Collected: 08/03/20 15:10 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080320-CN-DP-2-11' Lab Sample ID: 600-209487-6

Date Collected: 08/03/20 15:10 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 91.2**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.36 g	5 mL	300714	08/08/20 10:45	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 15:56	KLV	TAL HOU
Total/NA	Prep	5030B			9.94 g	10 mL	300708	08/08/20 07:14	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300709	08/08/20 16:31	WS1	TAL HOU
Total/NA	Prep	3546			5.06 g	1.0 mL	301371	08/17/20 12:40	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301452	08/18/20 16:31	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301062	08/13/20 16:25	W1N	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-3-5' Lab Sample ID: 600-209487-7

Date Collected: 08/04/20 09:50 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-3-5' Lab Sample ID: 600-209487-7

Date Collected: 08/04/20 09:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.15 g	5 mL	300714	08/08/20 10:45	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 16:22	KLV	TAL HOU
Total/NA	Prep	5030B			.33 g	10 mL	300708	08/08/20 07:14	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300709	08/08/20 16:56	WS1	TAL HOU
Total/NA	Prep	3546			10.00 g	1.0 mL	300964	08/12/20 08:32	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/15/20 01:27	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301062	08/13/20 17:27	W1N	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-3-10' Lab Sample ID: 600-209487-8
Date Collected: 08/04/20 09:55 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-3-10' Lab Sample ID: 600-209487-8
Date Collected: 08/04/20 09:55 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 81.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.73 g	5 mL	300714	08/08/20 10:45	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 16:48	KLV	TAL HOU
Total/NA	Prep	5030B			9.86 g	10 mL	300708	08/08/20 07:14	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300709	08/08/20 17:21	WS1	TAL HOU
Total/NA	Prep	3546			5.10 g	1.0 mL	301371	08/17/20 12:40	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301452	08/18/20 17:08	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301062	08/13/20 17:47	W1N	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-3-15' Lab Sample ID: 600-209487-9
Date Collected: 08/04/20 10:00 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-3-15' Lab Sample ID: 600-209487-9
Date Collected: 08/04/20 10:00 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.0**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.61 g	5 mL	300714	08/08/20 10:45	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 17:14	KLV	TAL HOU
Total/NA	Prep	5030B			9.84 g	10 mL	300708	08/08/20 13:51	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300709	08/08/20 17:46	WS1	TAL HOU
Total/NA	Prep	3546			5.07 g	1.0 mL	301371	08/17/20 12:40	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301452	08/18/20 17:45	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301062	08/13/20 18:07	W1N	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-4.5' Lab Sample ID: 600-209487-10
Date Collected: 08/04/20 10:30 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-4.5' Lab Sample ID: 600-209487-10

Date Collected: 08/04/20 10:30 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.52 g	5 mL	300714	08/08/20 10:45	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 17:40	KLV	TAL HOU
Total/NA	Prep	5030B			10.14 g	10 mL	300708	08/08/20 13:51	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300709	08/08/20 18:11	WS1	TAL HOU
Total/NA	Prep	3546			10.00 g	1.0 mL	300964	08/12/20 08:32	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/15/20 04:27	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301062	08/13/20 18:28	W1N	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-4-10' Lab Sample ID: 600-209487-11

Date Collected: 08/04/20 10:35 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-4-10' Lab Sample ID: 600-209487-11

Date Collected: 08/04/20 10:35 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 72.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.57 g	5 mL	300714	08/08/20 10:45	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 18:06	KLV	TAL HOU
Total/NA	Prep	5030B			9.56 g	10 mL	300708	08/08/20 13:51	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300709	08/08/20 18:36	WS1	TAL HOU
Total/NA	Prep	3546			5.00 g	1.0 mL	301371	08/17/20 12:40	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301452	08/18/20 18:21	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		10			301062	08/13/20 18:48	W1N	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-4-15' Lab Sample ID: 600-209487-12

Date Collected: 08/04/20 10:40 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-4-15' Lab Sample ID: 600-209487-12

Date Collected: 08/04/20 10:40 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.60 g	5 mL	300714	08/08/20 10:45	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 18:32	KLV	TAL HOU
Total/NA	Prep	5030B			9.82 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300851	08/11/20 12:07	WS1	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-4-15' Lab Sample ID: 600-209487-12

Date Collected: 08/04/20 10:40 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			5.03 g	1.0 mL	301371	08/17/20 12:40	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301452	08/18/20 18:58	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		25			301062	08/13/20 19:55	W1N	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-5-5' Lab Sample ID: 600-209487-13

Date Collected: 08/04/20 11:10 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-5-5' Lab Sample ID: 600-209487-13

Date Collected: 08/04/20 11:10 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 80.6**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.73 g	5 mL	300714	08/08/20 10:45	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 18:58	KLV	TAL HOU
Total/NA	Prep	5030B			10.31 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300851	08/11/20 11:39	WS1	TAL HOU
Total/NA	Prep	3546			5.00 g	1.0 mL	301371	08/17/20 12:40	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301452	08/18/20 19:34	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		10			301062	08/13/20 20:18	W1N	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-5-8' Lab Sample ID: 600-209487-14

Date Collected: 08/04/20 11:15 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-5-8' Lab Sample ID: 600-209487-14

Date Collected: 08/04/20 11:15 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 81.4**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.63 g	5 mL	300714	08/08/20 10:45	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 19:24	KLV	TAL HOU
Total/NA	Prep	5030B			9.70 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300851	08/11/20 12:38	WS1	TAL HOU
Total/NA	Prep	3546			5.00 g	1.0 mL	301371	08/17/20 12:40	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301452	08/18/20 20:47	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		5			301062	08/14/20 07:51	W1N	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-6-5' Lab Sample ID: 600-209487-15
Date Collected: 08/04/20 11:50 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-6-5' Lab Sample ID: 600-209487-15
Date Collected: 08/04/20 11:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.2**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.26 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 19:49	KLV	TAL HOU
Total/NA	Prep	5030B			10.12 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300851	08/11/20 13:10	WS1	TAL HOU
Total/NA	Prep	3546			5.00 g	1.0 mL	301371	08/17/20 12:40	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301452	08/18/20 21:23	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		10			301062	08/14/20 08:55	W1N	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-6-8' Lab Sample ID: 600-209487-16
Date Collected: 08/04/20 11:55 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-6-8' Lab Sample ID: 600-209487-16
Date Collected: 08/04/20 11:55 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.91 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 20:15	KLV	TAL HOU
Total/NA	Prep	5030B			9.85 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300851	08/11/20 13:44	WS1	TAL HOU
Total/NA	Prep	3546			5.07 g	1.0 mL	301371	08/17/20 12:40	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301452	08/18/20 21:58	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		5			301062	08/14/20 09:15	W1N	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-7-6' Lab Sample ID: 600-209487-17
Date Collected: 08/04/20 13:55 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-7-6' Lab Sample ID: 600-209487-17

Date Collected: 08/04/20 13:55 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 81.6**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.11 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 20:40	KLV	TAL HOU
Total/NA	Prep	5030B			10.11 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300851	08/11/20 14:20	WS1	TAL HOU
Total/NA	Prep	3546			10.00 g	1.0 mL	300964	08/12/20 08:32	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 01:19	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		10			301062	08/14/20 09:36	W1N	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-7-9' Lab Sample ID: 600-209487-18

Date Collected: 08/04/20 14:00 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-7-9' Lab Sample ID: 600-209487-18

Date Collected: 08/04/20 14:00 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 84.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.04 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 21:06	KLV	TAL HOU
Total/NA	Prep	5030B			9.85 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300851	08/11/20 14:59	WS1	TAL HOU
Total/NA	Prep	3546			10.02 g	1.0 mL	300964	08/12/20 08:32	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 01:52	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		10			301062	08/14/20 09:56	W1N	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-8-6' Lab Sample ID: 600-209487-19

Date Collected: 08/04/20 15:00 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-8-6' Lab Sample ID: 600-209487-19

Date Collected: 08/04/20 15:00 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.25 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 21:31	KLV	TAL HOU
Total/NA	Prep	5030B			10.20 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300851	08/11/20 15:38	WS1	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-8-6' Lab Sample ID: 600-209487-19

Date Collected: 08/04/20 15:00 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			5.01 g	1.0 mL	301371	08/17/20 12:40	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301452	08/18/20 22:34	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301062	08/14/20 10:17	W1N	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-8-9' Lab Sample ID: 600-209487-20

Date Collected: 08/04/20 15:05 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-8-9' Lab Sample ID: 600-209487-20

Date Collected: 08/04/20 15:05 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 72.3**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.96 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 21:56	KLV	TAL HOU
Total/NA	Prep	5030B			9.87 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	301053	08/13/20 07:54	WS1	TAL HOU
Total/NA	Prep	3546			3.00 g	1.0 mL	301371	08/17/20 12:40	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301452	08/18/20 23:10	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301062	08/14/20 10:37	W1N	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-9-6' Lab Sample ID: 600-209487-21

Date Collected: 08/04/20 15:50 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-9-6' Lab Sample ID: 600-209487-21

Date Collected: 08/04/20 15:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 76.2**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.70 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 22:22	KLV	TAL HOU
Total/NA	Prep	5030B			10.15 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	301053	08/13/20 08:19	WS1	TAL HOU
Total/NA	Prep	3546			5.02 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 04:47	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301062	08/14/20 11:38	W1N	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-9-9' Lab Sample ID: 600-209487-22
Date Collected: 08/04/20 15:55 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-9-9' Lab Sample ID: 600-209487-22
Date Collected: 08/04/20 15:55 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.6**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.77 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 22:47	KLV	TAL HOU
Total/NA	Prep	5030B			10.79 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300953	08/12/20 16:27	WS1	TAL HOU
Total/NA	Prep	3546			5.01 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 05:22	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		10			301062	08/14/20 11:59	W1N	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-10-5' Lab Sample ID: 600-209487-23
Date Collected: 08/05/20 08:15 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-10-5' Lab Sample ID: 600-209487-23
Date Collected: 08/05/20 08:15 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 85.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.82 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 23:12	KLV	TAL HOU
Total/NA	Prep	5030B			10.23 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300953	08/12/20 16:53	WS1	TAL HOU
Total/NA	Prep	3546			5.02 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 06:33	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		50			301062	08/14/20 13:00	W1N	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-10-8' Lab Sample ID: 600-209487-24
Date Collected: 08/05/20 08:20 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-10-8' Lab Sample ID: 600-209487-24

Date Collected: 08/05/20 08:20 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 100.0**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.32 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 23:37	KLV	TAL HOU
Total/NA	Prep	5030B			9.80 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300953	08/12/20 17:18	WS1	TAL HOU
Total/NA	Prep	3546			5.00 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 07:28	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		10			301062	08/14/20 14:01	W1N	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-11-5' Lab Sample ID: 600-209487-25

Date Collected: 08/05/20 09:00 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-11-5' Lab Sample ID: 600-209487-25

Date Collected: 08/05/20 09:00 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 80.6**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.44 g	5 mL	300721	08/09/20 12:02	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300850	08/11/20 18:31	WS1	TAL HOU
Total/NA	Prep	5030B			9.81 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300953	08/12/20 17:44	WS1	TAL HOU
Total/NA	Prep	3546			5.04 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 10:23	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		10			301062	08/14/20 14:22	W1N	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-11-8 Lab Sample ID: 600-209487-26

Date Collected: 08/05/20 09:05 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-11-8 Lab Sample ID: 600-209487-26

Date Collected: 08/05/20 09:05 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 91.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.08 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300850	08/11/20 11:22	WS1	TAL HOU
Total/NA	Prep	5030B			10.53 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	301053	08/13/20 08:44	WS1	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-11-8 Lab Sample ID: 600-209487-26

Date Collected: 08/05/20 09:05 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 91.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			5.00 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 08:02	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		10			301062	08/14/20 14:42	W1N	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-12-6' Lab Sample ID: 600-209487-27

Date Collected: 08/05/20 09:45 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-12-6' Lab Sample ID: 600-209487-27

Date Collected: 08/05/20 09:45 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 81.2**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.03 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300850	08/11/20 11:45	WS1	TAL HOU
Total/NA	Prep	5030B			10.12 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	301053	08/13/20 09:08	WS1	TAL HOU
Total/NA	Prep	3546			5.00 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 11:12	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		20			301062	08/14/20 15:02	W1N	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-12-9' Lab Sample ID: 600-209487-28

Date Collected: 08/05/20 09:50 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-12-9' Lab Sample ID: 600-209487-28

Date Collected: 08/05/20 09:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 84.0**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.93 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300850	08/11/20 12:08	WS1	TAL HOU
Total/NA	Prep	5030B			10.07 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	301053	08/13/20 09:33	WS1	TAL HOU
Total/NA	Prep	3546			5.02 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 08:37	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		10			301062	08/14/20 15:23	W1N	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-13-6' Lab Sample ID: 600-209487-29
Date Collected: 08/05/20 10:50 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-13-6' Lab Sample ID: 600-209487-29
Date Collected: 08/05/20 10:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.4**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.98 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300850	08/11/20 13:43	WS1	TAL HOU
Total/NA	Prep	5030B			10.04 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	301053	08/13/20 09:58	WS1	TAL HOU
Total/NA	Prep	3546			5.00 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 11:48	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		10			301426	08/18/20 11:12	W1N	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-13-9' Lab Sample ID: 600-209487-30
Date Collected: 08/05/20 10:55 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-13-9' Lab Sample ID: 600-209487-30
Date Collected: 08/05/20 10:55 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 76.5**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.55 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300850	08/11/20 14:07	WS1	TAL HOU
Total/NA	Prep	5030B			10.03 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	301053	08/13/20 10:23	WS1	TAL HOU
Total/NA	Prep	3546			5.01 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 09:12	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301426	08/18/20 12:13	W1N	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-14-6' Lab Sample ID: 600-209487-31
Date Collected: 08/05/20 11:25 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-14-6' Lab Sample ID: 600-209487-31
Date Collected: 08/05/20 11:25 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.3**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.74 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300850	08/11/20 14:31	WS1	TAL HOU
Total/NA	Prep	5030B			9.69 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300953	08/12/20 16:01	WS1	TAL HOU
Total/NA	Prep	3546			10.07 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 12:24	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301426	08/18/20 12:34	W1N	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-14-9' Lab Sample ID: 600-209487-32
Date Collected: 08/05/20 11:30 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-14-9' Lab Sample ID: 600-209487-32
Date Collected: 08/05/20 11:30 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 79.4**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.92 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300850	08/11/20 14:55	WS1	TAL HOU
Total/NA	Prep	5030B			9.52 g	10 mL	300717	08/08/20 15:03	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300953	08/12/20 09:32	WS1	TAL HOU
Total/NA	Prep	3546			5.02 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 14:20	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		5			301426	08/18/20 12:54	W1N	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-15-5' Lab Sample ID: 600-209487-33
Date Collected: 08/05/20 12:10 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-15-5' Lab Sample ID: 600-209487-33
Date Collected: 08/05/20 12:10 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.74 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300850	08/11/20 15:19	WS1	TAL HOU
Total/NA	Prep	5030B			10.10 g	10 mL	300717	08/08/20 15:03	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300953	08/12/20 10:00	WS1	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-15-5' Lab Sample ID: 600-209487-33

Date Collected: 08/05/20 12:10 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			5.00 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 14:58	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301426	08/18/20 13:15	W1N	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-15-11' Lab Sample ID: 600-209487-34

Date Collected: 08/05/20 17:15 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-15-11' Lab Sample ID: 600-209487-34

Date Collected: 08/05/20 17:15 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 79.4**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.89 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300850	08/11/20 15:43	WS1	TAL HOU
Total/NA	Prep	5030B	DL		0.84 g	5 mL	300721	08/09/20 12:02	WS1	TAL HOU
Total/NA	Analysis	8260B	DL	1	5 g	5 g	300952	08/12/20 11:17	WS1	TAL HOU
Total/NA	Prep	5030B			10.64 g	10 mL	300717	08/08/20 15:03	WS1	TAL HOU
Total/NA	Analysis	8015B		500	250 uL	5 mL	301053	08/13/20 10:47	WS1	TAL HOU
Total/NA	Prep	3546			5.01 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 15:36	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301426	08/18/20 13:35	W1N	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-15-20' Lab Sample ID: 600-209487-35

Date Collected: 08/05/20 17:20 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-15-20' Lab Sample ID: 600-209487-35

Date Collected: 08/05/20 17:20 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 71.7**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.58 g	5 mL	300721	08/09/20 12:02	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300850	08/11/20 16:07	WS1	TAL HOU
Total/NA	Prep	5030B			9.89 g	10 mL	300717	08/08/20 15:03	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300953	08/12/20 14:16	WS1	TAL HOU
Total/NA	Prep	3546			5.00 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 16:14	RJV	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-15-20' Lab Sample ID: 600-209487-35

Date Collected: 08/05/20 17:20 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 71.7**

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	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301663	08/20/20 13:44	DAW	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-16-5' Lab Sample ID: 600-209487-36

Date Collected: 08/05/20 14:45 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-16-5' Lab Sample ID: 600-209487-36

Date Collected: 08/05/20 14:45 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.0**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.86 g	5 mL	300721	08/09/20 12:02	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300850	08/11/20 16:31	WS1	TAL HOU
Total/NA	Prep	5030B			10.10 g	10 mL	300717	08/08/20 15:03	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300953	08/12/20 14:44	WS1	TAL HOU
Total/NA	Prep	3546			5.03 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 16:52	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301663	08/20/20 14:45	DAW	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-16-8' Lab Sample ID: 600-209487-37

Date Collected: 08/05/20 14:50 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-16-8' Lab Sample ID: 600-209487-37

Date Collected: 08/05/20 14:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 78.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.87 g	5 mL	300721	08/09/20 12:02	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300850	08/11/20 16:55	WS1	TAL HOU
Total/NA	Prep	5030B			9.90 g	10 mL	300717	08/08/20 15:03	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300953	08/12/20 15:35	WS1	TAL HOU
Total/NA	Prep	3546			5.00 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 17:30	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301663	08/20/20 15:05	DAW	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-17-5' Lab Sample ID: 600-209487-38
Date Collected: 08/05/20 15:35 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-17-5' Lab Sample ID: 600-209487-38
Date Collected: 08/05/20 15:35 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 93.6**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.02 g	5 mL	300721	08/09/20 12:02	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300850	08/11/20 17:19	WS1	TAL HOU
Total/NA	Prep	5030B			10.15 g	10 mL	300717	08/08/20 15:03	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300953	08/12/20 12:24	WS1	TAL HOU
Total/NA	Prep	3546			5.00 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 18:08	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301663	08/20/20 15:26	DAW	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-17-8' Lab Sample ID: 600-209487-39
Date Collected: 08/05/20 15:40 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-17-8' Lab Sample ID: 600-209487-39
Date Collected: 08/05/20 15:40 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 79.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.50 g	5 mL	300721	08/09/20 12:02	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300850	08/11/20 17:43	WS1	TAL HOU
Total/NA	Prep	5030B			10.20 g	10 mL	300717	08/08/20 15:03	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300953	08/12/20 12:52	WS1	TAL HOU
Total/NA	Prep	3546			3.00 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 18:45	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301663	08/20/20 15:46	DAW	TAL HOU

Client Sample ID: S-11213301-080520-CN-DPW-15-8' Lab Sample ID: 600-209487-41
Date Collected: 08/05/20 12:15 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DPW-15-8' **Lab Sample ID: 600-209487-41**
Date Collected: 08/05/20 12:15 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 79.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.99 g	5 mL	300721	08/09/20 12:02	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300850	08/11/20 18:07	WS1	TAL HOU
Total/NA	Prep	5030B			10.19 g	10 mL	300717	08/08/20 15:03	WS1	TAL HOU
Total/NA	Analysis	8015B		25	250 uL	5 mL	301053	08/13/20 11:12	WS1	TAL HOU
Total/NA	Prep	3546			5.00 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 19:23	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301663	08/20/20 16:06	DAW	TAL HOU

Laboratory References:
TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Accreditation/Certification Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Laboratory: Eurofins TestAmerica, Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	20-052-0	08-04-21
Louisiana	NELAP	01967	06-30-21
Oklahoma	State	2019-180	08-31-20
Texas	NELAP	T104704223-20-26	10-31-20
USDA	US Federal Programs	P330-18-00130	04-30-21

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Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: CN	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-78251-21066.1
Client Contact: Daniel Wascom	Phone: 716 818 0224	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page
Company: GHD Services Inc.				Job #:
Address: 5551 Corporate Boulevard Suite 200	Due Date Requested:			
City: Baton Rouge	TAT Requested (days):			
State, Zip: LA, 70808				
Phone:	PO #:			
Email: Daniel.Wascom@ghd.com	WO #:			
Project Name: 11213301-08 / Halliburton 2311 S 1st St	Project #: 60012556			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) TCL Volatiles	300_ORGFM_28D - 300 Chloride	Moisture	8015D_DRO/ ORO	8015B_GRO	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
S-11213301-080320-CN-DP-1-5'	8-3-20	1320	G	S			X	X	X	X	X		5 Day Turn around! Rush!
S-11213301-080320-CN-DP-1-12'	8-3-20	1330					X	X	X	X	X		5 Day Turn around Rush!
S-11213301-080320-CN-DP-1-15'	8-3-20	1350					X	X	X	X	X		
S-11213301-080320-CN-DP-2-5'	8-3-20	1440					X	X	X	X	X		
S-11213301-080320-CN-DP-2-10'	8-3-20	1500					X	X	X	X	X		
S-11213301-080320-CN-DP-2-11'	8-3-20	1510					X	X	X	X	X		
S-11213301-080420-CN-DP-3-5'	8-4-20	0950					X	X	X	X	X		1/4
S-11213301-080420-CN-DP-3-10'	8-4-20	0955					X	X	X	X	X		
S-11213301-080420-CN-DP-3-15'	8-4-20	1000					X	X	X	X	X		
S-11213301-080420-CN-DP-4-5'	8-4-20	1030					X	X	X	X	X		
S-11213301-080420-CN-DP-4-10'	8-4-20	1035	V	V			X	X	X	X	X		

600-209487 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	8-6-20 1500	GHD		8/7/20 920	ETA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Released to Imaging: 6/7/2023 10:53:13 AM
Received by OCD: 6/2/2023 1:09:40 PM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Charles Neligh	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-78251-21066.1
Client Contact: Daniel Wascom	Phone: 716 818 0224	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page
Company: GHD Services Inc.				Job #:
Address: 5551 Corporate Boulevard Suite 200	Due Date Requested:			
City: Baton Rouge	TAT Requested (days):			
State, Zip: LA, 70808				
Phone:	PO #:			
Email: Daniel.Wascom@ghd.com	WO #:			
Project Name: 11213301-08 / Halliburton 2311 S 1st St	Project #: 60012556			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) TCL Volatiles	300_ORGFM_28D - 300 Chloride	Moisture	8015D_DRO/ ORO	8015B_GRO	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
S-11213301-080420-CN-DP-4-15'	8-4-20	1040	G	S			X	X	X	X	X		
S-11213301-080420-CN-DP-5-5'		1110					X	X	X	X	X		
S-11213301-080420-CN-DP-5-8'		1115					X	X	X	X	X		
S-11213301-080420-CN-DP-6-5'		1150					X	X	X	X	X		
S-11213301-080420-CN-DP-6-8'		1155					X	X	X	X	X		
S-11213301-080420-CN-DP-7-6'		1355					X	X	X	X	X		2/4
S-11213301-080420-CN-DP-7-9'		1400					X	X	X	X	X		
S-11213301-080420-CN-DP-8-6'		1500					X	X	X	X	X		
S-11213301-080420-CN-DP-8-9'		1505					X	X	X	X	X		
S-11213301-080420-CN-DP-9-6'		1550					X	X	X	X	X		
S-11213301-080420-CN-DP-9-9'		1555					X	X	X	X	X		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Charles Neligh	8-6-20 1500	GHD		8/7/20 920	EHA
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:

Ver: 01/16/2019

Released to Imaging: 6/7/2023 10:53:13 AM
Received by OCD: 6/2/2023 1:09:40 PM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: CN	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-78251-21066.1
Client Contact: Daniel Wascom	Phone: 716 818 0224	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page
Company: GHD Services Inc.				Job #:
Address: 5551 Corporate Boulevard Suite 200	Due Date Requested:			
City: Baton Rouge	TAT Requested (days):			
State, Zip: LA, 70808				
Phone:	PO #:			
Email: Daniel.Wascom@ghd.com	WO #:			
Project Name: 11213301-08 / Halliburton 2311 S 1st St	Project #: 60012556			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) TCL Volatiles	300_ORGFM_28D - 300 Chloride	Moisture	8015D_DRO/ ORO	8015B_GRO	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
S-11213301-080520-CN-DP-10-5'	8-5-20	0815	G	S									
S-11213301-080520-CN-DP-10-8'		0820											
S-11213301-080520-CN-DP-11-5'		0900											
S-11213301-080520-CN-DP-11-8'		0905											
S-11213301-080520-CN-DP-12-6'		0945											
S-11213301-080520-CN-DP-12-9'		0950											
S-11213301-080520-CN-DP-13-6'		1050											
S-11213301-080520-CN-DP-13-9'		1055											
S-11213301-080520-CN-DP-14-6'		1125											
S-11213301-080520-CN-DP-14-9'		1130											
S-11213301-080520-CN-DP-15-5'		1210											

5/4

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		8-6-20 - 1515	GHD		8/7/20 920	ETA
2						
3						

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Released to Imaging: 6/7/2023 10:53:13 AM
Received by OCD: 6/2/2023 1:09:40 PM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: CN	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-78251-21066.1
Client Contact: Daniel Wascom	Phone: 716 818 0224	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page
Company: GHD Services Inc.				Job #:
Address: 5551 Corporate Boulevard Suite 200	Due Date Requested:			
City: Baton Rouge	TAT Requested (days):			
State, Zip: LA, 70808				
Phone:	PO #:			
Email: Daniel.Wascom@ghd.com	WO #:			
Project Name: 11213301-08 / Halliburton 2311 S 1st St	Project #: 60012556			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) TCL Volatiles [redacted]	300_ORGFM_28D - 300 Chloride	Moisture	8015D_DRO/ ORO	8015B_GRO	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
S-11213301-080520-CN-DP-15-11'	8-5-20	1715	G	S			X	X	X	X	X		
S-11213301-080520-CN-DP-15-20'		1720					X	X	X	X	X		
S-11213301-080520-CN-DP-16-5'		1445					X	X	X	X	X		
S-11213301-080520-CN-DP-16-8'		1460					X	X	X	X	X		4/4
S-11213301-080520-CN-DP-17-5'		1535					X	X	X	X	X		
S-11213301-080520-CN-DP-17-8'		1540					X	X	X	X	X		
GW-11213301-080520-CN-DPW-1		1745	G	W			X	X					HOLD DPW-1 untill results from DP-1-5' and DP-1-12'

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		8-16-20 1500	GHD		8/7/20 920	EHA
2						
3						

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Loc: 600
209487

eurofins | Environment Testing TestAmerica

Eurofins TestAmerica Houston

Sample Receipt Checklist

'20 AUG 7 9:20

Date/Time Received: _____

JOB NUMBER: _____ CLIENT: GHD

UNPACKED BY: JR CARRIER/DRIVER: Fedex

Custody Seal Present: ☑YES ☐NO Number of Coolers Received: 4

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
0333	Y / N	Y / N	4.2	680	+0.1	4.3
0300	Y / N	Y / N	3.1			3.2
0311	Y / N	Y / N	1.9			2.0
0322	Y / N	Y / N	2.9			3.0
	Y / N	Y / N			8/7/20	
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☑YES ☐NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☑NO ☐YES

Base samples are>pH 12: ☐YES ☐NO Acid preserved are<pH 2: ☐YES ☐NO

TX1005 samples frozen upon receipt: ☐ YES DATE & TIME PUT IN FREEZER: _____

pH paper Lot #_____ VOA headspace acceptable (5-6mm): ☑YES ☐NO ☐NA

Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	☑YES	☐ NO

COMMENTS:

8/7/20

HS-SA-WI-013 Rev. 4A; 08/26/2019

Login Sample Receipt Checklist

Client: GHD Services Inc. Job Number: 600-209487-1

Login Number: 209487 **List Source: Eurofins TestAmerica, Houston**
List Number: 1
Creator: Rubio, Yuri

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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	4.3,3.2,2.0,3.0
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	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-212831-1
Client Project/Site: 11213301-08 / Halliburton 2311 S 1st St

For:
GHD Services Inc.
5551 Corporate Boulevard
Suite 200
Baton Rouge, Louisiana 70808

Attn: Daniel Wascom

Authorized for release by:
10/30/2020 2:42:29 PM

Sachin Kudchadkar, Senior Project Manager
(713)690-4444
Sachin.Kudchadkar@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

Client: GHD Services Inc.
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Laboratory Job ID: 600-212831-1

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Case Narrative

Client: GHD Services Inc. Job ID: 600-212831-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Job ID: 600-212831-1

Laboratory: Eurofins TestAmerica, Houston

Narrative

Job Narrative
600-212831-1

Comments
No additional comments.

Receipt
The samples were received on 10/19/2020 10:11 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 10.0º C and 11.5º C.

Receipt Exceptions

The following samples were received at the laboratory outside the required temperature criteria: S-11213301-101420-CN-DP-29-10' (600-212831-1), S-11213301-101420-CN-DP-29-13' (600-212831-2), S-11213301-101420-CN-DP-29-16' (600-212831-3), S-11213301-101320-CN-DP-18-5' (600-212831-4), S-11213301-101320-CN-DP-18-10' (600-212831-5), S-11213301-101320-CN-DP-18-15' (600-212831-6), S-11213301-101320-CN-DP-18-20' (600-212831-7), S-11213301-101320-CN-DP-19-5' (600-212831-8), S-11213301-101320-CN-DP-19-10' (600-212831-9), S-11213301-101320-CN-DP-19-15' (600-212831-10), S-11213301-101320-CN-DP-19-20' (600-212831-11), S-11213301-101320-CN-DP-20-5' (600-212831-12), S-11213301-101320-CN-DP-20-10' (600-212831-13), S-11213301-101320-CN-DP-20-15' (600-212831-14), S-11213301-101320-CN-DP-20-20' (600-212831-15), S-11213301-101320-CN-DP-21-5' (600-212831-16), S-11213301-101320-CN-DP-21-10' (600-212831-17), S-11213301-101320-CN-DP-21-15' (600-212831-18), S-11213301-101320-CN-DP-21-20' (600-212831-19), S-11213301-101320-CN-DP-22-5' (600-212831-20), S-11213301-101320-CN-DP-22-10' (600-212831-21), S-11213301-101420-CN-DP-23-5' (600-212831-22), S-11213301-101420-CN-DP-23-10' (600-212831-23), S-11213301-101420-CN-DP-24-5' (600-212831-24), S-11213301-101420-CN-DP-24-10' (600-212831-25), S-11213301-101320-CN-DP-25-6' (600-212831-26), S-11213301-101320-CN-DP-25-9' (600-212831-27), S-11213301-101320-CN-DP-26-6' (600-212831-28), S-11213301-101320-CN-DP-26-9' (600-212831-29), S-11213301-101420-CN-DP-27-10' (600-212831-30), S-11213301-101420-CN-DP-27-13' (600-212831-31), S-11213301-101420-CN-DP-27-16' (600-212831-32), S-11213301-101420-CN-DP-28-10' (600-212831-33), S-11213301-101420-CN-DP-28-13' (600-212831-34) and S-11213301-101420-CN-DP-28-16' (600-212831-35).

General Chemistry
Method 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 600-306225 and analytical batch 600-306267 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Methods 300.0, 9056: The following samples were diluted due to the nature of the sample matrix: S-11213301-101420-CN-DP-29-10' (600-212831-1), S-11213301-101320-CN-DP-26-6' (600-212831-28), S-11213301-101320-CN-DP-26-9' (600-212831-29), S-11213301-101420-CN-DP-27-10' (600-212831-30), S-11213301-101420-CN-DP-27-13' (600-212831-31), S-11213301-101420-CN-DP-28-10' (600-212831-33) and S-11213301-101420-CN-DP-28-13' (600-212831-34). Elevated reporting limits (RLs) are provided.

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

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

Released to Imaging: 6/7/2023 10:53:13 AM

Method Summary

Client: GHD Services Inc. Job ID: 600-212831-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU
2540G	SM 2540G	SM22	TAL HOU
DI Leach	Deionized Water Leaching Procedure (Routine)	ASTM	TAL HOU

Protocol References:

ASTM = ASTM International

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

SM22 = Standard Methods For The Examination Of Water And Wastewater, 22nd Edition

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: GHD Services Inc. Job ID: 600-212831-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
600-212831-1	S-11213301-101420-CN-DP-29-10'	Solid	10/14/20 10:55	10/19/20 10:11	
600-212831-2	S-11213301-101420-CN-DP-29-13'	Solid	10/14/20 11:05	10/19/20 10:11	
600-212831-3	S-11213301-101420-CN-DP-29-16'	Solid	10/14/20 11:10	10/19/20 10:11	
600-212831-26	S-11213301-101320-CN-DP-25-6'	Solid	10/13/20 12:15	10/19/20 10:11	
600-212831-27	S-11213301-101320-CN-DP-25-9'	Solid	10/13/20 12:20	10/19/20 10:11	
600-212831-28	S-11213301-101320-CN-DP-26-6'	Solid	10/13/20 13:25	10/19/20 10:11	
600-212831-29	S-11213301-101320-CN-DP-26-9'	Solid	10/13/20 13:30	10/19/20 10:11	
600-212831-30	S-11213301-101420-CN-DP-27-10'	Solid	10/14/20 10:00	10/19/20 10:11	
600-212831-31	S-11213301-101420-CN-DP-27-13'	Solid	10/14/20 10:05	10/19/20 10:11	
600-212831-32	S-11213301-101420-CN-DP-27-16'	Solid	10/14/20 10:10	10/19/20 10:11	
600-212831-33	S-11213301-101420-CN-DP-28-10'	Solid	10/14/20 12:50	10/19/20 10:11	
600-212831-34	S-11213301-101420-CN-DP-28-13'	Solid	10/14/20 12:55	10/19/20 10:11	
600-212831-35	S-11213301-101420-CN-DP-28-16'	Solid	10/14/20 13:00	10/19/20 10:11	

Client Sample Results

Client: GHD Services Inc. Job ID: 600-212831-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-101420-CN-DP-29-10' — Lab Sample ID: 600-212831-1

Date Collected: 10/14/20 10:55 Matrix: Solid
Date Received: 10/19/20 10:11

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17.1		1.0		%			10/20/20 09:29	1
Percent Solids	82.9		1.0		%			10/20/20 09:29	1

Client Sample ID: S-11213301-101420-CN-DP-29-10' — Lab Sample ID: 600-212831-1

Date Collected: 10/14/20 10:55 Matrix: Solid
Date Received: 10/19/20 10:11 Percent Solids: 82.9

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND	F1	480		mg/Kg	☼		10/28/20 15:52	100

Client Sample ID: S-11213301-101420-CN-DP-29-13' — Lab Sample ID: 600-212831-2

Date Collected: 10/14/20 11:05 Matrix: Solid
Date Received: 10/19/20 10:11

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23.2		1.0		%			10/20/20 09:29	1
Percent Solids	76.8		1.0		%			10/20/20 09:29	1

Client Sample ID: S-11213301-101420-CN-DP-29-13' — Lab Sample ID: 600-212831-2

Date Collected: 10/14/20 11:05 Matrix: Solid
Date Received: 10/19/20 10:11 Percent Solids: 76.8

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	61		5.2		mg/Kg	☼		10/28/20 16:53	1

Client Sample ID: S-11213301-101420-CN-DP-29-16' — Lab Sample ID: 600-212831-3

Date Collected: 10/14/20 11:10 Matrix: Solid
Date Received: 10/19/20 10:11

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18.0		1.0		%			10/20/20 09:29	1
Percent Solids	82.0		1.0		%			10/20/20 09:29	1

Client Sample ID: S-11213301-101420-CN-DP-29-16' — Lab Sample ID: 600-212831-3

Date Collected: 10/14/20 11:10 Matrix: Solid
Date Received: 10/19/20 10:11 Percent Solids: 82.0

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	250		24		mg/Kg	☼		10/28/20 17:13	5

Client Sample ID: S-11213301-101320-CN-DP-25-6' — Lab Sample ID: 600-212831-26

Date Collected: 10/13/20 12:15 Matrix: Solid
Date Received: 10/19/20 10:11

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15.4		1.0		%			10/20/20 09:29	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-212831-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-101320-CN-DP-25-6' **Lab Sample ID: 600-212831-26**
Date Collected: 10/13/20 12:15 **Matrix: Solid**
Date Received: 10/19/20 10:11

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84.6		1.0		%			10/20/20 09:29	1

Client Sample ID: S-11213301-101320-CN-DP-25-6' **Lab Sample ID: 600-212831-26**
Date Collected: 10/13/20 12:15 **Matrix: Solid**
Date Received: 10/19/20 10:11 **Percent Solids: 84.6**

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	440		24		mg/Kg	☼		10/28/20 17:34	5

Client Sample ID: S-11213301-101320-CN-DP-25-9' **Lab Sample ID: 600-212831-27**
Date Collected: 10/13/20 12:20 **Matrix: Solid**
Date Received: 10/19/20 10:11

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21.2		1.0		%			10/20/20 09:29	1
Percent Solids	78.8		1.0		%			10/20/20 09:29	1

Client Sample ID: S-11213301-101320-CN-DP-25-9' **Lab Sample ID: 600-212831-27**
Date Collected: 10/13/20 12:20 **Matrix: Solid**
Date Received: 10/19/20 10:11 **Percent Solids: 78.8**

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	490		250		mg/Kg	☼		10/28/20 17:54	50

Client Sample ID: S-11213301-101320-CN-DP-26-6' **Lab Sample ID: 600-212831-28**
Date Collected: 10/13/20 13:25 **Matrix: Solid**
Date Received: 10/19/20 10:11

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16.4		1.0		%			10/20/20 09:29	1
Percent Solids	83.6		1.0		%			10/20/20 09:29	1

Client Sample ID: S-11213301-101320-CN-DP-26-6' **Lab Sample ID: 600-212831-28**
Date Collected: 10/13/20 13:25 **Matrix: Solid**
Date Received: 10/19/20 10:11 **Percent Solids: 83.6**

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		480		mg/Kg	☼		10/28/20 18:15	100

Client Sample ID: S-11213301-101320-CN-DP-26-9' **Lab Sample ID: 600-212831-29**
Date Collected: 10/13/20 13:30 **Matrix: Solid**
Date Received: 10/19/20 10:11

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21.5		1.0		%			10/20/20 09:29	1
Percent Solids	78.5		1.0		%			10/20/20 09:29	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-212831-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-101320-CN-DP-26-9' **Lab Sample ID: 600-212831-29**
Date Collected: 10/13/20 13:30 **Matrix: Solid**
Date Received: 10/19/20 10:11 **Percent Solids: 78.5**

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		510		mg/Kg	☼		10/28/20 19:16	100

Client Sample ID: S-11213301-101420-CN-DP-27-10' **Lab Sample ID: 600-212831-30**
Date Collected: 10/14/20 10:00 **Matrix: Solid**
Date Received: 10/19/20 10:11

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17.0		1.0		%			10/20/20 09:29	1
Percent Solids	83.0		1.0		%			10/20/20 09:29	1

Client Sample ID: S-11213301-101420-CN-DP-27-10' **Lab Sample ID: 600-212831-30**
Date Collected: 10/14/20 10:00 **Matrix: Solid**
Date Received: 10/19/20 10:11 **Percent Solids: 83.0**

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		240		mg/Kg	☼		10/28/20 19:36	50

Client Sample ID: S-11213301-101420-CN-DP-27-13' **Lab Sample ID: 600-212831-31**
Date Collected: 10/14/20 10:05 **Matrix: Solid**
Date Received: 10/19/20 10:11

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22.2		1.0		%			10/20/20 09:29	1
Percent Solids	77.8		1.0		%			10/20/20 09:29	1

Client Sample ID: S-11213301-101420-CN-DP-27-13' **Lab Sample ID: 600-212831-31**
Date Collected: 10/14/20 10:05 **Matrix: Solid**
Date Received: 10/19/20 10:11 **Percent Solids: 77.8**

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		510		mg/Kg	☼		10/28/20 19:57	100

Client Sample ID: S-11213301-101420-CN-DP-27-16' **Lab Sample ID: 600-212831-32**
Date Collected: 10/14/20 10:10 **Matrix: Solid**
Date Received: 10/19/20 10:11

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	28.8		1.0		%			10/20/20 09:29	1
Percent Solids	71.2		1.0		%			10/20/20 09:29	1

Client Sample ID: S-11213301-101420-CN-DP-27-16' **Lab Sample ID: 600-212831-32**
Date Collected: 10/14/20 10:10 **Matrix: Solid**
Date Received: 10/19/20 10:11 **Percent Solids: 71.2**

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	300		28		mg/Kg	☼		10/28/20 20:17	5

Client Sample Results

Client: GHD Services Inc. Job ID: 600-212831-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-101420-CN-DP-28-10' — Lab Sample ID: 600-212831-33

Date Collected: 10/14/20 12:50 **Matrix: Solid**
Date Received: 10/19/20 10:11

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	30.3		1.0		%			10/20/20 09:29	1
Percent Solids	69.7		1.0		%			10/20/20 09:29	1

Client Sample ID: S-11213301-101420-CN-DP-28-10' — Lab Sample ID: 600-212831-33

Date Collected: 10/14/20 12:50 **Matrix: Solid**
Date Received: 10/19/20 10:11 **Percent Solids: 69.7**

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		570		mg/Kg	☼		10/28/20 20:38	100

Client Sample ID: S-11213301-101420-CN-DP-28-13' — Lab Sample ID: 600-212831-34

Date Collected: 10/14/20 12:55 **Matrix: Solid**
Date Received: 10/19/20 10:11

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	14.5		1.0		%			10/20/20 09:29	1
Percent Solids	85.5		1.0		%			10/20/20 09:29	1

Client Sample ID: S-11213301-101420-CN-DP-28-13' — Lab Sample ID: 600-212831-34

Date Collected: 10/14/20 12:55 **Matrix: Solid**
Date Received: 10/19/20 10:11 **Percent Solids: 85.5**

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		470		mg/Kg	☼		10/28/20 21:39	100

Client Sample ID: S-11213301-101420-CN-DP-28-16' — Lab Sample ID: 600-212831-35

Date Collected: 10/14/20 13:00 **Matrix: Solid**
Date Received: 10/19/20 10:11

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18.3		1.0		%			10/20/20 09:29	1
Percent Solids	81.7		1.0		%			10/20/20 09:29	1

Client Sample ID: S-11213301-101420-CN-DP-28-16' — Lab Sample ID: 600-212831-35

Date Collected: 10/14/20 13:00 **Matrix: Solid**
Date Received: 10/19/20 10:11 **Percent Solids: 81.7**

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	190		24		mg/Kg	☼		10/28/20 21:59	5

Definitions/Glossary

Client: GHD Services Inc. Job ID: 600-212831-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

Glossary

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

QC Sample Results

Client: GHD Services Inc. Job ID: 600-212831-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-306225/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 306267

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		4.0		mg/Kg			10/28/20 13:01	1

Lab Sample ID: LCS 600-306225/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 306267

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			200	204		mg/Kg		102	90 - 110		

Lab Sample ID: 600-212831-1 MS — **Client Sample ID: S-11213301-101420-CN-DP-29-10'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 306267

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	ND	F1	12100	18200	F1	mg/Kg	☼	149	80 - 120		

Lab Sample ID: 600-212831-1 MSD — **Client Sample ID: S-11213301-101420-CN-DP-29-10'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 306267

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	ND	F1	12100	16100	F1	mg/Kg	☼	131	80 - 120	13	20

Lab Sample ID: 600-212831-33 MS — **Client Sample ID: S-11213301-101420-CN-DP-28-10'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 306267

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	ND		14300	15300		mg/Kg	☼	104	80 - 120		

Lab Sample ID: 600-212831-33 MSD — **Client Sample ID: S-11213301-101420-CN-DP-28-10'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 306267

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	ND		14300	14600		mg/Kg	☼	100	80 - 120	4	20

Method: 2540G - SM 2540G

Lab Sample ID: 600-212831-3 DU — **Client Sample ID: S-11213301-101420-CN-DP-29-16'**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 305718

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	18.0			17.9		%				0.5	20
Percent Solids	82.0			82.1		%				0.1	20

QC Sample Results

Client: GHD Services Inc. Job ID: 600-212831-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Method: 2540G - SM 2540G (Continued)

Lab Sample ID: 600-212831-29 DU **Client Sample ID: S-11213301-101320-CN-DP-26-9'**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 305718

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	21.5			22.1		%				3	20
Percent Solids	78.5			77.9		%				0.8	20

QC Association Summary

Client: GHD Services Inc. Job ID: 600-212831-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

HPLC/IC

Leach Batch: 306225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-212831-1	S-11213301-101420-CN-DP-29-10'	Soluble	Solid	DI Leach	
600-212831-2	S-11213301-101420-CN-DP-29-13'	Soluble	Solid	DI Leach	
600-212831-3	S-11213301-101420-CN-DP-29-16'	Soluble	Solid	DI Leach	
600-212831-26	S-11213301-101320-CN-DP-25-6'	Soluble	Solid	DI Leach	
600-212831-27	S-11213301-101320-CN-DP-25-9'	Soluble	Solid	DI Leach	
600-212831-28	S-11213301-101320-CN-DP-26-6'	Soluble	Solid	DI Leach	
600-212831-29	S-11213301-101320-CN-DP-26-9'	Soluble	Solid	DI Leach	
600-212831-30	S-11213301-101420-CN-DP-27-10'	Soluble	Solid	DI Leach	
600-212831-31	S-11213301-101420-CN-DP-27-13'	Soluble	Solid	DI Leach	
600-212831-32	S-11213301-101420-CN-DP-27-16'	Soluble	Solid	DI Leach	
600-212831-33	S-11213301-101420-CN-DP-28-10'	Soluble	Solid	DI Leach	
600-212831-34	S-11213301-101420-CN-DP-28-13'	Soluble	Solid	DI Leach	
600-212831-35	S-11213301-101420-CN-DP-28-16'	Soluble	Solid	DI Leach	
MB 600-306225/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 600-306225/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
600-212831-1 MS	S-11213301-101420-CN-DP-29-10'	Soluble	Solid	DI Leach	
600-212831-1 MSD	S-11213301-101420-CN-DP-29-10'	Soluble	Solid	DI Leach	
600-212831-33 MS	S-11213301-101420-CN-DP-28-10'	Soluble	Solid	DI Leach	
600-212831-33 MSD	S-11213301-101420-CN-DP-28-10'	Soluble	Solid	DI Leach	

Analysis Batch: 306267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-212831-1	S-11213301-101420-CN-DP-29-10'	Soluble	Solid	300.0	306225
600-212831-2	S-11213301-101420-CN-DP-29-13'	Soluble	Solid	300.0	306225
600-212831-3	S-11213301-101420-CN-DP-29-16'	Soluble	Solid	300.0	306225
600-212831-26	S-11213301-101320-CN-DP-25-6'	Soluble	Solid	300.0	306225
600-212831-27	S-11213301-101320-CN-DP-25-9'	Soluble	Solid	300.0	306225
600-212831-28	S-11213301-101320-CN-DP-26-6'	Soluble	Solid	300.0	306225
600-212831-29	S-11213301-101320-CN-DP-26-9'	Soluble	Solid	300.0	306225
600-212831-30	S-11213301-101420-CN-DP-27-10'	Soluble	Solid	300.0	306225
600-212831-31	S-11213301-101420-CN-DP-27-13'	Soluble	Solid	300.0	306225
600-212831-32	S-11213301-101420-CN-DP-27-16'	Soluble	Solid	300.0	306225
600-212831-33	S-11213301-101420-CN-DP-28-10'	Soluble	Solid	300.0	306225
600-212831-34	S-11213301-101420-CN-DP-28-13'	Soluble	Solid	300.0	306225
600-212831-35	S-11213301-101420-CN-DP-28-16'	Soluble	Solid	300.0	306225
MB 600-306225/1-A	Method Blank	Soluble	Solid	300.0	306225
LCS 600-306225/2-A	Lab Control Sample	Soluble	Solid	300.0	306225
600-212831-1 MS	S-11213301-101420-CN-DP-29-10'	Soluble	Solid	300.0	306225
600-212831-1 MSD	S-11213301-101420-CN-DP-29-10'	Soluble	Solid	300.0	306225
600-212831-33 MS	S-11213301-101420-CN-DP-28-10'	Soluble	Solid	300.0	306225
600-212831-33 MSD	S-11213301-101420-CN-DP-28-10'	Soluble	Solid	300.0	306225

General Chemistry

Analysis Batch: 305718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-212831-1	S-11213301-101420-CN-DP-29-10'	Total/NA	Solid	2540G	
600-212831-2	S-11213301-101420-CN-DP-29-13'	Total/NA	Solid	2540G	
600-212831-3	S-11213301-101420-CN-DP-29-16'	Total/NA	Solid	2540G	
600-212831-26	S-11213301-101320-CN-DP-25-6'	Total/NA	Solid	2540G	
600-212831-27	S-11213301-101320-CN-DP-25-9'	Total/NA	Solid	2540G	

QC Association Summary

Client: GHD Services Inc. Job ID: 600-212831-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

General Chemistry (Continued)

Analysis Batch: 305718 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-212831-28	S-11213301-101320-CN-DP-26-6'	Total/NA	Solid	2540G	
600-212831-29	S-11213301-101320-CN-DP-26-9'	Total/NA	Solid	2540G	
600-212831-30	S-11213301-101420-CN-DP-27-10'	Total/NA	Solid	2540G	
600-212831-31	S-11213301-101420-CN-DP-27-13'	Total/NA	Solid	2540G	
600-212831-32	S-11213301-101420-CN-DP-27-16'	Total/NA	Solid	2540G	
600-212831-33	S-11213301-101420-CN-DP-28-10'	Total/NA	Solid	2540G	
600-212831-34	S-11213301-101420-CN-DP-28-13'	Total/NA	Solid	2540G	
600-212831-35	S-11213301-101420-CN-DP-28-16'	Total/NA	Solid	2540G	
600-212831-3 DU	S-11213301-101420-CN-DP-29-16'	Total/NA	Solid	2540G	
600-212831-29 DU	S-11213301-101320-CN-DP-26-9'	Total/NA	Solid	2540G	

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-212831-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-101420-CN-DP-29-10' Lab Sample ID: 600-212831-1
Date Collected: 10/14/20 10:55 **Matrix: Solid**
Date Received: 10/19/20 10:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			305718	10/20/20 09:29	HAS	TAL HOU

Client Sample ID: S-11213301-101420-CN-DP-29-10' Lab Sample ID: 600-212831-1
Date Collected: 10/14/20 10:55 **Matrix: Solid**
Date Received: 10/19/20 10:11 **Percent Solids: 82.9**

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	306225	10/27/20 15:14	A1K	TAL HOU
Soluble	Analysis	300.0		100			306267	10/28/20 15:52	DAW	TAL HOU

Client Sample ID: S-11213301-101420-CN-DP-29-13' Lab Sample ID: 600-212831-2
Date Collected: 10/14/20 11:05 **Matrix: Solid**
Date Received: 10/19/20 10:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			305718	10/20/20 09:29	HAS	TAL HOU

Client Sample ID: S-11213301-101420-CN-DP-29-13' Lab Sample ID: 600-212831-2
Date Collected: 10/14/20 11:05 **Matrix: Solid**
Date Received: 10/19/20 10:11 **Percent Solids: 76.8**

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	306225	10/27/20 15:14	A1K	TAL HOU
Soluble	Analysis	300.0		1			306267	10/28/20 16:53	DAW	TAL HOU

Client Sample ID: S-11213301-101420-CN-DP-29-16' Lab Sample ID: 600-212831-3
Date Collected: 10/14/20 11:10 **Matrix: Solid**
Date Received: 10/19/20 10:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			305718	10/20/20 09:29	HAS	TAL HOU

Client Sample ID: S-11213301-101420-CN-DP-29-16' Lab Sample ID: 600-212831-3
Date Collected: 10/14/20 11:10 **Matrix: Solid**
Date Received: 10/19/20 10:11 **Percent Solids: 82.0**

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	306225	10/27/20 15:14	A1K	TAL HOU
Soluble	Analysis	300.0		5			306267	10/28/20 17:13	DAW	TAL HOU

Client Sample ID: S-11213301-101320-CN-DP-25-6' Lab Sample ID: 600-212831-26
Date Collected: 10/13/20 12:15 **Matrix: Solid**
Date Received: 10/19/20 10:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			305718	10/20/20 09:29	HAS	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-212831-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-101320-CN-DP-25-6' **Lab Sample ID: 600-212831-26**
Date Collected: 10/13/20 12:15 **Matrix: Solid**
Date Received: 10/19/20 10:11 **Percent Solids: 84.6**

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	306225	10/27/20 15:14	A1K	TAL HOU
Soluble	Analysis	300.0		5			306267	10/28/20 17:34	DAW	TAL HOU

Client Sample ID: S-11213301-101320-CN-DP-25-9' **Lab Sample ID: 600-212831-27**
Date Collected: 10/13/20 12:20 **Matrix: Solid**
Date Received: 10/19/20 10:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			305718	10/20/20 09:29	HAS	TAL HOU

Client Sample ID: S-11213301-101320-CN-DP-25-9' **Lab Sample ID: 600-212831-27**
Date Collected: 10/13/20 12:20 **Matrix: Solid**
Date Received: 10/19/20 10:11 **Percent Solids: 78.8**

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	306225	10/27/20 15:14	A1K	TAL HOU
Soluble	Analysis	300.0		50			306267	10/28/20 17:54	DAW	TAL HOU

Client Sample ID: S-11213301-101320-CN-DP-26-6' **Lab Sample ID: 600-212831-28**
Date Collected: 10/13/20 13:25 **Matrix: Solid**
Date Received: 10/19/20 10:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			305718	10/20/20 09:29	HAS	TAL HOU

Client Sample ID: S-11213301-101320-CN-DP-26-6' **Lab Sample ID: 600-212831-28**
Date Collected: 10/13/20 13:25 **Matrix: Solid**
Date Received: 10/19/20 10:11 **Percent Solids: 83.6**

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	306225	10/27/20 15:14	A1K	TAL HOU
Soluble	Analysis	300.0		100			306267	10/28/20 18:15	DAW	TAL HOU

Client Sample ID: S-11213301-101320-CN-DP-26-9' **Lab Sample ID: 600-212831-29**
Date Collected: 10/13/20 13:30 **Matrix: Solid**
Date Received: 10/19/20 10:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			305718	10/20/20 09:29	HAS	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-212831-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-101320-CN-DP-26-9' Lab Sample ID: 600-212831-29

Date Collected: 10/13/20 13:30 **Matrix: Solid**
Date Received: 10/19/20 10:11 **Percent Solids: 78.5**

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	306225	10/27/20 15:14	A1K	TAL HOU
Soluble	Analysis	300.0		100			306267	10/28/20 19:16	DAW	TAL HOU

Client Sample ID: S-11213301-101420-CN-DP-27-10' Lab Sample ID: 600-212831-30

Date Collected: 10/14/20 10:00 **Matrix: Solid**
Date Received: 10/19/20 10:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			305718	10/20/20 09:29	HAS	TAL HOU

Client Sample ID: S-11213301-101420-CN-DP-27-10' Lab Sample ID: 600-212831-30

Date Collected: 10/14/20 10:00 **Matrix: Solid**
Date Received: 10/19/20 10:11 **Percent Solids: 83.0**

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	306225	10/27/20 15:14	A1K	TAL HOU
Soluble	Analysis	300.0		50			306267	10/28/20 19:36	DAW	TAL HOU

Client Sample ID: S-11213301-101420-CN-DP-27-13' Lab Sample ID: 600-212831-31

Date Collected: 10/14/20 10:05 **Matrix: Solid**
Date Received: 10/19/20 10:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			305718	10/20/20 09:29	HAS	TAL HOU

Client Sample ID: S-11213301-101420-CN-DP-27-13' Lab Sample ID: 600-212831-31

Date Collected: 10/14/20 10:05 **Matrix: Solid**
Date Received: 10/19/20 10:11 **Percent Solids: 77.8**

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	306225	10/27/20 15:14	A1K	TAL HOU
Soluble	Analysis	300.0		100			306267	10/28/20 19:57	DAW	TAL HOU

Client Sample ID: S-11213301-101420-CN-DP-27-16' Lab Sample ID: 600-212831-32

Date Collected: 10/14/20 10:10 **Matrix: Solid**
Date Received: 10/19/20 10:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			305718	10/20/20 09:29	HAS	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-212831-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-101420-CN-DP-27-16' Lab Sample ID: 600-212831-32

Date Collected: 10/14/20 10:10 **Matrix: Solid**
Date Received: 10/19/20 10:11 **Percent Solids: 71.2**

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	306225	10/27/20 15:14	A1K	TAL HOU
Soluble	Analysis	300.0		5			306267	10/28/20 20:17	DAW	TAL HOU

Client Sample ID: S-11213301-101420-CN-DP-28-10' Lab Sample ID: 600-212831-33

Date Collected: 10/14/20 12:50 **Matrix: Solid**
Date Received: 10/19/20 10:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			305718	10/20/20 09:29	HAS	TAL HOU

Client Sample ID: S-11213301-101420-CN-DP-28-10' Lab Sample ID: 600-212831-33

Date Collected: 10/14/20 12:50 **Matrix: Solid**
Date Received: 10/19/20 10:11 **Percent Solids: 69.7**

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	306225	10/27/20 15:14	A1K	TAL HOU
Soluble	Analysis	300.0		100			306267	10/28/20 20:38	DAW	TAL HOU

Client Sample ID: S-11213301-101420-CN-DP-28-13' Lab Sample ID: 600-212831-34

Date Collected: 10/14/20 12:55 **Matrix: Solid**
Date Received: 10/19/20 10:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			305718	10/20/20 09:29	HAS	TAL HOU

Client Sample ID: S-11213301-101420-CN-DP-28-13' Lab Sample ID: 600-212831-34

Date Collected: 10/14/20 12:55 **Matrix: Solid**
Date Received: 10/19/20 10:11 **Percent Solids: 85.5**

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	306225	10/27/20 15:14	A1K	TAL HOU
Soluble	Analysis	300.0		100			306267	10/28/20 21:39	DAW	TAL HOU

Client Sample ID: S-11213301-101420-CN-DP-28-16' Lab Sample ID: 600-212831-35

Date Collected: 10/14/20 13:00 **Matrix: Solid**
Date Received: 10/19/20 10:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			305718	10/20/20 09:29	HAS	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-212831-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-101420-CN-DP-28-16' **Lab Sample ID: 600-212831-35**
Date Collected: 10/14/20 13:00 **Matrix: Solid**
Date Received: 10/19/20 10:11 **Percent Solids: 81.7**

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	306225	10/27/20 15:14	A1K	TAL HOU
Soluble	Analysis	300.0		5			306267	10/28/20 21:59	DAW	TAL HOU

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Accreditation/Certification Summary

Client: GHD Services Inc. Job ID: 600-212831-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Laboratory: Eurofins TestAmerica, Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	20-052-0	08-04-21
Louisiana	NELAP	01967	06-30-21
Oklahoma	State	2020-033	08-31-21
Texas	NELAP	T104704223-20-26	10-31-20
USDA	US Federal Programs	P330-18-00130	04-30-21

Released to Imaging: 6/7/2023 10:53:13 AM
Received by OCD: 6/2/2023 1:09:40 PM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: CN	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-79412-21420.1
Client Contact: Ms. Angela Bown	Phone: 716 818 0224	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page 1 of 4
Company: GHD Services Inc.				Job #:
Address: 2055 Niagara Falls Blvd., Suite 3	Due Date Requested:			
City: Niagara Falls	TAT Requested (days):			
State, Zip: NY, 14304				
Phone:	PO #: Purchase Order Requested			
Email: angela.bown@ghd.com	WO #:			
Project Name: 11213301-08 / Halliburton 2311 S 1st St	Project #: 60012556			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wasteoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D, Moisture	8015D_DRO - (MOD) Diesel Range Organics	8015B_GRO - Gasoline Range Organics	Moisture	Total Number of containers	Special Instructions/Note:
Preservation Code:					X	X	N	N	N		X	
S-11213301-101420-CN-DP-29-10'	10-14-20	1055	G	Solid			X	X	X			
S-11213301-101420-CN-DP-29-13'	↓	1105	↓	Solid			X	X	X			
S-11213301-101420-CN-DP-29-16'	↓	1110	↓	Solid			X	X	X	↓		
				Solid								
				Solid								
				Solid								
				Solid								
				Solid								
				Solid								
				Solid								
				Solid								

600-212831 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				10/19/20 1011	EA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Δ Yes Δ No

Ver: 01/16/2019

Released to Imaging: 6/7/2023 10:53:13 AM
Received by OCD: 6/2/2023 1:09:40 PM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: CN	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-79412-21420.2
Client Contact: Ms. Angela Bown	Phone: 716 919 0274	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page 2 of 4
Company: GHD Services Inc				Job #:
Address: 2055 Niagara Falls Blvd., Suite 3	Due Date Requested:			
City: Niagara Falls	TAT Requested (days):			
State, Zip: NY, 14304				
Phone:	PO #: Purchase Order Requested			
Email: angela.bown@ghd.com	WO #:			
Project Name: 11213301-08 / Halliburton 2311 S 1st St	Project #: 60012556			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D, Moisture	8015D_DRO - (MOD) Diesel Range Organics	8015B_GRO - Gasoline Range Organics	Moisture	Total Number of containers	Special Instructions/Note:
S-11213301-101320-CN-DP-18-5'	10-13-20	0940	G	Solid				✓	✓	✓		
S-11213301-101320-CN-DP-18-10'		0950		Solid								
S-11213301-101320-CN-DP-18-15'		0955		Solid								
S-11213301-101320-CN-DP-18-20'		1000		Solid								
S-11213301-101320-CN-DP-19-5'		1500		Solid								
S-11213301-101320-CN-DP-19-10'		1510		Solid								
S-11213301-101320-CN-DP-19-15'		1525		Solid								
S-11213301-101320-CN-DP-19-20'		1530		Solid								
S-11213301-101320-CN-DP-20-5'		1740		Solid								
S-11213301-101320-CN-DP-20-10'		1746		Solid								
S-11213301-101320-CN-DP-20-15'	✓	1750	✓	Solid				✓	✓	✓		

Possible Hazard Identification
☐ Non Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
			YCRS	10/19/20 1011	ETA
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Δ Yes Δ No

Ver: 01/16/2019

Released to Imaging: 6/7/2023 10:53:13 AM
Received by OCD: 6/2/2023 1:09:40 PM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: CN	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-79412-21420.3
Client Contact: Ms. Angela Bown	Phone: 713 818 0224	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page 3 of 4
Company: GHD Services Inc.				Job #:
Address: 2055 Niagara Falls Blvd., Suite 3	Due Date Requested:	Analysis Requested		Preservation Codes:
City: Niagara Falls	TAT Requested (days):			A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify)
State, Zip: NY, 14304	PO #: Purchase Order Requested			
Phone:	WO #:			Other:
Email: angela.bown@ghd.com	Project #: 60012556			
Project Name: 11213301-08 / Halliburton 2311 S 1st St	SSOW#:			
Site:				

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D_Moisture	8015D_DRO - (MOD) Diesel Range Organics	8015B_GRO - Gasoline Range Organics	Moisture	Total Number of containers	Special Instructions/Note:
S-11213301-101320-CN-DP-20-20'	10-13-20	1755	G	Solid				X	X			
S-11213301-101320-CN-DP-21-5'		1035		Solid				X	X			
S-11213301-101320-CN-DP-21-10'		1100		Solid				X	X			
S-11213301-101320-CN-DP-21-15'		1110		Solid				X	X			
S-11213301-101320-CN-DP-21-20'		1115		Solid				X	X			
S-11213301-101320-CN-DP-22-5'		1630		Solid				X	X			
S-11213301-101320-CN-DP-22-10'		1640		Solid				X	X			
S-11213301-101420-CN-DP-23-5'	10-14-20	0825		Solid				X	X			
S-11213301-101420-CN-DP-23-10'		0830		Solid				X	X			
S-11213301-101420-CN-DP-24-5'		0840		Solid				X	X			
S-11213301-101420-CN-DP-24-10'		0850		Solid				X	X			

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: Date: Time: Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
			YORS	10/19/20 1011	EFA
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

☐ Yes ☐ No

Ver: 01/16/2019

Released to Imaging: 6/7/2023 10:53:13 AM
Received by OCD: 6/2/2023 1:09:40 PM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: CN	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-79412-21420.4
Client Contact: Ms. Angela Bown	Phone: 716 818 0224	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page 4 of 4
Company: GHD Services Inc.				Job #:
Address: 2055 Niagara Falls Blvd., Suite 3	Due Date Requested:			
City: Niagara Falls	TAT Requested (days):			
State, Zip: NY, 14304				
Phone:	PO #: Purchase Order Requested			
Email: angela.bown@ghd.com	WO #:			
Project Name: 11213301.007 Halliburton 2011 S 1st St	Project #: 60012566			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify); Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260_ORGFM_28D_Chlorides	8015D_DRO - (MOD) Diesel Range Organics_Ol Range Organics	8015B_GRO - Gasoline Range Organics	Moisture	Total Number of containers	Special Instructions/Note:
S-11213301-101320-CN-DP-25-6'	10-13-20	1215	G	Solid			X			X		
S-11213301-101320-CN-DP-25-9'	↓	1220					X			X		
S-11213301-101320-CN-DP-26-6'		1325					X			X		
S-11213301-101320-CN-DP-26-9'	↓	1330					X			X		
S-11213301-101420-CN-DP-27-10'	10-14-20	1000					X	X	X	X		
S-11213301-101420-CN-DP-27-13'		1005					X	X	X	X		
S-11213301-101420-CN-DP-27-16'		1010					X	X	X	X		
S-11213301-101420-CN-DP-28-10'		1250					X	X	X	X		
S-11213301-101420-CN-DP-28-13'		1255					X	X	X	X		
S-11213301-101420-CN-DP-28-16'	↓	1300					X	X	X	X		

Possible Hazard Identification
☐ Non Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Deliverable Requested: I, II, III, IV, Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time:	Company:	Received by: YCR	Date/Time: 10/19/20 1011	Company: ETA
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: ☐ Yes ☐ No | Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Upton, Cathy

From: Kudchadkar, Sachin
Sent: Monday, October 19, 2020 12:45 PM
To: Upton, Cathy
Cc: Houston - Sample Administration
Subject: RE: Message from KM_554e

Log in

Sachin G. Kudchadkar

Phone: 713.690.4444 Ext 860114
Direct: 713.358.2004

E-mail: Sachin.Kudchadkar@eurofinset.com

COMMUNICATIONS ALERT: Change of email addresses for all Eurofins TestAmerica staff effective July 9, 2020

Please update my email address Sachin.Kudchadkar@eurofinset.com in your email directory!

www.EurofinsUS.com | www.TestAmericainc.com | Facebook | LinkedIn

From: Upton, Cathy <Cathy.Upton@Eurofinset.com>
Sent: Monday, October 19, 2020 11:55 AM
To: Kudchadkar, Sachin <Sachin.Kudchadkar@Eurofinset.com>
Cc: Houston - Sample Administration <Houston-SampleAdministration@eurofinset.com>
Subject: RE: Message from KM_554e

Does the client want to continue with analysis since it was received out of temp?

Thanks!

Cathy Upton
Sample Receiving

Phone: 713.690.4444, Ext. 860108
Direct: 713-358-2419
Cathy.Upton@eurofinset.com

COMMUNICATIONS ALERT: Change of email addresses for all Eurofins TestAmerica staff effective July 9, 2020

Please update my email address Cathy.Upton@eurofinset.com in your email directory!

From: Kudchadkar, Sachin <Sachin.Kudchadkar@Eurofinset.com>
Sent: Monday, October 19, 2020 11:53 AM
To: Upton, Cathy <Cathy.Upton@Eurofinset.com>

Upton, Cathy

From: Kudchadkar, Sachin
Sent: Monday, October 19, 2020 2:45 PM
To: Houston - Sample Administration
Subject: FW: Message from KM_554e

Sachin G. Kudchadkar

Phone: 713.690.4444 Ext 860114
Direct: 713.358.2004

E-mail: Sachin.Kudchadkar@eurofinset.com

COMMUNICATIONS ALERT: Change of email addresses for all Eurofins TestAmerica staff effective July 9, 2020

Please update my email address Sachin.Kudchadkar@eurofinset.com in your email directory!

www.EurofinsUS.com | www.TestAmericainc.com | Facebook | LinkedIn

From: Christine Mathews <Christine.Mathews@ghd.com>
Sent: Monday, October 19, 2020 2:03 PM
To: Kudchadkar, Sachin <Sachin.Kudchadkar@Eurofinset.com>; Angela Bown <Angela.Bown@ghd.com>; Daniel Wascom <Daniel.Wascom@ghd.com>
Cc: Debbie Brennan <Deborah.Brennan@ghd.com>
Subject: RE: Message from KM_554e

EXTERNAL EMAIL*

Sachin,

Please run the chloride samples only.

Do you all have a courier services or a location in or near Artesia or Las Cruces NM or possibly in El Paso TX?

Also, I know it isn't your issue directly, but I will be filing a claim with Fedex related to this shipment. I'm letting you know since the tracking numbers are associated with your account. These coolers were shipped priority overnight and arrived four days late. FedEx is not offering refunds due to the pandemic and essentially said sorry, but there's nothing we can do.

A warning to GHD and Test America/Eurofins.

'20 OCT 19 10:1

Loc: 300
212831

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Eurofins TestAmerica Houston

Sample Receipt Checklist

Date/Time Received: _____

JOB NUMBER: _____ CLIENT: GHA

UNPACKED BY: YR CARRIER/DRIVER: FedEx

Custody Seal Present: ☐YES ☒NO Number of Coolers Received: 2

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
2203	Y / N	Y / N	11.4	680	0.1	11.5
2188	Y / N	Y / N	9.9	1	1	10.0
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☐YES ☒NO melted

CM 10/19/20

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☒NO ☐YES

Base samples are>pH 12: ☐YES ☐NO Acid preserved are<pH 2: ☐YES ☐NO

TX1005 samples frozen upon receipt: ☐ YES DATE & TIME PUT IN FREEZER: _____

pH paper Lot #_____ VOA headspace acceptable (5-6mm): ☐YES ☐NO ☒NA

Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	☒YES	☐NO

COMMENTS:

10/19/20

HS-SA-WI-013 Rev. 4A; 08/26/2019

Login Sample Receipt Checklist

Client: GHD Services Inc. Job Number: 600-212831-1

Login Number: 212831 **List Source: Eurofins TestAmerica, Houston**
List Number: 1
Creator: Rubio, Yuri

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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.	False	Water present in cooler; indicates evidence of melted ice.
Cooler Temperature is acceptable.	False	Refer to Job Narrative for details.
Cooler Temperature is recorded.	True	11.5,10.0
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	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

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Certificate of Analysis Summary 676190

GHD-Albuquerque, NM, Albuquerque, NM

Project Name: Artesia Phase II

Project Id: 11213301
Contact: Christine Mathews
Project Location:

Date Received in Lab: Tue 10.27.2020 13:00
Report Date: 10.30.2020 16:05
Project Manager: Sachin Kudchadkar

Analysis Requested													
	Lab Id:	676190-001		676190-002		676190-003		676190-004		676190-005		676190-006	
	Field Id:	S-11213301-102720-CN		S-11213301-102720-CN		S-11213301-102620-CN		S-11213301-102620-CN		S-11213301-102620-CN		S-11213301-102620-CN	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	10.27.2020 09:40		10.27.2020 09:45		10.26.2020 13:40		10.26.2020 13:45		10.26.2020 13:50		10.26.2020 13:55	
Percent Moisture SUB: T104704400-20-21	***Extracted:***												
	Analyzed:	10.29.2020 14:50		10.29.2020 14:50		10.29.2020 14:50		10.29.2020 14:50		10.29.2020 14:50		10.29.2020 14:50	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		26.2		42.0		19.5		20.1		22.4		22.6	
TPH By SW8015 Mod	***Extracted:***	10.27.2020 17:09		10.27.2020 17:09		10.27.2020 17:09		10.27.2020 17:09		10.27.2020 17:09		10.27.2020 17:09	
	Analyzed:	10.28.2020 02:11		10.28.2020 02:31		10.28.2020 02:51		10.28.2020 03:30		10.28.2020 03:50		10.28.2020 04:10	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		ND	67.7	ND	86.1	ND	62.3	ND	62.7	ND	64.8	ND	64.8
Diesel Range Organics (DRO)		ND	67.7	ND	86.1	ND	62.3	82.2	62.7	ND	64.8	ND	64.8
Motor Oil Range Hydrocarbons (MRO)		ND	67.7	ND	86.1	ND	62.3	ND	62.7	ND	64.8	ND	64.8
Total TPH		ND	67.7	ND	86.1	ND	62.3	82.2	62.7	ND	64.8	ND	64.8

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

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Certificate of Analysis Summary 676190

GHD-Albuquerque, NM, Albuquerque, NM

Project Name: Artesia Phase II

Project Id: 11213301
Contact: Christine Mathews
Project Location:

Date Received in Lab: Tue 10.27.2020 13:00
Report Date: 10.30.2020 16:05
Project Manager: Sachin Kudchadkar

Analysis Requested													
	Lab Id:	676190-007		676190-008		676190-009		676190-010		676190-011		676190-012	
	Field Id:	S-11213301-102720-CN		S-11213301-102720-CN		S-11213301-102720-CN		S-11213301-102720-CN		S-11213301-102720-CN		S-11213301-102720-CN	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	10.27.2020 08:50		10.27.2020 08:55		10.27.2020 10:10		10.27.2020 10:15		10.27.2020 10:40		10.27.2020 10:45	
Percent Moisture	***Extracted:***												
SUB: T104704400-20-21	***Analyzed:***	10.29.2020 14:50		10.29.2020 14:50		10.29.2020 14:50		10.29.2020 14:50		10.29.2020 14:50		10.29.2020 14:50	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		15.0		24.7		15.3		29.3		15.2		25.3	
TPH By SW8015 Mod	***Extracted:***	10.27.2020 17:09		10.27.2020 17:09		10.27.2020 17:09		10.27.2020 17:09		10.27.2020 17:09		10.27.2020 17:09	
	Analyzed:	10.28.2020 04:30		10.28.2020 04:50		10.28.2020 05:10		10.28.2020 05:29		10.28.2020 05:49		10.28.2020 06:09	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		ND	58.8	ND	66.3	ND	59.2	ND	70.3	ND	59.1	ND	67.2
Diesel Range Organics (DRO)		ND	58.8	ND	66.3	ND	59.2	ND	70.3	ND	59.1	ND	67.2
Motor Oil Range Hydrocarbons (MRO)		ND	58.8	ND	66.3	ND	59.2	ND	70.3	ND	59.1	ND	67.2
Total TPH		ND	58.8	ND	66.3	ND	59.2	ND	70.3	ND	59.1	ND	67.2

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Certificate of Analysis Summary 676190

GHD-Albuquerque, NM, Albuquerque, NM

Project Name: Artesia Phase II

Project Id: 11213301
Contact: Christine Mathews
Project Location:

Date Received in Lab: Tue 10.27.2020 13:00
Report Date: 10.30.2020 16:05
Project Manager: Sachin Kudchadkar

Analysis Requested													
	Lab Id:	676190-013		676190-014		676190-015		676190-016		676190-017		676190-018	
	Field Id:	S-11213301-102720-CN		S-11213301-102720-CN		S-11213301-102720-CN		S-11213301-102620-CN		S-11213301-102620-CN		S-11213301-102620-CN	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	10.27.2020 08:15		10.27.2020 08:30		10.27.2020 08:35		10.26.2020 17:20		10.26.2020 17:25		10.26.2020 17:30	
Percent Moisture SUB: T104704400-20-21	***Extracted:***												
	Analyzed:	10.29.2020 14:50		10.29.2020 14:50		10.29.2020 14:50		10.29.2020 14:50		10.29.2020 14:50		10.29.2020 14:50	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		19.0		19.1		25.8		42.6		20.7		18.4	
TPH By SW8015 Mod	***Extracted:***	10.27.2020 17:09		10.28.2020 13:31		10.28.2020 13:31		10.28.2020 13:31		10.28.2020 13:31		10.28.2020 13:31	
	Analyzed:	10.28.2020 06:29		10.28.2020 16:24		10.28.2020 17:29		10.28.2020 17:49		10.28.2020 18:09		10.28.2020 18:30	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		ND	62.1	ND	61.5	ND	67.4	ND	87.0	ND	62.8	ND	61.6
Diesel Range Organics (DRO)		ND	62.1	ND	61.5	ND	67.4	ND	87.0	ND	62.8	ND	61.6
Motor Oil Range Hydrocarbons (MRO)		ND	62.1	ND	61.5	ND	67.4	ND	87.0	ND	62.8	ND	61.6
Total TPH		ND	62.1	ND	61.5	ND	67.4	ND	87.0	ND	62.8	ND	61.6

BRL - Below Reporting Limit

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Certificate of Analysis Summary 676190

GHD-Albuquerque, NM, Albuquerque, NM

Project Name: Artesia Phase II

Project Id: 11213301
Contact: Christine Mathews
Project Location:

Date Received in Lab: Tue 10.27.2020 13:00
Report Date: 10.30.2020 16:05
Project Manager: Sachin Kudchadkar

Analysis Requested													
	Lab Id:	676190-019		676190-020		676190-021		676190-022		676190-023		676190-024	
	Field Id:	S-11213301-102620-CN		S-11213301-102620-CN		S-11213301-102620-CN		S-11213301-102620-CN		S-11213301-102620-CN		S-11213301-102620-CN	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	10.26.2020 17:00		10.26.2020 17:05		10.26.2020 15:30		10.26.2020 15:35		10.26.2020 15:40		10.26.2020 15:45	
Percent Moisture	***Extracted:***												
SUB: T104704400-20-21	***Analyzed:***	10.29.2020 14:50		10.29.2020 14:50		10.29.2020 14:50		10.29.2020 14:50		10.29.2020 14:50		10.29.2020 14:50	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		45.2		27.8		17.5		20.4		22.3		23.2	
TPH By SW8015 Mod	***Extracted:***	10.28.2020 13:31		10.28.2020 13:31		10.28.2020 13:31		10.28.2020 13:31		10.28.2020 13:04		10.28.2020 13:04	
	Analyzed:	10.28.2020 18:50		10.28.2020 19:11		10.28.2020 19:31		10.28.2020 19:52		10.28.2020 17:29		10.28.2020 17:49	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		ND	90.9	ND	69.5	ND	60.7	158	62.6	ND	64.7	ND	65.2
Diesel Range Organics (DRO)		ND	90.9	ND	69.5	ND	60.7	166	62.6	ND	64.7	ND	65.2
Motor Oil Range Hydrocarbons (MRO)		ND	90.9	ND	69.5	ND	60.7	ND	62.6	ND	64.7	ND	65.2
Total TPH		ND	90.9	ND	69.5	ND	60.7	324	62.6	ND	64.7	ND	65.2

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Certificate of Analysis Summary 676190

GHD-Albuquerque, NM, Albuquerque, NM

Project Name: Artesia Phase II

Project Id: 11213301
Contact: Christine Mathews
Project Location:

Date Received in Lab: Tue 10.27.2020 13:00
Report Date: 10.30.2020 16:05
Project Manager: Sachin Kudchadkar

Analysis Requested													
	Lab Id:	676190-025		676190-026		676190-027		676190-028		676190-029		676190-030	
	Field Id:	S-11213301-102620-CN		S-11213301-102620-CN		S-11213301-102620-CN		S-11213301-102620-CN		S-11213301-102720-CN		S-11213301-102720-CN	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	10.26.2020 14:35		10.26.2020 14:40		10.26.2020 14:45		10.26.2020 14:50		10.27.2020 09:30		10.27.2020 09:35	
Percent Moisture SUB: T104704400-20-21	***Extracted:***												
	Analyzed:	10.29.2020 14:50		10.29.2020 14:50		10.29.2020 14:50		10.29.2020 14:50		10.29.2020 14:50		10.29.2020 14:50	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		19.4		20.4		26.4		25.0		16.9		24.3	
TPH By SW8015 Mod	***Extracted:***	10.28.2020 13:04		10.28.2020 13:04		10.28.2020 13:04		10.28.2020 13:04		10.28.2020 13:04		10.28.2020 13:04	
	Analyzed:	10.28.2020 18:09		10.28.2020 18:30		10.28.2020 18:50		10.28.2020 19:11		10.28.2020 19:31		10.28.2020 19:52	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		ND	62.1	67.6	62.7	ND	67.8	ND	66.8	ND	59.9	ND	66.0
Diesel Range Organics (DRO)		ND	62.1	82.4	62.7	ND	67.8	ND	66.8	ND	59.9	128	66.0
Motor Oil Range Hydrocarbons (MRO)		ND	62.1	ND	62.7	ND	67.8	ND	66.8	ND	59.9	ND	66.0
Total TPH		ND	62.1	150	62.7	ND	67.8	ND	66.8	ND	59.9	128	66.0

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Certificate of Analysis Summary 676190

GHD-Albuquerque, NM, Albuquerque, NM

Project Name: Artesia Phase II

Project Id: 11213301
Contact: Christine Mathews
Project Location:

Date Received in Lab: Tue 10.27.2020 13:00
Report Date: 10.30.2020 16:05
Project Manager: Sachin Kudchadkar

Analysis Requested								
	Lab Id:	676190-031						
	Field Id:	S-11213301-102620-CN						
	Depth:							
	Matrix:	SOIL						
	Sampled:	10.26.2020 17:30						
Percent Moisture SUB: T104704400-20-21	***Extracted:***							
	Analyzed:	10.29.2020 14:50						
	Units/RL:	%	RL					
Percent Moisture		16.2						
TPH By SW8015 Mod	***Extracted:***	10.28.2020 13:04						
	Analyzed:	10.28.2020 16:24						
	Units/RL:	mg/kg	RL					
Gasoline Range Hydrocarbons (GRO)		ND	59.6					
Diesel Range Organics (DRO)		ND	59.6					
Motor Oil Range Hydrocarbons (MRO)		ND	59.6					
Total TPH		ND	59.6					

BRL - Below Reporting Limit

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Analytical Report 676190

for

GHD-Albuquerque, NM

Project Manager: Christine Mathews

Artesia Phase II

11213301

10.30.2020

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

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10.30.2020

Project Manager: **Christine Mathews**
GHD-Albuquerque, NM
6121 Indian School Rd. NE Suite 200

Albuquerque, NM 87110

Reference: Eurofins Xenco, LLC Report No(s): **676190**
Artesia Phase II
Project Address:

Christine Mathews:

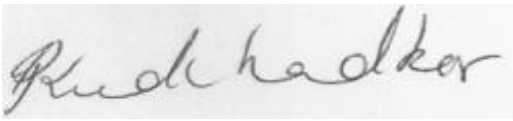
We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 676190. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 676190 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,



Sachin Kudchadkar
Project Manager

A Small Business and Minority Company

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Sample Cross Reference 676190

GHD-Albuquerque, NM, Albuquerque, NM

Artesia Phase II

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
S-11213301-102720-CN-DP-20R-15'	S	10.27.2020 09:40		676190-001
S-11213301-102720-CN-DP-20R-20'	S	10.27.2020 09:45		676190-002
S-11213301-102620-CN-DP-21R-5'	S	10.26.2020 13:40		676190-003
S-11213301-102620-CN-DP-21R-10'	S	10.26.2020 13:45		676190-004
S-11213301-102620-CN-DP-21R-15'	S	10.26.2020 13:50		676190-005
S-11213301-102620-CN-DP-21R-20'	S	10.26.2020 13:55		676190-006
S-11213301-102720-CN-DP-22R-5'	S	10.27.2020 08:50		676190-007
S-11213301-102720-CN-DP-22R-10'	S	10.27.2020 08:55		676190-008
S-11213301-102720-CN-DP-23R-5'	S	10.27.2020 10:10		676190-009
S-11213301-102720-CN-DP-23R-10'	S	10.27.2020 10:15		676190-010
S-11213301-102720-CN-DP-24R-5'	S	10.27.2020 10:40		676190-011
S-11213301-102720-CN-DP-24R-10'	S	10.27.2020 10:45		676190-012
S-11213301-102720-CN-DP-27R-10'	S	10.27.2020 08:15		676190-013
S-11213301-102720-CN-DP-27R-13'	S	10.27.2020 08:30		676190-014
S-11213301-102720-CN-DP-27R-16'	S	10.27.2020 08:35		676190-015
S-11213301-102620-CN-DP-28R-10'	S	10.26.2020 17:20		676190-016
S-11213301-102620-CN-DP-28R-13'	S	10.26.2020 17:25		676190-017
S-11213301-102620-CN-DP-28R-16'	S	10.26.2020 17:30		676190-018
S-11213301-102620-CN-DP-29R-10'	S	10.26.2020 17:00		676190-019
S-11213301-102620-CN-DP-29R-12'	S	10.26.2020 17:05		676190-020
S-11213301-102620-CN-DP-18R-5'	S	10.26.2020 15:30		676190-021
S-11213301-102620-CN-DP-18R-10'	S	10.26.2020 15:35		676190-022
S-11213301-102620-CN-DP-18R-15'	S	10.26.2020 15:40		676190-023
S-11213301-102620-CN-DP-18R-20'	S	10.26.2020 15:45		676190-024
S-11213301-102620-CN-DP-19R-5'	S	10.26.2020 14:35		676190-025
S-11213301-102620-CN-DP-19R-10'	S	10.26.2020 14:40		676190-026
S-11213301-102620-CN-DP-19R-15'	S	10.26.2020 14:45		676190-027
S-11213301-102620-CN-DP-19R-20'	S	10.26.2020 14:50		676190-028
S-11213301-102720-CN-DP-20R-5'	S	10.27.2020 09:30		676190-029
S-11213301-102720-CN-DP-20R-10'	S	10.27.2020 09:35		676190-030
S-11213301-102620-CN-DP-29R-16'	S	10.26.2020 17:30		676190-031

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CASE NARRATIVE

Client Name: GHD-Albuquerque, NM

Project Name: Artesia Phase II

Project ID: *11213301*
Work Order Number(s): *676190*

Report Date: *10.30.2020*
Date Received: *10.27.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

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Artesia Phase II

Sample Id:	**S-11213301-102720-CN-DP-20R-15'**	Matrix:	Soil	Date Received:	10.27.2020 13:00
Lab Sample Id:	676190-001	Date Collected:	10.27.2020 09:40		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	10.27.2020 17:09	% Moisture:	26.19
Seq Number:	3140770			Basis:	Dry Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	ND	67.7	mg/kg	10.28.2020 02:11	U	1
Diesel Range Organics (DRO)	C10C28DRO	ND	67.7	mg/kg	10.28.2020 02:11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	ND	67.7	mg/kg	10.28.2020 02:11	U	1
Total TPH	PHC635	ND	67.7	mg/kg	10.28.2020 02:11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	10.28.2020 02:11	
o-Terphenyl	84-15-1	116	%	70-135	10.28.2020 02:11	

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Artesia Phase II

Sample Id:	**S-11213301-102720-CN-DP-20R-20'**	Matrix:	Soil	Date Received:	10.27.2020 13:00
Lab Sample Id:	676190-002	Date Collected:	10.27.2020 09:45		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	10.27.2020 17:09	% Moisture:	41.97
Seq Number:	3140770			Basis:	Dry Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	ND	86.1	mg/kg	10.28.2020 02:31	U	1
Diesel Range Organics (DRO)	C10C28DRO	ND	86.1	mg/kg	10.28.2020 02:31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	ND	86.1	mg/kg	10.28.2020 02:31	U	1
Total TPH	PHC635	ND	86.1	mg/kg	10.28.2020 02:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	119	%	70-135	10.28.2020 02:31	
o-Terphenyl	84-15-1	119	%	70-135	10.28.2020 02:31	

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Artesia Phase II

Sample Id:	**S-11213301-102620-CN-DP-21R-5'**	Matrix:	Soil	Date Received:	10.27.2020 13:00
Lab Sample Id:	676190-003	Date Collected:	10.26.2020 13:40		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	10.27.2020 17:09	% Moisture:	19.49
Seq Number:	3140770			Basis:	Dry Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	ND	62.3	mg/kg	10.28.2020 02:51	U	1
Diesel Range Organics (DRO)	C10C28DRO	ND	62.3	mg/kg	10.28.2020 02:51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	ND	62.3	mg/kg	10.28.2020 02:51	U	1
Total TPH	PHC635	ND	62.3	mg/kg	10.28.2020 02:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	10.28.2020 02:51	
o-Terphenyl	84-15-1	115	%	70-135	10.28.2020 02:51	

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Artesia Phase II

Sample Id:	**S-11213301-102620-CN-DP-21R-10'**	Matrix:	Soil	Date Received:	10.27.2020 13:00
Lab Sample Id:	676190-004	Date Collected:	10.26.2020 13:45		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	10.27.2020 17:09	% Moisture:	20.07
Seq Number:	3140770			Basis:	Dry Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	ND	62.7	mg/kg	10.28.2020 03:30	U	1
Diesel Range Organics (DRO)	C10C28DRO	**82.2**	62.7	mg/kg	10.28.2020 03:30		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	ND	62.7	mg/kg	10.28.2020 03:30	U	1
Total TPH	PHC635	**82.2**	62.7	mg/kg	10.28.2020 03:30		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	120	%	70-135	10.28.2020 03:30	
o-Terphenyl	84-15-1	117	%	70-135	10.28.2020 03:30	

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Artesia Phase II

Sample Id:	**S-11213301-102620-CN-DP-21R-15'**	Matrix:	Soil	Date Received:	10.27.2020 13:00
Lab Sample Id:	676190-005	Date Collected:	10.26.2020 13:50		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	10.27.2020 17:09	% Moisture:	22.42
Seq Number:	3140770			Basis:	Dry Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	ND	64.8	mg/kg	10.28.2020 03:50	U	1
Diesel Range Organics (DRO)	C10C28DRO	ND	64.8	mg/kg	10.28.2020 03:50	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	ND	64.8	mg/kg	10.28.2020 03:50	U	1
Total TPH	PHC635	ND	64.8	mg/kg	10.28.2020 03:50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	10.28.2020 03:50	
o-Terphenyl	84-15-1	121	%	70-135	10.28.2020 03:50	

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Artesia Phase II

Sample Id:	**S-11213301-102620-CN-DP-21R-20'**	Matrix:	Soil	Date Received:	10.27.2020 13:00
Lab Sample Id:	676190-006	Date Collected:	10.26.2020 13:55		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	10.27.2020 17:09	% Moisture:	22.58
Seq Number:	3140770			Basis:	Dry Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	ND	64.8	mg/kg	10.28.2020 04:10	U	1
Diesel Range Organics (DRO)	C10C28DRO	ND	64.8	mg/kg	10.28.2020 04:10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	ND	64.8	mg/kg	10.28.2020 04:10	U	1
Total TPH	PHC635	ND	64.8	mg/kg	10.28.2020 04:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	10.28.2020 04:10	
o-Terphenyl	84-15-1	117	%	70-135	10.28.2020 04:10	

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Artesia Phase II

Sample Id:	**S-11213301-102720-CN-DP-22R-5'**	Matrix:	Soil	Date Received:	10.27.2020 13:00
Lab Sample Id:	676190-007	Date Collected:	10.27.2020 08:50		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	10.27.2020 17:09	% Moisture:	15.04
Seq Number:	3140770			Basis:	Dry Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	ND	58.8	mg/kg	10.28.2020 04:30	U	1
Diesel Range Organics (DRO)	C10C28DRO	ND	58.8	mg/kg	10.28.2020 04:30	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	ND	58.8	mg/kg	10.28.2020 04:30	U	1
Total TPH	PHC635	ND	58.8	mg/kg	10.28.2020 04:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	10.28.2020 04:30	
o-Terphenyl	84-15-1	113	%	70-135	10.28.2020 04:30	

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Artesia Phase II

Sample Id:	**S-11213301-102720-CN-DP-22R-10'**	Matrix:	Soil	Date Received:	10.27.2020 13:00
Lab Sample Id:	676190-008	Date Collected:	10.27.2020 08:55		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	10.27.2020 17:09	% Moisture:	24.69
Seq Number:	3140770			Basis:	Dry Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	ND	66.3	mg/kg	10.28.2020 04:50	U	1
Diesel Range Organics (DRO)	C10C28DRO	ND	66.3	mg/kg	10.28.2020 04:50	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	ND	66.3	mg/kg	10.28.2020 04:50	U	1
Total TPH	PHC635	ND	66.3	mg/kg	10.28.2020 04:50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	10.28.2020 04:50	
o-Terphenyl	84-15-1	116	%	70-135	10.28.2020 04:50	

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Artesia Phase II

Sample Id:	**S-11213301-102720-CN-DP-23R-5'**	Matrix:	Soil	Date Received:	10.27.2020 13:00
Lab Sample Id:	676190-009	Date Collected:	10.27.2020 10:10		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	10.27.2020 17:09	% Moisture:	15.28
Seq Number:	3140770			Basis:	Dry Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	ND	59.2	mg/kg	10.28.2020 05:10	U	1
Diesel Range Organics (DRO)	C10C28DRO	ND	59.2	mg/kg	10.28.2020 05:10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	ND	59.2	mg/kg	10.28.2020 05:10	U	1
Total TPH	PHC635	ND	59.2	mg/kg	10.28.2020 05:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	10.28.2020 05:10	
o-Terphenyl	84-15-1	109	%	70-135	10.28.2020 05:10	

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Artesia Phase II

Sample Id:	**S-11213301-102720-CN-DP-23R-10'**	Matrix:	Soil	Date Received:	10.27.2020 13:00
Lab Sample Id:	676190-010	Date Collected:	10.27.2020 10:15		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	10.27.2020 17:09	% Moisture:	29.25
Seq Number:	3140770			Basis:	Dry Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	ND	70.3	mg/kg	10.28.2020 05:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	ND	70.3	mg/kg	10.28.2020 05:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	ND	70.3	mg/kg	10.28.2020 05:29	U	1
Total TPH	PHC635	ND	70.3	mg/kg	10.28.2020 05:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	120	%	70-135	10.28.2020 05:29	
o-Terphenyl	84-15-1	119	%	70-135	10.28.2020 05:29	

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Artesia Phase II

Sample Id:	**S-11213301-102720-CN-DP-24R-5'**	Matrix:	Soil	Date Received:	10.27.2020 13:00
Lab Sample Id:	676190-011	Date Collected:	10.27.2020 10:40		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	10.27.2020 17:09	% Moisture:	15.16
Seq Number:	3140770			Basis:	Dry Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	ND	59.1	mg/kg	10.28.2020 05:49	U	1
Diesel Range Organics (DRO)	C10C28DRO	ND	59.1	mg/kg	10.28.2020 05:49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	ND	59.1	mg/kg	10.28.2020 05:49	U	1
Total TPH	PHC635	ND	59.1	mg/kg	10.28.2020 05:49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	130	%	70-135	10.28.2020 05:49	
o-Terphenyl	84-15-1	128	%	70-135	10.28.2020 05:49	

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Artesia Phase II

Sample Id:	**S-11213301-102720-CN-DP-24R-10'**	Matrix:	Soil	Date Received:	10.27.2020 13:00
Lab Sample Id:	676190-012	Date Collected:	10.27.2020 10:45		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	10.27.2020 17:09	% Moisture:	25.29
Seq Number:	3140770			Basis:	Dry Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	ND	67.2	mg/kg	10.28.2020 06:09	U	1
Diesel Range Organics (DRO)	C10C28DRO	ND	67.2	mg/kg	10.28.2020 06:09	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	ND	67.2	mg/kg	10.28.2020 06:09	U	1
Total TPH	PHC635	ND	67.2	mg/kg	10.28.2020 06:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	10.28.2020 06:09	
o-Terphenyl	84-15-1	115	%	70-135	10.28.2020 06:09	

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Artesia Phase II

Sample Id:	**S-11213301-102720-CN-DP-27R-10'**	Matrix:	Soil	Date Received:	10.27.2020 13:00
Lab Sample Id:	676190-013	Date Collected:	10.27.2020 08:15		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	10.27.2020 17:09	% Moisture:	19.04
Seq Number:	3140770			Basis:	Dry Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	ND	62.1	mg/kg	10.28.2020 06:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	ND	62.1	mg/kg	10.28.2020 06:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	ND	62.1	mg/kg	10.28.2020 06:29	U	1
Total TPH	PHC635	ND	62.1	mg/kg	10.28.2020 06:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	10.28.2020 06:29	
o-Terphenyl	84-15-1	114	%	70-135	10.28.2020 06:29	

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Artesia Phase II

Sample Id:	**S-11213301-102720-CN-DP-27R-13'**	Matrix:	Soil	Date Received:	10.27.2020 13:00
Lab Sample Id:	676190-014	Date Collected:	10.27.2020 08:30		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	10.28.2020 13:31	% Moisture:	19.07
Seq Number:	3140893			Basis:	Dry Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	ND	61.5	mg/kg	10.28.2020 16:24	U	1
Diesel Range Organics (DRO)	C10C28DRO	ND	61.5	mg/kg	10.28.2020 16:24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	ND	61.5	mg/kg	10.28.2020 16:24	U	1
Total TPH	PHC635	ND	61.5	mg/kg	10.28.2020 16:24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	123	%	70-135	10.28.2020 16:24	
o-Terphenyl	84-15-1	123	%	70-135	10.28.2020 16:24	

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Artesia Phase II

Sample Id:	**S-11213301-102720-CN-DP-27R-16'**	Matrix:	Soil	Date Received:	10.27.2020 13:00
Lab Sample Id:	676190-015	Date Collected:	10.27.2020 08:35		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	10.28.2020 13:31	% Moisture:	25.82
Seq Number:	3140893			Basis:	Dry Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	ND	67.4	mg/kg	10.28.2020 17:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	ND	67.4	mg/kg	10.28.2020 17:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	ND	67.4	mg/kg	10.28.2020 17:29	U	1
Total TPH	PHC635	ND	67.4	mg/kg	10.28.2020 17:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	10.28.2020 17:29	
o-Terphenyl	84-15-1	116	%	70-135	10.28.2020 17:29	

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Artesia Phase II

Sample Id:	**S-11213301-102620-CN-DP-28R-10'**	Matrix:	Soil	Date Received:	10.27.2020 13:00
Lab Sample Id:	676190-016	Date Collected:	10.26.2020 17:20		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	10.28.2020 13:31	% Moisture:	42.56
Seq Number:	3140893			Basis:	Dry Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	ND	87.0	mg/kg	10.28.2020 17:49	U	1
Diesel Range Organics (DRO)	C10C28DRO	ND	87.0	mg/kg	10.28.2020 17:49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	ND	87.0	mg/kg	10.28.2020 17:49	U	1
Total TPH	PHC635	ND	87.0	mg/kg	10.28.2020 17:49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	10.28.2020 17:49	
o-Terphenyl	84-15-1	116	%	70-135	10.28.2020 17:49	

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Artesia Phase II

Sample Id:	**S-11213301-102620-CN-DP-28R-13'**	Matrix:	Soil	Date Received:	10.27.2020 13:00
Lab Sample Id:	676190-017	Date Collected:	10.26.2020 17:25		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	10.28.2020 13:31	% Moisture:	20.65
Seq Number:	3140893			Basis:	Dry Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	ND	62.8	mg/kg	10.28.2020 18:09	U	1
Diesel Range Organics (DRO)	C10C28DRO	ND	62.8	mg/kg	10.28.2020 18:09	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	ND	62.8	mg/kg	10.28.2020 18:09	U	1
Total TPH	PHC635	ND	62.8	mg/kg	10.28.2020 18:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	118	%	70-135	10.28.2020 18:09	
o-Terphenyl	84-15-1	120	%	70-135	10.28.2020 18:09	

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Artesia Phase II

Sample Id:	**S-11213301-102620-CN-DP-28R-16'**	Matrix:	Soil	Date Received:	10.27.2020 13:00
Lab Sample Id:	676190-018	Date Collected:	10.26.2020 17:30		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	10.28.2020 13:31	% Moisture:	18.42
Seq Number:	3140893			Basis:	Dry Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	ND	61.6	mg/kg	10.28.2020 18:30	U	1
Diesel Range Organics (DRO)	C10C28DRO	ND	61.6	mg/kg	10.28.2020 18:30	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	ND	61.6	mg/kg	10.28.2020 18:30	U	1
Total TPH	PHC635	ND	61.6	mg/kg	10.28.2020 18:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	124	%	70-135	10.28.2020 18:30	
o-Terphenyl	84-15-1	120	%	70-135	10.28.2020 18:30	

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Artesia Phase II

Sample Id:	**S-11213301-102620-CN-DP-29R-10'**	Matrix:	Soil	Date Received:	10.27.2020 13:00
Lab Sample Id:	676190-019	Date Collected:	10.26.2020 17:00		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	10.28.2020 13:31	% Moisture:	45.24
Seq Number:	3140893			Basis:	Dry Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	ND	90.9	mg/kg	10.28.2020 18:50	U	1
Diesel Range Organics (DRO)	C10C28DRO	ND	90.9	mg/kg	10.28.2020 18:50	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	ND	90.9	mg/kg	10.28.2020 18:50	U	1
Total TPH	PHC635	ND	90.9	mg/kg	10.28.2020 18:50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	126	%	70-135	10.28.2020 18:50	
o-Terphenyl	84-15-1	124	%	70-135	10.28.2020 18:50	

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Artesia Phase II

Sample Id:	**S-11213301-102620-CN-DP-29R-12'**	Matrix:	Soil	Date Received:	10.27.2020 13:00
Lab Sample Id:	676190-020	Date Collected:	10.26.2020 17:05		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	10.28.2020 13:31	% Moisture:	27.78
Seq Number:	3140893			Basis:	Dry Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	ND	69.5	mg/kg	10.28.2020 19:11	U	1
Diesel Range Organics (DRO)	C10C28DRO	ND	69.5	mg/kg	10.28.2020 19:11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	ND	69.5	mg/kg	10.28.2020 19:11	U	1
Total TPH	PHC635	ND	69.5	mg/kg	10.28.2020 19:11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	126	%	70-135	10.28.2020 19:11	
o-Terphenyl	84-15-1	121	%	70-135	10.28.2020 19:11	

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Artesia Phase II

Sample Id:	**S-11213301-102620-CN-DP-18R-5'**	Matrix:	Soil	Date Received:	10.27.2020 13:00
Lab Sample Id:	676190-021	Date Collected:	10.26.2020 15:30		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	10.28.2020 13:31	% Moisture:	17.5
Seq Number:	3140893			Basis:	Dry Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	ND	60.7	mg/kg	10.28.2020 19:31	U	1
Diesel Range Organics (DRO)	C10C28DRO	ND	60.7	mg/kg	10.28.2020 19:31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	ND	60.7	mg/kg	10.28.2020 19:31	U	1
Total TPH	PHC635	ND	60.7	mg/kg	10.28.2020 19:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	10.28.2020 19:31	
o-Terphenyl	84-15-1	113	%	70-135	10.28.2020 19:31	

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Artesia Phase II

Sample Id:	**S-11213301-102620-CN-DP-18R-10'**	Matrix:	Soil	Date Received:	10.27.2020 13:00
Lab Sample Id:	676190-022	Date Collected:	10.26.2020 15:35		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	10.28.2020 13:31	% Moisture:	20.41
Seq Number:	3140893			Basis:	Dry Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**158**	62.6	mg/kg	10.28.2020 19:52		1
Diesel Range Organics (DRO)	C10C28DRO	**166**	62.6	mg/kg	10.28.2020 19:52		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	ND	62.6	mg/kg	10.28.2020 19:52	U	1
Total TPH	PHC635	**324**	62.6	mg/kg	10.28.2020 19:52		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	133	%	70-135	10.28.2020 19:52	
o-Terphenyl	84-15-1	128	%	70-135	10.28.2020 19:52	

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Artesia Phase II

Sample Id:	**S-11213301-102620-CN-DP-18R-15'**	Matrix:	Soil	Date Received:	10.27.2020 13:00
Lab Sample Id:	676190-023	Date Collected:	10.26.2020 15:40		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	10.28.2020 13:04	% Moisture:	22.32
Seq Number:	3140894			Basis:	Dry Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	ND	64.7	mg/kg	10.28.2020 17:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	ND	64.7	mg/kg	10.28.2020 17:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	ND	64.7	mg/kg	10.28.2020 17:29	U	1
Total TPH	PHC635	ND	64.7	mg/kg	10.28.2020 17:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	10.28.2020 17:29	
o-Terphenyl	84-15-1	109	%	70-135	10.28.2020 17:29	

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Artesia Phase II

Sample Id:	**S-11213301-102620-CN-DP-18R-20'**	Matrix:	Soil	Date Received:	10.27.2020 13:00
Lab Sample Id:	676190-024	Date Collected:	10.26.2020 15:45		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	10.28.2020 13:04	% Moisture:	23.15
Seq Number:	3140894			Basis:	Dry Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	ND	65.2	mg/kg	10.28.2020 17:49	U	1
Diesel Range Organics (DRO)	C10C28DRO	ND	65.2	mg/kg	10.28.2020 17:49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	ND	65.2	mg/kg	10.28.2020 17:49	U	1
Total TPH	PHC635	ND	65.2	mg/kg	10.28.2020 17:49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	10.28.2020 17:49	
o-Terphenyl	84-15-1	113	%	70-135	10.28.2020 17:49	

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Artesia Phase II

Sample Id:	**S-11213301-102620-CN-DP-19R-5'**	Matrix:	Soil	Date Received:	10.27.2020 13:00
Lab Sample Id:	676190-025	Date Collected:	10.26.2020 14:35		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	10.28.2020 13:04	% Moisture:	19.36
Seq Number:	3140894			Basis:	Dry Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	ND	62.1	mg/kg	10.28.2020 18:09	U	1
Diesel Range Organics (DRO)	C10C28DRO	ND	62.1	mg/kg	10.28.2020 18:09	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	ND	62.1	mg/kg	10.28.2020 18:09	U	1
Total TPH	PHC635	ND	62.1	mg/kg	10.28.2020 18:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	10.28.2020 18:09	
o-Terphenyl	84-15-1	107	%	70-135	10.28.2020 18:09	

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Artesia Phase II

Sample Id:	**S-11213301-102620-CN-DP-19R-10'**	Matrix:	Soil	Date Received:	10.27.2020 13:00
Lab Sample Id:	676190-026	Date Collected:	10.26.2020 14:40		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	10.28.2020 13:04	% Moisture:	20.38
Seq Number:	3140894			Basis:	Dry Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**67.6**	62.7	mg/kg	10.28.2020 18:30		1
Diesel Range Organics (DRO)	C10C28DRO	**82.4**	62.7	mg/kg	10.28.2020 18:30		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	ND	62.7	mg/kg	10.28.2020 18:30	U	1
Total TPH	PHC635	**150**	62.7	mg/kg	10.28.2020 18:30		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	10.28.2020 18:30	
o-Terphenyl	84-15-1	106	%	70-135	10.28.2020 18:30	

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Artesia Phase II

Sample Id:	**S-11213301-102620-CN-DP-19R-15'**	Matrix:	Soil	Date Received:	10.27.2020 13:00
Lab Sample Id:	676190-027	Date Collected:	10.26.2020 14:45		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	10.28.2020 13:04	% Moisture:	26.38
Seq Number:	3140894			Basis:	Dry Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	ND	67.8	mg/kg	10.28.2020 18:50	U	1
Diesel Range Organics (DRO)	C10C28DRO	ND	67.8	mg/kg	10.28.2020 18:50	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	ND	67.8	mg/kg	10.28.2020 18:50	U	1
Total TPH	PHC635	ND	67.8	mg/kg	10.28.2020 18:50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	10.28.2020 18:50	
o-Terphenyl	84-15-1	110	%	70-135	10.28.2020 18:50	

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Artesia Phase II

Sample Id:	**S-11213301-102620-CN-DP-19R-20'**	Matrix:	Soil	Date Received:	10.27.2020 13:00
Lab Sample Id:	676190-028	Date Collected:	10.26.2020 14:50		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	10.28.2020 13:04	% Moisture:	24.96
Seq Number:	3140894			Basis:	Dry Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	ND	66.8	mg/kg	10.28.2020 19:11	U	1
Diesel Range Organics (DRO)	C10C28DRO	ND	66.8	mg/kg	10.28.2020 19:11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	ND	66.8	mg/kg	10.28.2020 19:11	U	1
Total TPH	PHC635	ND	66.8	mg/kg	10.28.2020 19:11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	10.28.2020 19:11	
o-Terphenyl	84-15-1	113	%	70-135	10.28.2020 19:11	

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Artesia Phase II

Sample Id:	**S-11213301-102720-CN-DP-20R-5'**	Matrix:	Soil	Date Received:	10.27.2020 13:00
Lab Sample Id:	676190-029	Date Collected:	10.27.2020 09:30		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	10.28.2020 13:04	% Moisture:	16.86
Seq Number:	3140894			Basis:	Dry Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	ND	59.9	mg/kg	10.28.2020 19:31	U	1
Diesel Range Organics (DRO)	C10C28DRO	ND	59.9	mg/kg	10.28.2020 19:31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	ND	59.9	mg/kg	10.28.2020 19:31	U	1
Total TPH	PHC635	ND	59.9	mg/kg	10.28.2020 19:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	10.28.2020 19:31	
o-Terphenyl	84-15-1	105	%	70-135	10.28.2020 19:31	

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Artesia Phase II

Sample Id:	**S-11213301-102720-CN-DP-20R-10'**	Matrix:	Soil	Date Received:	10.27.2020 13:00
Lab Sample Id:	676190-030	Date Collected:	10.27.2020 09:35		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	10.28.2020 13:04	% Moisture:	24.29
Seq Number:	3140894			Basis:	Dry Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	ND	66.0	mg/kg	10.28.2020 19:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	**128**	66.0	mg/kg	10.28.2020 19:52		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	ND	66.0	mg/kg	10.28.2020 19:52	U	1
Total TPH	PHC635	**128**	66.0	mg/kg	10.28.2020 19:52		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	10.28.2020 19:52	
o-Terphenyl	84-15-1	109	%	70-135	10.28.2020 19:52	

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Artesia Phase II

Sample Id:	**S-11213301-102620-CN-DP-29R-16'**	Matrix:	Soil	Date Received:	10.27.2020 13:00
Lab Sample Id:	676190-031	Date Collected:	10.26.2020 17:30		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	10.28.2020 13:04	% Moisture:	16.16
Seq Number:	3140894			Basis:	Dry Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	ND	59.6	mg/kg	10.28.2020 16:24	U	1
Diesel Range Organics (DRO)	C10C28DRO	ND	59.6	mg/kg	10.28.2020 16:24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	ND	59.6	mg/kg	10.28.2020 16:24	U	1
Total TPH	PHC635	ND	59.6	mg/kg	10.28.2020 16:24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	10.28.2020 16:24	
o-Terphenyl	84-15-1	102	%	70-135	10.28.2020 16:24	

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Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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QC Summary 676190

GHD-Albuquerque, NM

Artesia Phase II

Analytical Method: **Percent Moisture**
Seq Number: 3140921 Matrix: Solid
MB Sample Id: 3140921-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Percent Moisture	ND	%	10.29.2020 14:50	

Analytical Method: **Percent Moisture**
Seq Number: 3140924 Matrix: Solid
MB Sample Id: 3140924-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Percent Moisture	ND	%	10.29.2020 14:50	

Analytical Method: **Percent Moisture**
Seq Number: 3140921 Matrix: Soil
Parent Sample Id: 676190-001 MD Sample Id: 676190-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	26.2	26.3	0	20	%	10.29.2020 14:50	

Analytical Method: **Percent Moisture**
Seq Number: 3140921 Matrix: Soil
Parent Sample Id: 676190-011 MD Sample Id: 676190-011 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	15.2	15.1	1	20	%	10.29.2020 14:50	

Analytical Method: **Percent Moisture**
Seq Number: 3140924 Matrix: Soil
Parent Sample Id: 676190-021 MD Sample Id: 676190-021 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	17.5	17.6	1	20	%	10.29.2020 14:50	

Analytical Method: **Percent Moisture**
Seq Number: 3140924 Matrix: Soil
Parent Sample Id: 676190-031 MD Sample Id: 676190-031 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	16.2	14.9	8	20	%	10.29.2020 14:50	

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

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QC Summary 676190

GHD-Albuquerque, NM

Artesia Phase II

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3140770 — Matrix: Solid — Date Prep: 10.27.2020
MB Sample Id: 7714059-1-BLK — LCS Sample Id: 7714059-1-BKS — LCSD Sample Id: 7714059-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	993	99	1130	113	70-135	13	35	mg/kg	10.27.2020 22:32	
Diesel Range Organics (DRO)	<50.0	1000	956	96	1120	112	70-135	16	35	mg/kg	10.27.2020 22:32	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	83		88		131		70-135	%	10.27.2020 22:32
o-Terphenyl	81		74		129		70-135	%	10.27.2020 22:32

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3140894 — Matrix: Solid — Date Prep: 10.28.2020
MB Sample Id: 7714136-1-BLK — LCS Sample Id: 7714136-1-BKS — LCSD Sample Id: 7714136-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1120	112	1070	107	70-135	5	35	mg/kg	10.28.2020 15:43	
Diesel Range Organics (DRO)	<50.0	1000	1350	135	1280	128	70-135	5	35	mg/kg	10.28.2020 15:43	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	131		133		130		70-135	%	10.28.2020 15:43
o-Terphenyl	130		132		125		70-135	%	10.28.2020 15:43

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3140893 — Matrix: Solid — Date Prep: 10.28.2020
MB Sample Id: 7714135-1-BLK — LCS Sample Id: 7714135-1-BKS — LCSD Sample Id: 7714135-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1260	126	1200	120	70-135	5	35	mg/kg	10.28.2020 15:43	
Diesel Range Organics (DRO)	<50.0	1000	1250	125	1260	126	70-135	1	35	mg/kg	10.28.2020 15:43	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	127		128		132		70-135	%	10.28.2020 15:43
o-Terphenyl	106		120		114		70-135	%	10.28.2020 15:43

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3140770 — Matrix: Solid — Date Prep: 10.27.2020
MB Sample Id: 7714059-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	ND	mg/kg	10.27.2020 22:12	

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

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QC Summary 676190

GHD-Albuquerque, NM

Artesia Phase II

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3140894 — Matrix: Solid — Date Prep: 10.28.2020
MB Sample Id: 7714136-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	ND	mg/kg	10.28.2020 15:22	

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3140893 — Matrix: Solid — Date Prep: 10.28.2020
MB Sample Id: 7714135-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	ND	mg/kg	10.28.2020 15:22	

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3140770 — Matrix: Soil — Date Prep: 10.27.2020
Parent Sample Id: 676154-005 — MS Sample Id: 676154-005 S — MSD Sample Id: 676154-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.2	1000	1080	108	944	94	70-135	13	35	mg/kg	10.27.2020 23:32	
Diesel Range Organics (DRO)	<50.2	1000	1260	126	1080	108	70-135	15	35	mg/kg	10.27.2020 23:32	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	97		96		70-135	%	10.27.2020 23:32
o-Terphenyl	114		133		70-135	%	10.27.2020 23:32

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3140894 — Matrix: Soil — Date Prep: 10.28.2020
Parent Sample Id: 676190-031 — MS Sample Id: 676190-031 S — MSD Sample Id: 676190-031 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	739	74	739	74	70-135	0	35	mg/kg	10.28.2020 16:45	
Diesel Range Organics (DRO)	<50.0	1000	811	81	813	81	70-135	0	35	mg/kg	10.28.2020 16:45	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	129		133		70-135	%	10.28.2020 16:45
o-Terphenyl	110		112		70-135	%	10.28.2020 16:45

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

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QC Summary 676190

GHD-Albuquerque, NM

Artesia Phase II

Analytical Method: **TPH By SW8015 Mod** Prep Method: SW8015P

Seq Number: 3140893 Matrix: Soil Date Prep: 10.28.2020

Parent Sample Id: 676190-014 MS Sample Id: 676190-014 S MSD Sample Id: 676190-014 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.2	1000	832	83	814	81	70-135	2	35	mg/kg	10.28.2020 16:45	
Diesel Range Organics (DRO)	<50.2	1000	886	89	855	86	70-135	4	35	mg/kg	10.28.2020 16:45	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	129		132		70-135	%	10.28.2020 16:45
o-Terphenyl	118		110		70-135	%	10.28.2020 16:45

MS/MSD Percent Recovery [D] = 100*(C-A) / B

Relative Percent Difference RPD = 200* | (C-E) / (C+E) |

LCS/LCSD Recovery [D] = 100 * (C) / [B]

Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample

A = Parent Result

C = MS/LCS Result

E = MSD/LCSD Result

MS = Matrix Spike

B = Spike Added

D = MSD/LCSD % Rec

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Chain of Custody

Work Order No: 676190

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Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701 www.xenco.com

Project Manager:	Christine Mathews	Bill to: (if different)	
Company Name:	GHD	Company Name:	
Address:		Address:	
City, State ZIP:		City, State ZIP:	
Phone:	505 269 0088	Email:	Christine.Mathews@ghd.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Artesia Phase II	Turn Around	
Project Number:	11213301	Routine ☐	
Project Location		Rush: 5-Day	
Sampler's Name:	Charles Nalley	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	1.2 / 1.0	Thermometer ID	T. NM-007
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Total Containers:	31

ANALYSIS REQUEST

Full Range TPH, MRO, GRO, DRO

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Sample Comments
	S-11213301-102720-CN-DP-20R-15'	S	10-27-20	0940			
	S-11213301-102720-CN-DP-20R-20'		10-27-20	0946			
	S-11213301-102620-CN-DP-21R-5'		10-26-20	1340			
	S-11213301-102620-CN-DP-21R-10'		10-26-20	1345			
	S-11213301-102620-CN-DP-21R-15'		10-26-20	1350			
	S-11213301-102620-CN-DP-21R-20'		10-26-20	1355			
	S-11213301-102720-CN-DP-22R-5'		10-27-20	0850			
	S-11213301-102720-CN-DP-22R-10'			0855			
	S-11213301-102720-CN-DP-23R-5'			1010			
	S-11213301-102720-CN-DP-23R-10'		↓	1015			

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed

TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U

1631 / 245.1 / 7470 / 7471 : Hg

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	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			10-27-20 1300	2		
3				4		
5				6		

Revised Date 022619 Rev. 2019.1

Received by OCD: 6/2/2023 1:09:40 PM
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Chain of Custody

Work Order No: 676190

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www.xenco.com

Project Manager:	Christine Mathews	Bill to: (if different)	
Company Name:	GHD	Company Name:	
Address:		Address:	
City, State ZIP:		City, State ZIP:	
Phone:	505 269 0088	Email:	Christine.Mathews@ghd.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Atkesier Phase II	Turn Around	
Project Number:	11213301	Routine ☐	
Project Location		Rush: 5-Day	
Sampler's Name:	Charles Nelight	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Temperature (°C):		Thermometer ID	See Page 1
Received Intact:	Yes No		
Cooler Custody Seals:	Yes No N/A	Correction Factor:	
Sample Custody Seals:	Yes No N/A	Total Containers:	

ANALYSIS REQUEST

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Pres. Code	Tot Ranges TPH GRO, MRO, DRO
	S-11213301-102720-CN-DP-24R-6'	S	10-27-20	1040				
	S-11213301-102720-CN-DP-24R-10'			1045				
	S-11213301-102720-CN-DP-27R-10'			0825				
	S-11213301-102720-CN-DP-27R-13'			0830				
	S-11213301-102720-CN-DP-27R-16'			0835				
	S-11213301-102620-CN-DP-28R-10'		10-26-20	1720				
	S-11213301-102620-CN-DP-25R-13'			1725				
	S-11213301-102620-CN-DP-28R-16'			1730				
	S-11213301-102620-CN-DP-29R-10'			1700				
	S-11213301-102620-CN-DP-29R-16'	V		1705				

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed

TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Charles Nelight	Clue Cruz	10-27-20 1300	2		
			4		
			6		

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Chain of Custody

Work Order No: 676190

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Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701 www.xenco.com

Project Manager:	Christine Mathews	Bill to: (if different)	
Company Name:	GHD	Company Name:	
Address:		Address:	
City, State ZIP:		City, State ZIP:	
Phone:	505 269 0088	Email:	Christine.Mathews@ghd.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Artesia Phase II	Turn Around	
Project Number:	11213301	Routine ☐	
Project Location		Rush 5 Days	
Sampler's Name:	Charles Nelligh	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Temperature (°C):		Thermometer ID	See Page 1
Received Intact:	Yes No		
Cooler Custody Seals:	Yes No N/A	Correction Factor:	
Sample Custody Seals:	Yes No N/A	Total Containers:	

ANALYSIS REQUEST

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Full Range TPH, 8100&8260 DRO	Sample Comments
	S-11213301-102620-CN-DP-15R-5'	S	10-26-20	1530				
	S-11213301-102620-CN-DP-15R-10'			1535				
	S-11213301-102620-CN-DP-15R-15'			1540				
	S-11213301-102620-CN-DP-15R-20'			1545				
	S-11213301-102620-CN-DP-19R-5'			1435				
	S-11213301-102620-CN-DP-19R-10'			1440				
	S-11213301-102620-CN-DP-19R-15'			1445				
	S-11213301-102620-CN-DP-19R-20'		↓	1450				
	S-11213301-102720-CN-DP-20R-5'		10-27-20	0930				
	S-11213301-102720-CN-DP-20R-10'	↓	10-27-20	0935		↓	↓	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U 1631 / 245.1 / 7470 / 7471 : Hg

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Charles Nelligh	Cleo Clifton	10-27-20 - 1300	2		
			4		
			6		

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www.xenco.com

Work Order No: 676190

Project Manager:	Christine Mathews	Bill to: (if different)	
Company Name:	GHD	Company Name:	
Address:		Address:	
City, State ZIP:		City, State ZIP:	
Phone:	505 269 0088	Email:	Christine.Mathews@ghd.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Artesia Plant II	Turn Around	
Project Number:	11213301	Routine ☐	
Project Location		Rush: 5 Day	
Sampler's Name:	Charles Neigh	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Temperature (°C):		Thermometer ID	
Received Intact:	Yes No	See Page 1	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	
Sample Custody Seals:	Yes No N/A	Total Containers:	

ANALYSIS REQUEST

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Pres. Code	Full Range TPH GRO, DRO, MRO	Sample Comments
676190-1	11213301-10620-CN-DP-29R-16'	S	10-26-20	1730				X	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U 1631 / 245.1 / 7470 / 7471 : Hg

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		10-27-20 1300	2		
			4		
			6		

Revised Date 022619 Rev. 2019.1

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Certificate of Analysis Summary 678064

GHD-Albuquerque, NM, Albuquerque, NM

Project Name: Artesia Field Camp

Project Id: 11213301
Contact: Christine Mathews
Project Location: Eddy County, New Mexico

Date Received in Lab: Tue 11.17.2020 09:19
Report Date: 11.19.2020 18:01
Project Manager: Debbie Simmons

Analysis Requested											
	Lab Id:	678064-001		678064-002		678064-003		678064-004			
	Field Id:	25R-5		25R-10		26R-5		26R-10			
	Depth:										
	Matrix:	SOIL		SOIL		SOIL		SOIL			
	Sampled:	11.16.2020 12:45		11.16.2020 13:30		11.16.2020 14:30		11.16.2020 15:00			
TPH By SW8015 Mod	***Extracted:***	11.17.2020 10:00		11.17.2020 10:00		11.17.2020 10:00		11.17.2020 10:00			
	Analyzed:	11.17.2020 14:29		11.17.2020 14:49		11.17.2020 15:36		11.17.2020 15:56			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)		<49.9	49.9	<50.3	50.3	<49.9	49.9	<49.8	49.8		
Diesel Range Organics (DRO)		<49.9	49.9	<50.3	50.3	<49.9	49.9	<49.8	49.8		
Motor Oil Range Hydrocarbons (MRO)		<49.9	49.9	<50.3	50.3	<49.9	49.9	<49.8	49.8		
Total TPH		<49.9	49.9	<50.3	50.3	<49.9	49.9	<49.8	49.8		

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

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Analytical Report 678064

for

GHD-Albuquerque, NM

Project Manager: Christine Mathews

Artesia Field Camp

11213301

11.19.2020

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

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11.19.2020

Project Manager: **Christine Mathews**
GHD-Albuquerque, NM
6121 Indian School Rd. NE Suite 200

Albuquerque, NM 87110

Reference: Eurofins Xenco, LLC Report No(s): **678064**
Artesia Field Camp
Project Address: Eddy County, New Mexico

Christine Mathews:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 678064. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 678064 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Chad A. Bechtold

Chad Bechtold
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

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Sample Cross Reference 678064

GHD-Albuquerque, NM, Albuquerque, NM

Artesia Field Camp

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
25R-5	S	11.16.2020 12:45		678064-001
25R-10	S	11.16.2020 13:30		678064-002
26R-5	S	11.16.2020 14:30		678064-003
26R-10	S	11.16.2020 15:00		678064-004

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CASE NARRATIVE

Client Name: GHD-Albuquerque, NM

Project Name: Artesia Field Camp

Project ID: *11213301*
Work Order Number(s): *678064*

Report Date: *11.19.2020*
Date Received: *11.17.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

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Certificate of Analytical Results 678064

GHD-Albuquerque, NM, Albuquerque, NM

Artesia Field Camp

Sample Id:	**25R-5**	Matrix:	Soil	Date Received:	11.17.2020 09:19
Lab Sample Id:	678064-001	Date Collected:	11.16.2020 12:45		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	11.17.2020 10:00	% Moisture:	
Seq Number:	3142566			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	11.17.2020 14:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	11.17.2020 14:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	11.17.2020 14:29	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	11.17.2020 14:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	125	%	70-135	11.17.2020 14:29	
o-Terphenyl	84-15-1	118	%	70-135	11.17.2020 14:29	

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Certificate of Analytical Results 678064

GHD-Albuquerque, NM, Albuquerque, NM

Artesia Field Camp

Sample Id:	**25R-10**	Matrix:	Soil	Date Received:	11.17.2020 09:19
Lab Sample Id:	678064-002	Date Collected:	11.16.2020 13:30		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	11.17.2020 10:00	% Moisture:	
Seq Number:	3142566			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	11.17.2020 14:49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	11.17.2020 14:49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	11.17.2020 14:49	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	11.17.2020 14:49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	118	%	70-135	11.17.2020 14:49	
o-Terphenyl	84-15-1	110	%	70-135	11.17.2020 14:49	

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Certificate of Analytical Results 678064

GHD-Albuquerque, NM, Albuquerque, NM

Artesia Field Camp

Sample Id:	**26R-5**	Matrix:	Soil	Date Received:	11.17.2020 09:19
Lab Sample Id:	678064-003	Date Collected:	11.16.2020 14:30		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	11.17.2020 10:00	% Moisture:	
Seq Number:	3142566			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	11.17.2020 15:36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	11.17.2020 15:36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	11.17.2020 15:36	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	11.17.2020 15:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	11.17.2020 15:36	
o-Terphenyl	84-15-1	118	%	70-135	11.17.2020 15:36	

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Certificate of Analytical Results 678064

GHD-Albuquerque, NM, Albuquerque, NM

Artesia Field Camp

Sample Id:	**26R-10**	Matrix:	Soil	Date Received:	11.17.2020 09:19
Lab Sample Id:	678064-004	Date Collected:	11.16.2020 15:00		
Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	11.17.2020 10:00	% Moisture:	
Seq Number:	3142566			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	11.17.2020 15:56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	11.17.2020 15:56	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	11.17.2020 15:56	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	11.17.2020 15:56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	11.17.2020 15:56	
o-Terphenyl	84-15-1	106	%	70-135	11.17.2020 15:56	

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Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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QC Summary 678064

GHD-Albuquerque, NM

Artesia Field Camp

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3142566 — Matrix: Solid — Date Prep: 11.17.2020
MB Sample Id: 7715396-1-BLK — LCS Sample Id: 7715396-1-BKS — LCSD Sample Id: 7715396-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1160	116	1170	117	70-135	1	35	mg/kg	11.17.2020 11:28	
Diesel Range Organics (DRO)	<50.0	1000	1020	102	1050	105	70-135	3	35	mg/kg	11.17.2020 11:28	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	118		119		113		70-135	%	11.17.2020 11:28
o-Terphenyl	117		123		109		70-135	%	11.17.2020 11:28

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3142566 — Matrix: Solid — Date Prep: 11.17.2020
MB Sample Id: 7715396-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	11.17.2020 11:08	

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3142566 — Matrix: Soil — Date Prep: 11.17.2020
Parent Sample Id: 677883-023 — MS Sample Id: 677883-023 S — MSD Sample Id: 677883-023 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1060	106	1130	113	70-135	6	35	mg/kg	11.17.2020 12:28	
Diesel Range Organics (DRO)	<50.0	1000	1010	101	1020	102	70-135	1	35	mg/kg	11.17.2020 12:28	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	105		112		70-135	%	11.17.2020 12:28
o-Terphenyl	114		114		70-135	%	11.17.2020 12:28

MS/MSD Percent Recovery — [D] = 100*(C-A) / B
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery — [D] = 100 * (C) / [B]
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

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678064

CHAIN OF CUSTODY

Page 1 Of 1

XENCO LABORATORIES

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Stafford,Texas (281-240-4200)

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Norcross, Georgia (770-449-8800)

Lakeland, Florida (863-646-8526)

Tampa, Florida (813-620-2000)

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Xenco Quote #

Xenco Job #

Client / Reporting Information

Company Name / Branch: GHD/Albuquerque

Company Address: 6121 Indian School rd. NE Suite 200, Albuquerque, NM 87110

Email: Christine.mathews@ghd.com, Zach.comino@ghd.com

Phone No: (505)269-0088

Project Contact: Christine Mathews

Samplers's Name Zach Comino

Project Information

Project Name/Number: Artesia Field Camp / 11213301

Project Location: Eddy County, New Mexico

Invoice To: GHD: Christine Mathews

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

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	TPH By 8015 Mod (GRO, DRO & MRO)	Field Comments
1	25R-5		11.16.20	12:45	S	2								X	X	
2	25R-10		11.16.20	13:30	S	2								X	X	
3	26R-5		↓	14:30	↓	↓								↓	↓	
4	26R-10		↓	15:00	↓	↓								↓	↓	
5																
6																
7																
8																
9																
10																

Turnaround Time (Business days)

- [ ] Same Day TAT
- [x] 5 Day TAT
- [ ] Next Day EMERGENCY
- [ ] 7 Day TAT
- [ ] 2 Day EMERGENCY
- [ ] Contract TAT
- [ ] 3 Day EMERGENCY

TAT Starts Day received by Lab, if received by 5:00 pm

Data 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
- [ ] TRRP Checklist

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	Zach Comino	111720 / 1200	1 Cole Cutteo 11.17.20 0919			2
3	Relinquished by:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice: X Cooler Temp. 5.6/5.4 Thermo. Corr. Factor -0.2

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 negiotiated under a fully executed client contract.

Received by OCD: 6/2/2023 1:09:40 PM

Released to Imaging: 6/7/2023 10:53:13 AM

Final 1.000

Page 12 of 13

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: GHD-Albuquerque, NM

Date/ Time Received: 11.17.2020 09.19.00 AM

Work Order #: 678064

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T_NM_007

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	5.4	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 Custody Seals intact on sample bottles?	**N/A**	
#6*Custody Seals Signed and dated?	**Yes**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**No**	
#9 Chain of Custody signed when relinquished/ received?	**Yes**	
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**	
#11 Container label(s) legible and intact?	**Yes**	
#12 Samples in proper container/ bottle?	**Yes**	Samples received in bulk containers.
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**Yes**	
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**No**	
#18 Water VOC samples have zero headspace?	**N/A**	

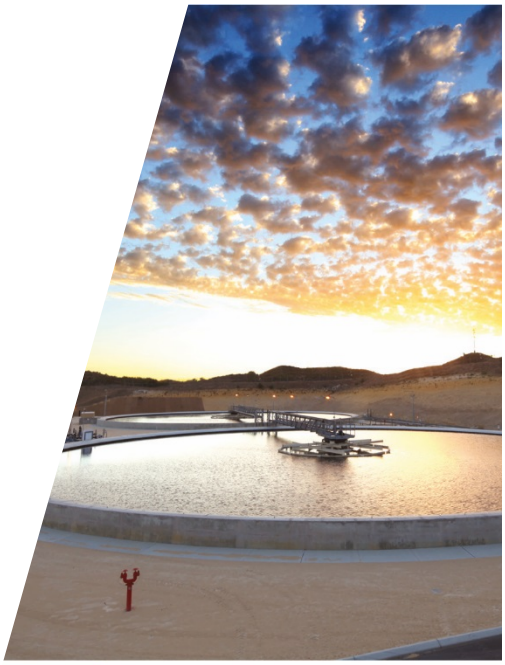
*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: PH Device/Lot#:

Checklist completed by: Cloe Clifton Date: 11.17.2020

Checklist reviewed by: Chad Bechtold Date: 11.19.2020

Appendix E
Phase II Report

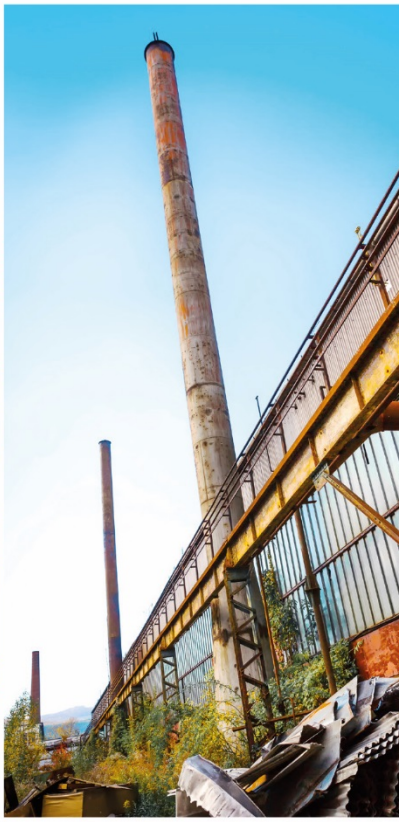


Phase II Environmental Site Assessment Report

Artesia Field Camp
2311 South 1st Street
Artesia, New Mexico

October 6, 2020

Halliburton Energy Services, Inc.



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1. Introduction 1
2. Background 1
3. Soil Investigation 2
   3.1 Soil Boring Installation 3
   3.2 Sample Collection and Analysis 3
   3.3 Analytical Results 4
4. Groundwater Investigation 5
5. Summary of Findings 6

Figure Index

Figure 1 Site Location Map
Figure 2 Site Plan
Figure 3 Sample Location Map

Table Index

Table 1 Summary Table of Soil Analytical Results
Table 2 Summary Table of Groundwater Analytical Results

Appendix Index

Appendix A Soil Boring Logs
Appendix B Photographs
Appendix C Soil Laboratory Analytical Data
Appendix D Groundwater Laboratory Analytical Data

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1. Introduction

GHD Services, Inc. (GHD) has prepared this Phase II Environmental Site Assessment (ESA) Report on behalf of Halliburton Energy Services, Inc. (Halliburton). The location of the Artesia Field Camp facility is 2311 South 1st Street in Artesia, New Mexico (Site). The Site location is provided on Figure 1. Site details are shown on Figure 2.

2. Background

GHD completed a Phase I ESA of the Site on June 10, 2020. Halliburton formerly utilized the Site to service the oilfield industry. The Phase I ESA completed by GHD revealed the evidence of potential Recognized Environmental Conditions (RECs) in connection with the Site, as described below:

- **Soil Impacts from Former Below Grade Tanks:** Based on the review of reasonably ascertainable information, two 5,000-gallon below grade acid neutralization holding tanks were removed from an area just north of Building 5 (Acid dock) in 1998. The tanks received fluids generated during acid neutralization activities and were also used for batch water storage. It is unknown if any other hazardous substances or petroleum products were held in these tanks. A report describing the removal of the tanks was found in available documents on the New Mexico Oil Conservation Division (NMOCD) website. The February 1999 report written by Delta Environmental Consultants (Delta) stated that maximum concentrations in soil samples collected during the tank removal were 2,600 milligrams per kilogram (mg/Kg) for total petroleum hydrocarbons (TPH), 414.4 mg/Kg for total volatile organic hydrocarbons (VOC)`s, and 51.94 mg/Kg for total semi-volatile organic compounds (SVOCs), which are above the NMOCD standards. A groundwater sample collected from the excavation pit was found to contain a concentration of total VOCs of 10.31 mg/L. Delta concluded “Analytical results indicate that soil and ground water have been impacted by operation of the neutralization tanks”. No further information pertaining to the assessment or remediation of the soil or groundwater in the area of the former acid neutralization tanks was available to GHD. The detected concentrations of TPH, VOCs and SVOCs above unrestricted criteria in soil and groundwater constitutes a REC.
- **Likely Release(s) related to Wash Bays, Grit Pit, and Associated Oil/Water Separators (OWS):** Based on historical documents, interviews, and review of aerial photographs the current wash bays, grit pit, and associated below grade fiberglass OWSs have been in use since at least 1987 but likely were installed circa 1981 when the Site was expanded. The bays, pit, and OWSs are located southeast of Building 3. The wash bays are used to wash oilfield trucks associated with Site operations of bulk cement mixing, acidizing, and as a stimulation services supplier. Fluids and sediments cleaned out of field trucks may contain hydrocarbons, neutralized acids, and mud. During a 2009 Site inspection performed by the NMOCD for a renewal of the Site’s wastewater discharge permit, it was noted that there was soil staining within the grit pit area and around one or more of the OWS tanks. During GHD’s Site reconnaissance on June 10, 2020, standing fluids were observed in the grit pit and the OWS tanks. Staining was observed at that time around the grit pit and on one of the OWS tanks access stem. This was the same OWS tank that had previously been noted as having “seepage” visible around the tank during the 2009 NMOCD Site inspection. Additionally, conditions of the Site’s discharge permit GW-115 originally

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obtained in 1993 from the NMOCD states that all pits, ponds, and BGTs are to be retrofitted with secondary containment and leak detection. As of August 2009, according to correspondence with NMOCD, Halliburton had proposed to place a metal liner within the grit pit and place smaller holding tanks within the fiberglass OWS tanks to allow for secondary containment and leak detection. GHD could not observe either of the mentioned implementations due to accessibility. An evaluation of subsurface portions of the grit pit or OWS was not possible. According to Site personnel, no leaks or releases from the units have occurred at the Site. The Site was not listed in the environmental databases searched as having any releases associated with the aforementioned below grade items. Due to the age (i.e., ~40 years) of the wash bays, grit pit, and OWS tanks, the conveyance and/or retaining of fluids likely containing hazardous substances and/or petroleum products, and lack of evidence suggesting that secondary containment or leak detection is present, a release from the units is likely and constitutes a REC.

- **Likely Release(s) related to Sumps with Standing Fluids:** Standing fluids were observed in all Site sumps and the single floor drain. An evaluation of subsurface portions of the sumps was not possible. The Site is not listed in the environmental databases searched as having any releases listed associated with the aforementioned below grade items. Pink staining was observed in the waste storage area and the sump also in this area was full of pink fluid. According to Site personnel, no leaks or releases from the units have occurred at the Site. Due to the age (i.e., ~40 years) of the sumps and the conveyance and/or retaining of fluids likely containing hazardous substances and/or petroleum products for an extended period of time, a release from the units is likely and constitutes a REC.

One additional recognized environmental condition (REC), Groundwater Impact from Former Gasoline and Diesel Fuel Leaking Underground Storage Tanks (LUSTs), was identified during the Phase I ESA but was not included as part of the Phase II investigation since the release is already being managed and regulated by the New Mexico Environment Department (NMED), Petroleum Storage Tank Bureau (PSTB).

The purpose of the Phase II ESA is to address RECs identified in GHD's Phase I ESA. This report documents the Phase II investigation methodology, soil lithology, and analytical results relative to regulatory criteria.

3. Soil Investigation

GHD conducted a Phase II ESA at the Site August 3 through 6, 2020. JR Drilling, a New Mexico licensed driller, was contracted to perform the drilling activities and utilized a direct push Geoprobe rig to complete boring installation. A Site-specific health and safety plan (HASP) was prepared for the subsurface investigation activities conducted at the Site. Prior to drilling, utility locating was completed via New Mexico 811. Additionally, each boring was pre-cleared via hand auger to a depth of five feet below ground surface.

During the advancement of the soil borings, sample collection, and field analyses, a QA/QC program was employed. The QA/QC procedures included, but were not limited to, the following:

- Cleaning of drilling equipment prior to use at each soil boring location;
- Decontamination of non-disposable sampling equipment prior to each sampling location;

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- Proper calibration of field equipment;
- Chain-of-custody protocol for laboratory analysis to ensure sample integrity; and
- Documentation of field procedures.

Prior to sampling, all non-disposable sampling equipment was washed with a non-ionic detergent and then rinsed with distilled water. Sampling equipment utilized during this Phase II ESA (including nitrile gloves and plastic bags) was disposed between sampling intervals to prevent cross-contaminating the samples.

3.1 Soil Boring Installation

A total of 17 borings were advanced at the Site to evaluate environmental conditions in the five areas of concern identified in the Phase I ESA, as follows:

- **Soil Impacts from Former Below Grade Tanks**: Borings DP-1 and DP-2 were installed to approximately 15 and 11 (refusal) feet below ground surface (ft bgs), respectively.
- **Likely Release(s) related to Wash Bays, Grit Pit, and Associated OWSs**: Borings DP-7 through DP-14 were installed to approximately eight to nine ft bgs.
- **Likely Release(s) related to Sumps with Standing Fluids**: Borings DP-3 and DP-4 were installed to approximately 15 ft bgs, borings DP-5, DP-6, DP-16, and DP-17 were installed to approximately eight ft bgs. Boring DP-15 was installed to approximately 20 ft bgs.

The lithology of the borings beneath the asphalt, concrete, and/or base course cover generally consist of fine to medium sand, silty clay, and fat clay.

Boring locations and sample locations are depicted on Figure 3, soil boring logs are provided in Appendix A, and photographs of the boring locations are provided in Appendix B.

3.2 Sample Collection and Analysis

Soils were screened in the field utilizing a Photoionization Detector (PID). GHD collected two soil samples per boring from those borings that were 10 feet or less and three samples from each boring greater than 10 feet bgs. Of the samples collected from each boring, one was from the interval with the highest PID reading or from the base of the below grade feature if PID readings were generally consistent throughout the boring and one from the bottom of the boring. Soils for laboratory analysis were placed in laboratory supplied bottleware and a chain of custody was prepared. Soil samples were placed in a cooler with ice and shipped to the laboratory for analysis.

Eurofins TestAmerica of Houston, Texas performed the analysis of the soil samples collected at the Site. Sample analysis is summarized as follows:

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Sampling Information	Soil Impacts from Former Below Grade Tanks	Likely Releases related to Wash Bays, Grit Pit, and Associated OWSs	Likely Releases related to Sumps with Standing Fluids
Boring IDs and sampling intervals:	DP-1 (5) DP-1 (12) DP-1 (15) DP-2 (5) DP-2 (10) DP-2 (11)	DP-7 (6) DP-7 (9) DP-8 (6) DP-8 (9) DP-9 (6) DP-9 (9) DP-10 (5) DP-10 (8) DP-11 (5) DP-11 (8) DP-12 (6) DP-12 (9) DP-13 (6) DP-13 (9) DP-14 (6) DP-14 (9)	DP-3 (5) DP-3 (10) DP-3 (15) DP-4 (5) DP-4 (10) DP-4 (15) DP-5 (5) DP-5 (8) DP-6 (5) DP-6 (8) DP-15 (5) DP-15 (11) DP-15 (20) DP-16 (5) DP-16 (8) DP-17 (5) DP-17 (8)
Sample analyses:	Volatile Organic Compounds (VOCs) by EPA Method 8260B Full Range Total Petroleum Hydrocarbons (TPH) by EPA Method 8015B Chloride by EPA Method 300	VOCs by EPA Method 8260B Full Range TPH by EPA Method 8015B Chloride by EPA Method 300	VOCs by EPA Method 8260B Full Range TPH by EPA Method 8015B Chloride by EPA Method 300

The analytical data package is provided in Appendix C.

3.3 Analytical Results

Soil analytical results have been compared against the New Mexico Administrative Code (NMAC) Title 19, Chapter 15, Part 29 – Natural Resources and Wildlife, Oil and Gas, Releases which is regulated by the New Mexico Oil Conservation Division.

The soil analytical results are presented on Table 1. A summary of locations above regulatory criteria is as follows:

Boring Location	Sampling Interval	Analyte(s) above Standard
DP-1	12 feet	TPH
DP-2	11feet	TPH
DP-13	6 feet	TPH and Chloride
DP-15	5 feet	TPH

Boring Location	Sampling Interval	Analyte(s) above Standard
DP-15	8 feet	TPH
DP-15	11 feet	TPH
DP-15	20 feet	TPH
DP-16	5 feet	TPH
DP-17	8 feet	TPH

4. Groundwater Investigation

A temporary monitoring well, DPW-1, was installed in the DP-1 boring location on August 3, 2020 to assess Soil Impacts related to Former Below Grade Tanks. The well was installed as a two-inch diameter well, constructed of PVC and screened from five to 15 ft bgs due to soil impacts identified at depth and just above groundwater. A groundwater sample was attempted via a Hydrasleeve, an EPA approved no purge method; however, the Hydrasleeve did not collect a sufficient sample volume. The well was subsequently purged of three well volumes with a new polyethylene bailer and the sample collected following purging. The groundwater sample was collected on August 5, 2020, approximately 48 hours after well installation activities were completed. Groundwater was encountered in the boring at approximately 13 ft bgs. The groundwater sample was placed in laboratory supplied bottleware and a chain of custody was prepared. The groundwater sample was placed in a cooler with ice and shipped to the laboratory for analysis.

Eurofins TestAmerica performed the analysis of the groundwater samples collected at the Site. The groundwater sample from DPW-1 was analyzed for BTEX by EPA Method 8260 and chloride by EPA Method 300.0. The temporary well location is provided on Figure 2 and laboratory analytical results are provided in Appendix E.

Groundwater analytical results have been compared against the New Mexico Water Quality Control Commission, Standards for Ground Water of 10,000 mg/L TDS Concentration or Less, Human Health Standards – NMAC Title 20, Chapter 6, Part 2, Subpart 3103, Letter A.

A summary of results above regulatory criteria is as follows:

Well ID	Sampling Date	Analyte(s) above Standard
DPW-1	August 5, 2020	Chloride

5. Summary of Findings

A summary of Phase II ESA analytical results above regulatory criteria is summarized as follows:

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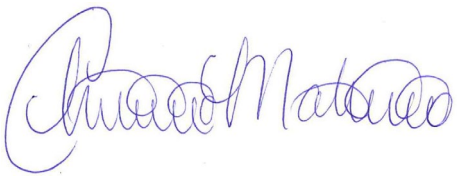
	Soil Impacts from Former Below Grade Tanks	Likely Releases related to Wash Bays, Grit Pit, and Associated OWSs	Likely Releases related to Sumps with Standing Fluids
Analytical results above regulatory criteria:	Yes	Yes	Yes
Location / parameters above standard (if any):	DP-1 (12) / TPH DP-2 (11) / TPH DPW-1 (GW) / Chloride	DP-13 (6) / TPH and Chloride	DP-15 (5) / TPH DP-15 (8) / TPH DP-15 (11) / TPH DP-15 (20) / TPH DP-16 (5) / TPH DP-17 (8) / TPH

All of Which is Respectfully Submitted,

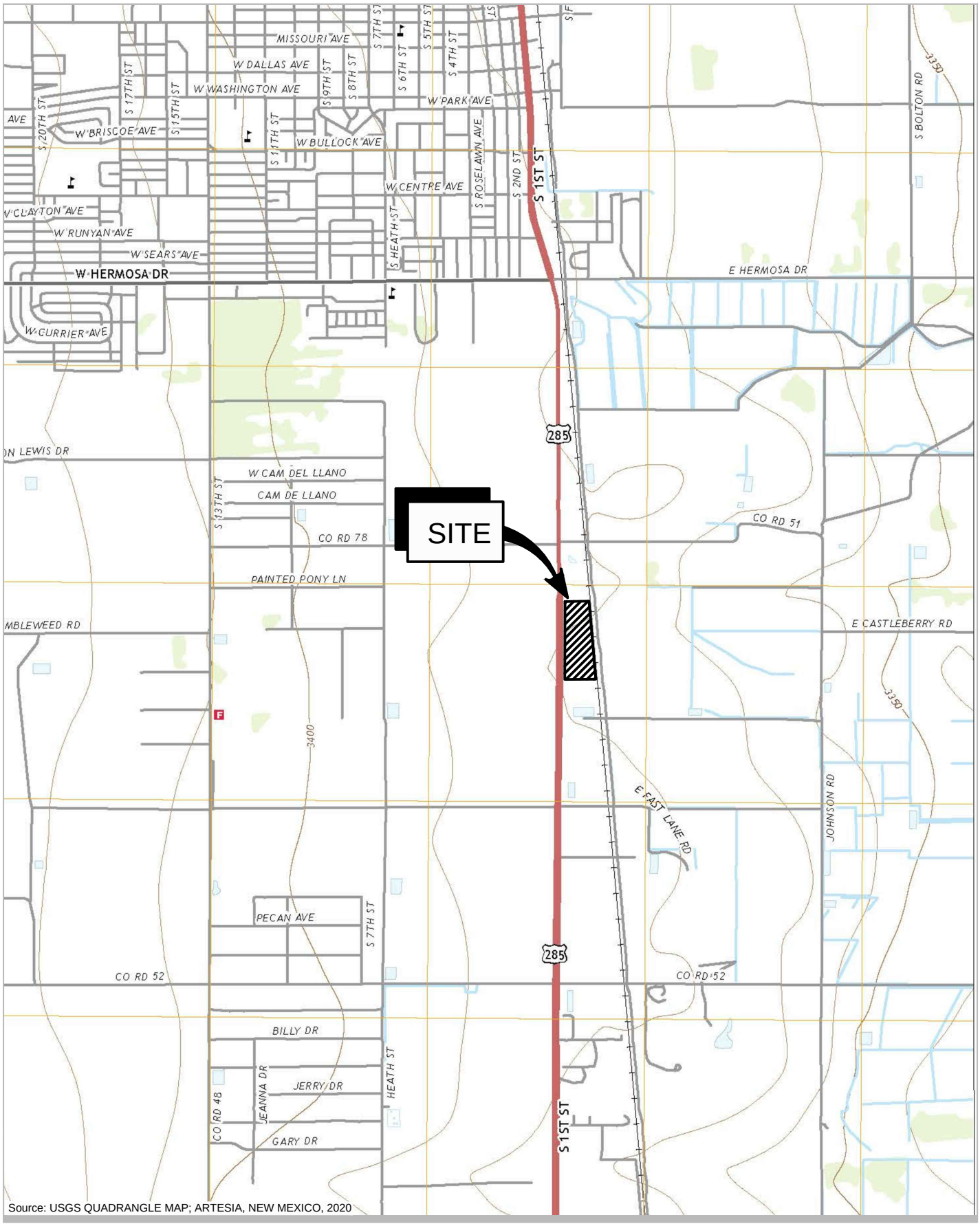
GHD



Christine Mathew
Project Manager

Jeff Walker
Senior Project Manager

Figures



Source: USGS QUADRANGLE MAP; ARTESIA, NEW MEXICO, 2020

0 1000 2000 ft

N

GHD

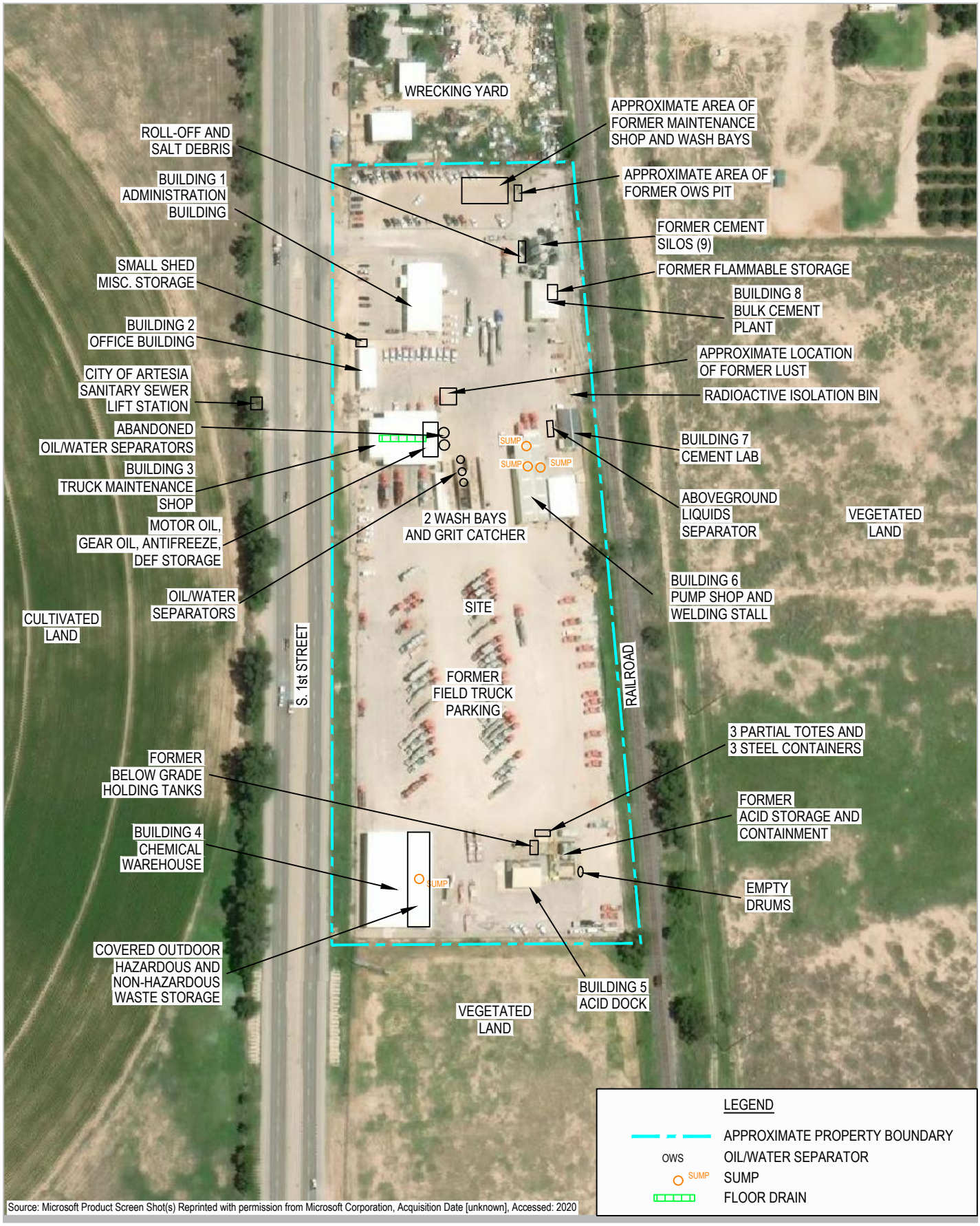
HALLIBURTON ENERGY SERVICES
ARTESIA SOUTH FIELD CAMP
2311 S. 1st STREET
ARTESIA, NEW MEXICO

Project No. **11213301**
Date **June 2020**

SITE LOCATION

FIGURE 1

Filename: N:\US\Baton Rouge\Projects\562\11213301\Digital_Design\ACAD 2018\Figures\RPT-008PH1\111213301-08(RPT-008ARTESIANEWMEXICO)GN-DE001.dwg



Source: Microsoft Product Screen Shot(s) Reprinted with permission from Microsoft Corporation, Acquisition Date [unknown], Accessed: 2020

0 100 200 ft

N

Coordinate System: STATE PLANE NM-NAD83

GHD

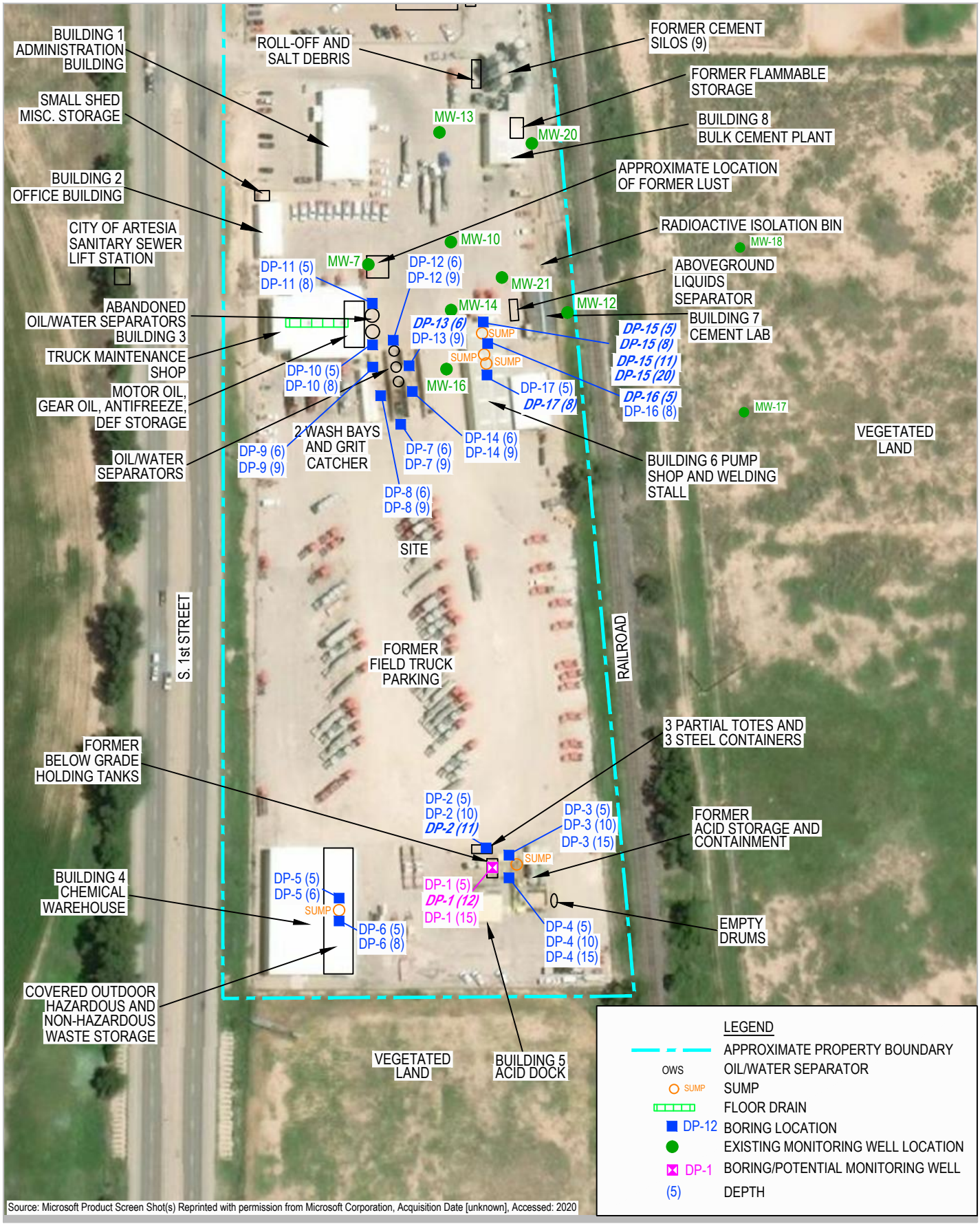
HALLIBURTON ENERGY SERVICES
ARTESIA FIELD CAMP
2311 S. 1st STREET
ARTESIA, NEW MEXICO

Project No. **11213301**
Date **July 2020**

SITE PLAN

FIGURE 2

Filename: N:\US\Baton Rouge\Projects\562\11213301\Digital_Design\ACAD 2018\Figures\RPT-008PH1\11213301-08(RPT-008ARTESIANEWMEXICO)GN-DE002.dwg



Source: Microsoft Product Screen Shot(s) Reprinted with permission from Microsoft Corporation, Acquisition Date [unknown], Accessed: 2020

0 75 150 ft

Coordinate System: STATE PLANE NM-NAD83

N

GHD

HALLIBURTON ENERGY SERVICES
ARTESIA FIELD CAMP
2311 S. 1st STREET
ARTESIA, NEW MEXICO

SAMPLE LOCATION MAP

Project No. **11213301**
Date **August 2020**

FIGURE 3

Filename: N:\US\Baton Rouge\Projects\562\11213301\Digital_Design\ACAD 2018\Figures\RPT-015PH2\11213301-08(RPT-015PHIIARTESIANEWMEXICO)GN-DE001.dwg

Tables

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Table 1

Soil Analytical Results Summary
Halliburton Energy Services, Ltd. - Artesia Field Camp
Artesia, New Mexico

Sample ID	Date	Sample Depth (ft.)	Chlorides (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (C6-C-10) (mg/kg)	TPH DRO (C10-C28) (mg/kg)	TPH ORO (C28-C36) (mg/kg)	Total TPH GRO/DRO/ORO (mg/kg)
S-11213301-080320-CN-DP-1-5'	8/3/2020	5	80	<0.0062	<0.0062	<0.0062	<0.0062	<0.0248	<1.2	<15	49	49
S-11213301-080320-CN-DP-1-12'	8/3/2020	12	87	<0.0036	0.45	0.36	2.3	3.11	**110**	**350**	**280**	**740**
S-11213301-080320-CN-DP-1-15'	8/3/2020	15	230	<0.0058	<0.0058	<0.0058	<0.0058	<0.0232	<1.3	<15	<15	<31.3
S-11213301-080320-CN-DP-2-5'	8/3/2020	5	37	<0.0063	<0.0063	<0.0063	<0.0063	<0.0252	<1.2	<15	57	57
S-11213301-080320-CN-DP-2-10'	8/3/2020	10	28	<0.0065	<0.0065	<0.0065	<0.0065	<0.026	<1.2	<15	54	54
S-11213301-080320-CN-DP-2-11'	8/3/2020	11	38	<0.0051	<0.0051	<0.0051	<0.0051	<0.0204	<1.1	**85**	**170**	**255**
S-11213301-080420-CN-DP-3-5'	8/4/2020	5	180	<0.0058	<0.0058	<0.0058	<0.0058	<0.0232	< 36	28	43	71
S-11213301-080420-CN-DP-3-10'	8/4/2020	10	96	<0.0065	<0.0065	<0.0065	<0.0065	<0.026	<1.2	<30	<30	<61.2
S-11213301-080420-CN-DP-3-15'	8/4/2020	15	390	<0.0054	<0.0054	<0.0054	<0.0054	<0.216	<1.2	<30	<30	<61.2
S-11213301-080420-CN-DP-4-5'	8/4/2020	5	27	<0.0067	<0.0067	<0.0067	<0.0067	<0.0268	<1.2	<15	46	46
S-11213301-080420-CN-DP-4-10'	8/4/2020	10	84	<0.0076	<0.0076	<0.0076	<0.0076	<0.0304	<1.5	<35	<35	<71.5
S-11213301-080420-CN-DP-4-15'	8/4/2020	15	290	<0.0066	<0.0066	<0.0066	<0.0066	<0.0264	<1.2	<30	<30	<61.2
S-11213301-080420-CN-DP-5-5'	8/4/2020	5	340	<0.0066	<0.0066	<0.0066	<0.0066	<0.0264	<1.2	<31	<31	<63.2
S-11213301-080420-CN-DP-5-8'	8/4/2020	8	130	<0.0066	<0.0066	<0.0066	<0.0066	<0.0264	<1.3	<31	<31	<63.3
S-11213301-080420-CN-DP-6-5'	8/4/2020	5	390	<0.0058	<0.0058	<0.0058	<0.0058	<0.0232	<1.2	<30	<30	<61.2
S-11213301-080420-CN-DP-6-8'	8/4/2020	8	200	<0.0062	<0.0062	<0.0062	<0.0062	<0.0248	<1.2	<30	<30	<61.2
S-11213301-080420-CN-DP-7-6'	8/4/2020	6	100	<0.0060	<0.0060	<0.0060	<0.0060	<0.024	<1.2	<15	36	36
S-11213301-080420-CN-DP-7-9'	8/4/2020	9	73	<0.0058	<0.0058	<0.0058	<0.0058	<0.0232	<1.2	<15	<15	<31.2
S-11213301-080420-CN-DP-8-6'	8/4/2020	6	160	<0.0058	<0.0058	<0.0058	<0.0058	<0.0232	<1.2	<30	<30	<61.2
S-11213301-080420-CN-DP-8-9'	8/4/2020	9	130	<0.0070	<0.0070	<0.0070	<0.0070	<0.028	<1.4	<57	<57	<115.4
S-11213301-080420-CN-DP-9-6'	8/4/2020	6	54	<0.0058	<0.0058	<0.0058	<0.0058	<0.0232	<1.3	<33	83	83
S-11213301-080420-CN-DP-9-9'	8/4/2020	9	<48	<0.0063	<0.0063	<0.0063	<0.0063	<0.0252	<1.1	<30	<30	<61.1
S-11213301-080520-CN-DP-10-5'	8/5/2020	5	480	<0.0061	<0.0061	<0.0061	<0.0061	<0.0244	<1.1	<29	<29	<59.1
S-11213301-080520-CN-DP-10-8'	8/5/2020	8	160	<0.0047	<0.0047	<0.0047	<0.0047	<0.0188	<1.0	<25	<25	<51
S-11213301-080520-CN-DP-11-5'	8/5/2020	5	180	<0.0057	<0.0057	<0.0057	<0.0057	<0.0228	<1.3	<31	<31	<63.3
S-11213301-080520-CN-DP-11-8'	8/5/2020	8	130	<0.0054	<0.0054	<0.0054	<0.0054	<0.0216	<1.0	<27	<27	<60
S-11213301-080520-CN-DP-12-6'	8/5/2020	6	<99	<0.0061	<0.0061	<0.0061	<0.0061	<0.0244	<1.2	<31	<31	<63.2
S-11213301-080520-CN-DP-12-9'	8/5/2020	9	<48	<0.0060	<0.0060	<0.0060	<0.0060	<0.024	<1.2	<30	<30	<61.2
S-11213301-080520-CN-DP-13-6'	8/5/2020	6	**640**	<0.0060	<0.0060	<0.0060	<0.0060	<0.024	<1.2	<30	**130**	**130**
S-11213301-080520-CN-DP-13-9'	8/5/2020	9	22	<0.0059	<0.0059	<0.0059	<0.0059	<0.0236	<1.3	<32	<32	<65.3
S-11213301-080520-CN-DP-14-6'	8/5/2020	6	120	<0.0063	<0.0063	<0.0063	<0.0063	<0.0252	<1.2	<15	64	64
S-11213301-080520-CN-DP-14-9'	8/5/2020	9	68	<0.0064	<0.0064	<0.0064	<0.0064	<0.0256	<1.3	<31	<31	<63.3
S-11213301-080520-CN-DP-15-5'	8/5/2020	5	6.8	<0.0064	<0.0064	<0.0064	<0.0064	<0.0256	<1.2	<30	**110**	**110**
S-112133-1-080520-CN-DP-15-8'	8/5/2020	8	18	<0.0063	<0.0063	<0.0063	<0.0063	<0.0252	**36**	**170**	<31	**206**
S-11213301-080520-CN-DP-15-11'	8/5/2020	11	13	<0.0064	0.089	<0.0064	0.4	0.489	**870**	**690**	**120**	**1680**
S-11213301-080520-CN-DP-15-20'	8/5/2020	20	40	<0.0076	<0.0076	<0.0076	<0.0076	<0.0304	<1.4	<35	**110**	**110**
S-11213301-080520-CN-DP-16-5'	8/5/2020	5	23	<0.0062	<0.0062	<0.0062	<0.0062	<0.0248	<1.2	<30	**100**	**100**
S-11213301-080520-CN-DP-16-8'	8/5/2020	8	28	<0.0065	<0.0065	<0.0065	<0.0065	<0.026	<1.3	<32	<32	<65.3
S-11213301-080520-CN-DP-17-5'	8/5/2020	5	20	<0.0053	<0.0053	<0.0053	<0.0053	<0.0212	<1.1	<27	82	82
S-11213301-080520-CN-DP-17-8'	8/5/2020	8	51	<0.0070	<0.0070	<0.0070	<0.0070	<0.028	<1.2	**60**	**160**	**220**
NMOCD Remediation Action Levels			**600**	**10**	**NE**	**NE**	**NE**	**50**	**100**			**100**

Notes:

Concentrations that are BOLD exceed the NMOCD Remediation Action Level
NE = Not Established
mg/Kg = milligrams per Kilogram

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Table 2

Groundwater Analytical Results Summary
Halliburton Energy Services, Ltd. - Artesia Field Camp
Artesia, New Mexico

Sample ID	Date	Chlorides (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (mg/L)
GW-11213301-080520-CN-DPW-1	8/5/2020	**650**	<0.0010	0.017	0.0054	0.023
NMWQCC Standards (mg/L)		**250**	**0.005**	**1.0**	**0.7**	**0.62**

Notes:

Concentrations that are BOLD exceed the NMWQCC Human Health Standard
mg/L = milligrams per liter

Appendices

Appendix A
Soil Boring Logs

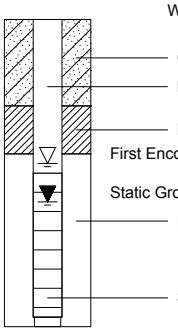
MAJOR DIVISIONS					TYPICAL NAMES
COARSE-GRAINED SOILS MORE THAN HALF IS COARSER THAN NO. 200 SIEVE	GRAVELS MORE THAN HALF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE	CLEAN GRAVELS WITH LESS THAN 15% FINES	GW		WELL-GRADED GRAVELS WITH OR WITHOUT SAND
			GP		POORLY-GRADED GRAVELS WITH OR WITHOUT SAND
		GRAVELS WITH 15% OR MORE FINES	GM		SILTY GRAVELS WITH OR WITHOUT SAND
			GC		CLAYEY GRAVELS WITH OR WITHOUT SAND
	SANDS MORE THAN HALF COARSE FRACTION IS FINER THAN NO. 4 SIEVE SIZE	CLEAN SANDS WITH LESS THAN 15% FINES	SW		WELL-GRADED SANDS WITH OR WITHOUT GRAVEL
			SP		POORLY-GRADED SANDS WITH OR WITHOUT GRAVEL
		SANDS WITH 15% OR MORE FINES	SM		SILTY SANDS WITH OR WITHOUT GRAVEL
			SC		CLAYEY SANDS WITH OR WITHOUT GRAVEL
FINE-GRAINED SOILS MORE THAN HALF IS FINER THAN NO. 200 SIEVE	SILTS AND CLAYS LIQUID LIMIT 50% OR LESS		ML		INORGANIC SILTS OF LOW TO MEDIUM PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
			CL		INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
			OL		ORGANIC SILTS OR CLAYS OF LOW TO MEDIUM PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50%		MH		INORGANIC SILTS OF HIGH PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
			CH		INORGANIC CLAYS OF HIGH PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
			OH		ORGANIC SILTS OR CLAYS OF HIGH PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
HIGHLY ORGANIC SOILS			PT		PEAT AND OTHER HIGHLY ORGANIC SOILS

SYMBOLS KEY

SAMPLE TYPES

AK	Air Knife		Modified Split Spoon
	Auger Cuttings		No Recovery
C	Composite		Post Hole Digger
	Rock Core		Shelby Tube
HV	Hydro-Vac		Sonic Core
HA	Hand Auger		Split Spoon
	Large Bore		Undisturbed Core
P/S	Macro-Core		Vane Shear

WELL SYMBOLS



ABBREVIATION KEY

CA	-	CHEMICAL ANALYSIS (CORROSIVITY)	(200)	-	(WITH % PASSING NO. 200 SIEVE
CD	-	CONSOLIDATED DRAINED TRIAXIAL			
CN	-	CONSOLIDATION	SW	-	SWELL TEST
CU	-	CONSOLIDATED UNDRAINED TRIAXIAL	TC	-	CYCLIC TRIAXIAL
DS	-	DIRECT SHEAR	TV	-	TORVANE SHEAR
PP	-	POCKET PENETROMETER (TSF)	UC	-	UNCONFINED COMPRESSION
(3.0)	-	(WITH SHEAR STRENGTH IN KSF)	(1.5)	-	(WITH SHEAR STRENGTH IN KSF)
RV	-	R-VALUE			
SA	-	SIEVE ANALYSIS: % PASSING #200 SIEVE	UU	-	UNCONSOLIDATED UNDRAINED TRIAXIAL
			WA	-	WASH ANALYSIS
			(200%)	-	(WITH % PASSING NO. 200 SIEVE)

Key to Boring Log

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/08
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-1 (DPW-1)
DATE COMPLETED: 3 August 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	WELL CONSTRUCTION	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
0	Fine, silty sand, brown, dry, with med-fine gravels		Hydrated Bentonite Seal; Sch. 40 PVC riser				
3	Fat clay, damp, brown, fine gravels	3.00					
5	Fat clay, damp, brown, fine gravels	5.00		5'	20	49	80
6			10-20 Silica Sand; Sch. 40 PVC screen 0.010 slotted				
11	Black, fiberglass, odor	11.50					
12	Med sand,wet, black, odor	12.00		12'	407.9	740	87
13	Fat clay,dry, brown, black silt	13.00			31.8		
15	END OF HOLE @ 15.0ft BGS	15.00		15'	2.7	<31.3	230

WELL DETAILS
Screened interval:
5.00 to 15.00ft BGS
Length: 10ft
Slot Size: 0.010 inch
Material: PVC
Seal:
3.00 to 0.00ft BGS
Material: Bentonite
Sand Pack:
15.00 to 3.00ft BGS
Material: 10/20

BOREHOLE DIAMETER

NOTES:

LABORATORY ANALYSIS ( )

DEVON MIGURA LOG 11213301 HALLIBURTON ARTESIA.GPJ CRA_CORP.GDT 28/8/20

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/08
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-10
DATE COMPLETED: 5 August 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Concrete surface cover					
	Sub base material	1.00				
2	Fine caliche sand, tan/white, damp	2.00				
4						
	Silty clay, dry, brown/tan	5.00	5'	0	<59.1	480
6						
8	END OF HOLE @ 8.0ft BGS	8.00	8'	0	<51	160
10						
12						
14						
16						
18						
20						
22						
24						

NOTES:

LABORATORY ANALYSIS

DEVON MIGURA LOG 11213301 HALLIBURTON ARTESIA.GPJ CRA_CORP.GDT 28/8/20

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/08
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-11
DATE COMPLETED: 5 August 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Concrete surface cover					
	Sub base material	1.00				
2	Fine, sand (Magnetic fill?), tan/white, dry	2.00				
4						
	Silty clay, dry, brown/tan	5.00	5'	0.3	<63.3	180
6						
8	END OF HOLE @ 8.0ft BGS	8.00	8'	0.5	<60	130
10						
12						
14						
16						
18						
20						
22						
24						

NOTES:

LABORATORY ANALYSIS (5' 8')

DEVON MIGURA LOG 11213301 HALLIBURTON ARTESIA.GPJ CRA_CORP.GDT 28/8/20

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/08
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-12
DATE COMPLETED: 5 August 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Concrete surface cover					
	Sub base material	1.00				
2	Fine, caliche sand, tan, dry	2.00				
4		5.00				
	Fine sandy clay, tan/brown, dry					
6	Clay, brown, dry	6.00	6'	2.7	<63.2	<99
8						
	END OF HOLE @ 9.0ft BGS	9.00	9'	2.3	<61.2	<48
10						
12						
14						
16						
18						
20						
22						
24						

NOTES:

LABORATORY ANALYSIS

DEVON MIGURA LOG 11213301 HALLIBURTON ARTESIA.GPJ CRA_CORP.GDT 28/8/20

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/08
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-13
DATE COMPLETED: 5 August 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Concrete surface cover					
	Sub base material	1.00				
2	Fat clay, brown, damp	2.00				
4						
6			6'	2.1	130	640
8						
	END OF HOLE @ 9.0ft BGS	9.00	9'	1.1	<65.3	22
10						
12						
14						
16						
18						
20						
22						
24						

NOTES:

LABORATORY ANALYSIS (6')

DEVON MIGURA LOG 11213301 HALLIBURTON ARTESIA.GPJ CRA_CORP.GDT 28/8/20

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/08
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-14
DATE COMPLETED: 5 August 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Concrete surface cover					
	Sub base material	1.00				
2	Fat clay, brown, damp	2.00				
4						
6			6'	3	64	120
8						
	END OF HOLE @ 9.0ft BGS	9.00	9'	15	<63.3	68
10						
12						
14						
16						
18						
20						
22						
24						

NOTES:

LABORATORY ANALYSIS (6' 9')

DEVON MIGURA LOG 11213301 HALLIBURTON ARTESIA.GPJ CRA_CORP.GDT 28/8/20

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/08
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-15
DATE COMPLETED: 5 August 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Concrete surface cover					
	Sub base material	1.00				
2	Fat clay, grey, damp, odor	2.00				
4			5'	1.1	110	6.8
6						
8			8'	684.3	206	18
10						
			11'	798.1	1680	13
12				565.9		
	Fat clay, brown, damp - trace fractured limestone, olive at 19'	13.00		203.1		
14						
				229.3		
16						
18				0.1		
20	END OF HOLE @ 20.0ft BGS	20.00	20'	0.3	110	40
22						
24						

NOTES:

LABORATORY ANALYSIS ( )

DEVON MIGURA LOG 11213301 HALLIBURTON ARTESIA.GPJ CRA_CORP.GDT 28/8/20

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/08
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-16
DATE COMPLETED: 5 August 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Concrete surface cover					
	Sub base material	1.00				
2	Fat clay, brown, damp	2.00				
4			5'	4.9	100	23
6						
8	END OF HOLE @ 8.0ft BGS	8.00	8'	2.8	<65.3	28
10						
12						
14						
16						
18						
20						
22						
24						

NOTES:

LABORATORY ANALYSIS (5' 8')

DEVON MIGURA LOG 11213301 HALLIBURTON ARTESIA.GPJ CRA_CORP.GDT 28/8/20

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/08
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-17
DATE COMPLETED: 5 August 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Concrete surface cover					
	Sub base material	1.00				
2	Fat clay, brown, damp	2.00				
4			5'	2.1	82	20
6						
8	END OF HOLE @ 8.0ft BGS	8.00	8'	35.5	220	51
10						
12						
14						
16						
18						
20						
22						
24						

NOTES:

LABORATORY ANALYSIS ( )

DEVON MIGURA LOG 11213301 HALLIBURTON ARTESIA.GPJ CRA_CORP.GDT 28/8/20

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/08
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-2
DATE COMPLETED: 3 August 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
0	Fine, silt, fill dirt			0.2		
3	Fat clay, brown, damp	3.00				
5			5'	0.2	57	37
10			10'	0.6	54	28
11			11'	1.3	255	38
11.3	END OF HOLE @ 11.3ft BGS	11.50				

NOTES:

LABORATORY ANALYSIS

DEVON MIGURA LOG 11213301 HALLIBURTON ARTESIA.GPJ CRA_CORP.GDT 28/8/20

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/08
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-3
DATE COMPLETED: 4 August 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Concrete surface cover					
	Sub base material	1.00				
2	Fat clay, brown, damp, with fine gravels.	2.00				
4						
		5.00	5'	0.2	71	180
	Fat clay, brown, damp					
6						
8						
10			10'	0.4	<61.2	96
12						
14						
		15.00	15'	1.3	<61.2	390
	END OF HOLE @ 15.0ft BGS					
16						
18						
20						
22						
24						

NOTES:

LABORATORY ANALYSIS ( )

DEVON MIGURA LOG 11213301 HALLIBURTON ARTESIA.GPJ CRA_CORP.GDT 28/8/20

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/08
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-4
DATE COMPLETED: 4 August 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Concrete surface cover					
	Sub base material	1.00				
2	Fat clay, brown, damp	2.00				
4			5'	1	46	27
6						
8						
10	Fine-med sandy clay, grey/brown, damp	9.50	10'	1.5	<71.5	84
12	Very fine, silty, clay, dry,grey, slight odor	11.00				
14						
	END OF HOLE @ 15.0ft BGS	15.00	15'	2.3	<61.2	290
16						
18						
20						
22						
24						

NOTES:

LABORATORY ANALYSIS ( )

DEVON MIGURA LOG 11213301 HALLIBURTON ARTESIA.GPJ CRA_CORP.GDT 28/8/20

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/08
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-5
DATE COMPLETED: 4 August 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Concrete surface cover					
	Sub base material	1.00				
2	Fat clay, brown, damp	2.00				
4			5'	0.3	<63.2	340
6						
8						
10	END OF HOLE @ 10.0ft BGS	10.00	10'	0.6	<63.3	130
12						
14						
16						
18						
20						
22						
24						

NOTES:

LABORATORY ANALYSIS ( )

DEVON MIGURA LOG 11213301 HALLIBURTON ARTESIA.GPJ CRA_CORP.GDT 28/8/20

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/08
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-6
DATE COMPLETED: 4 August 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Concrete surface cover					
	Sub base material	1.00				
2	Fat clay, brown, damp	2.00				
4			5'	0.3	<61.2	390
6						
8	END OF HOLE @ 8.0ft BGS	8.00	8'	1.1	<61.2	200
10						
12						
14						
16						
18						
20						
22						
24						

NOTES:

LABORATORY ANALYSIS (5' 8')

DEVON MIGURA LOG 11213301 HALLIBURTON ARTESIA.GPJ CRA_CORP.GDT 28/8/20

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/08
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-7
DATE COMPLETED: 4 August 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Concrete surface cover					
	Sub base material	1.00				
2	Fat clay, brown, damp	2.00				
4						
6			6'	4.3	36	100
8						
	END OF HOLE @ 9.0ft BGS	9.00	9'		<31.2	73
10						
12						
14						
16						
18						
20						
22						
24						

NOTES:

LABORATORY ANALYSIS ( )

DEVON MIGURA LOG 11213301 HALLIBURTON ARTESIA.GPJ CRA_CORP.GDT 28/8/20

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/08
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-8
DATE COMPLETED: 4 August 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Concrete surface cover					
	Sub base material	1.00				
2	Fat clay, brown, damp	2.00		1.6		
4						
6			6'	4.2	<61.2	160
8						
	END OF HOLE @ 9.0ft BGS	9.00	9'	6	<115.4	130
10						
12						
14						
16						
18						
20						
22						
24						

NOTES:

LABORATORY ANALYSIS (6' 9')

DEVON MIGURA LOG 11213301 HALLIBURTON ARTESIA.GPJ CRA_CORP.GDT 28/8/20

This log should not be used separately from the original report.

STRATIGRAPHIC LOG (OVERBURDEN)

PROJECT NAME: Artesia Field Camp
PROJECT NUMBER: 11213301/08
CLIENT: Halliburton Energy Services, Inc.
LOCATION: Artesia

HOLE DESIGNATION: DP-9
DATE COMPLETED: 4 August 2020
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: Charles Neligh

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE ID	PID (ppm)	Total TPH (mg/kg)	Chloride (mg/kg)
	Concrete surface cover					
	Sub base material	1.00				
2	Fat clay, brown, damp	2.00				
4						
6			6'	3.4	83	54
8						
	END OF HOLE @ 9.0ft BGS	9.00	9'	0.2	<61.1	<48
10						
12						
14						
16						
18						
20						
22						
24						

NOTES:

LABORATORY ANALYSIS ( )

DEVON MIGURA LOG 11213301 HALLIBURTON ARTESIA.GPJ CRA_CORP.GDT 28/8/20

This log should not be used separately from the original report.

Appendix B
Photographs

Photo 1 - Looking south at wooden stakes showing location of DP-2 in front of DP-1 north of Building 5

Photo 2 - Looking south at locations of DP-3 nearest containment and DP-4 near drain in truck bay. Final location of DP-4 was offset to the east.

Site Photographs

Photo 3 - Looking southwest at east side of Building 4 at DP-5 on the right and DP-6 on the left marked in white

Photo 4 - Looking north at south side of the grit pit and DP-7 location marked in white

Site Photographs

Photo 5 - Looking north through west wash bay at location of DP-8 in front of DP-9 marked in white

Photo 6 - Looking northwest at east side of building 3 at DP-10 and DP-11 marked I white. Final location of both borings was shifted east to avoid underground piping

Site Photographs

Photo 7 - Looking southeast at north end of oil water separators/grit pit at DP-12 location marked in white

Photo 8 - Looking north through east wash bay at locations marked in white DP-14 in front of DP-13 just beyond the hose

Site Photographs

Photo 9 - Looking south at north end of Building 6 at location of DP-15 marked in white

Photo 10 - Looking east inside Building 6 at locations of DP-16 and DP-17 marked in white

Site Photographs

Appendix C
Soil Laboratory Analytical Data

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-209487-1
Client Project/Site: 11213301-08 / Halliburton 2311 S 1st St

For:
GHD Services Inc.
5551 Corporate Boulevard
Suite 200
Baton Rouge, Louisiana 70808

Attn: Daniel Wascom

Authorized for release by:
8/21/2020 5:39:10 PM

Sachin Kudchadkar, Senior Project Manager
(713)690-4444
Sachin.Kudchadkar@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

Client: GHD Services Inc.
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Laboratory Job ID: 600-209487-1

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Case Narrative

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Job ID: 600-209487-1

Laboratory: Eurofins TestAmerica, Houston

Narrative

Job Narrative
600-209487-1

Comments
No additional comments.

Receipt
The samples were received on 8/7/2020 9:20 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 2.0º C, 3.0º C, 3.2º C and 4.3º C.

GC/MS VOA
Method 8260B: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 600-300707 recovered outside control limits for the following analytes: 2-Butanone (MEK), Acetone, and Bromomethane.

Method 8260B: The following sample was diluted to bring the concentration of target analytes within the calibration range: S-11213301-080320-CN-DP-1-12' (600-209487-2). Elevated reporting limits (RLs) are provided.

Method 8260B: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 600-300771 recovered outside control limits for the following analytes: 1,1,2,2,-Tetrachloroethane, 2-Hexanone, 4-Methyl-2-pentanone (MIBK), Acetone, Methyl acetate, and Vinyl acetate.

Method 8260B: The following compounds were outside control limits in the continuing calibration verification (CCV) associated with batch 600-300707: Methyl acetate (36.2%). These compounds are not classified as Calibration Check Compounds (CCCs) in the reference method, and the laboratory defaults to in-house and/or project-specific criteria for evaluation. The drift% is more than 35% but below 50%.

Method 8260B: The following sample was diluted to bring the concentration of target analytes within the calibration range: S-11213301-080520-CN-DP-15-11' (600-209487-34). Elevated reporting limits (RLs) are provided.

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

GC VOA
Method 8015B: The following sample was diluted due to the nature of the sample matrix: S-11213301-080320-CN-DP-1-12' (600-209487-2). Elevated reporting limits (RLs) are provided.

Method 8015B: The following sample was diluted to bring the concentration of target analytes within the calibration range: S-11213301-080520-CN-DP-15-11' (600-209487-34). Elevated reporting limits (RLs) are provided.

Method 8015B: The following sample required a dilution due to the nature of the sample matrix: S-11213301-080520-CN-DP-15-11' (600-209487-34). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method 8015B: The following samples were diluted to bring the concentration of target analytes within the calibration range: S-11213301-080520-CN-DP-15-11' (600-209487-34) and S-11213301-080520-CN-DPW-15-8' (600-209487-41). Elevated reporting limits (RLs) are provided.

Method 8015B: The following sample required a dilution due to the nature of the sample matrix: S-11213301-080520-CN-DP-15-11' (600-209487-34). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

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

GC Semi VOA
Method 8015D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 600-300964 and analytical batch 600-301085 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample

Case Narrative

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Job ID: 600-209487-1 (Continued)

Laboratory: Eurofins TestAmerica, Houston (Continued)

(LCS) recovery was within acceptance limits.

Method 8015D: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 600-300964 and analytical batch 600-301085 was outside control limits. Sample non-homogeneity is suspected.

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

General Chemistry
Method 300.0: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 600-301125 and analytical batch 600-301062 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) precision was within acceptance limits.

(600-209487-A-1-A MS) and (600-209487-A-1-A MSD)

Method 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 600-301125 and analytical batch 600-301062 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 300.0: The following samples were diluted to bring the concentration of target analytes within the calibration range: S-11213301-080420-CN-DP-9-9' (600-209487-22), S-11213301-080520-CN-DP-12-6' (600-209487-27) and S-11213301-080520-CN-DP-12-9' (600-209487-28). Elevated reporting limits (RLs) are provided.

Method 300.0: The continuing calibration blank for preparation batch 600-301125 and analytical batch 600-301663 contained Chloride above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

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

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

Organic Prep
Method 3546: Due to the matrix, the initial volumes used for the following samples deviated from the standard procedure: S-11213301-080320-CN-DP-1-5' (600-209487-1), S-11213301-080320-CN-DP-1-12' (600-209487-2), S-11213301-080320-CN-DP-1-15' (600-209487-3), S-11213301-080320-CN-DP-2-5' (600-209487-4), S-11213301-080320-CN-DP-2-10' (600-209487-5), S-11213301-080320-CN-DP-2-11' (600-209487-6), S-11213301-080420-CN-DP-3-5' (600-209487-7), S-11213301-080420-CN-DP-3-10' (600-209487-8), S-11213301-080420-CN-DP-3-15' (600-209487-9), S-11213301-080420-CN-DP-4.5' (600-209487-10), S-11213301-080420-CN-DP-4-10' (600-209487-11), S-11213301-080420-CN-DP-4-15' (600-209487-12), S-11213301-080420-CN-DP-5-5' (600-209487-13), S-11213301-080420-CN-DP-5-8' (600-209487-14), S-11213301-080420-CN-DP-6-5' (600-209487-15), S-11213301-080420-CN-DP-6-8' (600-209487-16), S-11213301-080420-CN-DP-7-6' (600-209487-17), S-11213301-080420-CN-DP-7-9' (600-209487-18), S-11213301-080420-CN-DP-8-6' (600-209487-19), S-11213301-080420-CN-DP-8-9' (600-209487-20), (600-209487-B-13 MS) and (600-209487-B-13 MSD). The reporting limits (RLs) have been adjusted proportionately.

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

Method Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8015B	Gasoline Range Organics - (GC)	SW846	TAL HOU
8015D	Diesel Range Organics (DRO) (GC)	SW846	TAL HOU
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU
2540G	SM 2540G	SM22	TAL HOU
3546	Microwave Extraction	SW846	TAL HOU
5030B	Purge and Trap for Methanol Extractions	SW846	TAL HOU
5030B	Purge and Trap for Solids	SW846	TAL HOU
DI Leach	Deionized Water Leaching Procedure (Routine)	ASTM	TAL HOU

Protocol References:

ASTM = ASTM International
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SM22 = Standard Methods For The Examination Of Water And Wastewater, 22nd Edition
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: GHD Services Inc.
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Job ID: 600-209487-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
600-209487-1	S-11213301-080320-CN-DP-1-5'	Solid	08/03/20 13:20	08/07/20 09:20	
600-209487-2	S-11213301-080320-CN-DP-1-12'	Solid	08/03/20 13:30	08/07/20 09:20	
600-209487-3	S-11213301-080320-CN-DP-1-15'	Solid	08/03/20 13:50	08/07/20 09:20	
600-209487-4	S-11213301-080320-CN-DP-2-5'	Solid	08/03/20 14:40	08/07/20 09:20	
600-209487-5	S-11213301-080320-CN-DP-2-10'	Solid	08/03/20 15:00	08/07/20 09:20	
600-209487-6	S-11213301-080320-CN-DP-2-11'	Solid	08/03/20 15:10	08/07/20 09:20	
600-209487-7	S-11213301-080420-CN-DP-3-5'	Solid	08/04/20 09:50	08/07/20 09:20	
600-209487-8	S-11213301-080420-CN-DP-3-10'	Solid	08/04/20 09:55	08/07/20 09:20	
600-209487-9	S-11213301-080420-CN-DP-3-15'	Solid	08/04/20 10:00	08/07/20 09:20	
600-209487-10	S-11213301-080420-CN-DP-4.5'	Solid	08/04/20 10:30	08/07/20 09:20	
600-209487-11	S-11213301-080420-CN-DP-4-10'	Solid	08/04/20 10:35	08/07/20 09:20	
600-209487-12	S-11213301-080420-CN-DP-4-15'	Solid	08/04/20 10:40	08/07/20 09:20	
600-209487-13	S-11213301-080420-CN-DP-5-5'	Solid	08/04/20 11:10	08/07/20 09:20	
600-209487-14	S-11213301-080420-CN-DP-5-8'	Solid	08/04/20 11:15	08/07/20 09:20	
600-209487-15	S-11213301-080420-CN-DP-6-5'	Solid	08/04/20 11:50	08/07/20 09:20	
600-209487-16	S-11213301-080420-CN-DP-6-8'	Solid	08/04/20 11:55	08/07/20 09:20	
600-209487-17	S-11213301-080420-CN-DP-7-6'	Solid	08/04/20 13:55	08/07/20 09:20	
600-209487-18	S-11213301-080420-CN-DP-7-9'	Solid	08/04/20 14:00	08/07/20 09:20	
600-209487-19	S-11213301-080420-CN-DP-8-6'	Solid	08/04/20 15:00	08/07/20 09:20	
600-209487-20	S-11213301-080420-CN-DP-8-9'	Solid	08/04/20 15:05	08/07/20 09:20	
600-209487-21	S-11213301-080420-CN-DP-9-6'	Solid	08/04/20 15:50	08/07/20 09:20	
600-209487-22	S-11213301-080420-CN-DP-9-9'	Solid	08/04/20 15:55	08/07/20 09:20	
600-209487-23	S-11213301-080520-CN-DP-10-5'	Solid	08/05/20 08:15	08/07/20 09:20	
600-209487-24	S-11213301-080520-CN-DP-10-8'	Solid	08/05/20 08:20	08/07/20 09:20	
600-209487-25	S-11213301-080520-CN-DP-11-5'	Solid	08/05/20 09:00	08/07/20 09:20	
600-209487-26	S-11213301-080520-CN-DP-11-8	Solid	08/05/20 09:05	08/07/20 09:20	
600-209487-27	S-11213301-080520-CN-DP-12-6'	Solid	08/05/20 09:45	08/07/20 09:20	
600-209487-28	S-11213301-080520-CN-DP-12-9'	Solid	08/05/20 09:50	08/07/20 09:20	
600-209487-29	S-11213301-080520-CN-DP-13-6'	Solid	08/05/20 10:50	08/07/20 09:20	
600-209487-30	S-11213301-080520-CN-DP-13-9'	Solid	08/05/20 10:55	08/07/20 09:20	
600-209487-31	S-11213301-080520-CN-DP-14-6'	Solid	08/05/20 11:25	08/07/20 09:20	
600-209487-32	S-11213301-080520-CN-DP-14-9'	Solid	08/05/20 11:30	08/07/20 09:20	
600-209487-33	S-11213301-080520-CN-DP-15-5'	Solid	08/05/20 12:10	08/07/20 09:20	
600-209487-34	S-11213301-080520-CN-DP-15-11'	Solid	08/05/20 17:15	08/07/20 09:20	
600-209487-35	S-11213301-080520-CN-DP-15-20'	Solid	08/05/20 17:20	08/07/20 09:20	
600-209487-36	S-11213301-080520-CN-DP-16-5'	Solid	08/05/20 14:45	08/07/20 09:20	
600-209487-37	S-11213301-080520-CN-DP-16-8'	Solid	08/05/20 14:50	08/07/20 09:20	
600-209487-38	S-11213301-080520-CN-DP-17-5'	Solid	08/05/20 15:35	08/07/20 09:20	
600-209487-39	S-11213301-080520-CN-DP-17-8'	Solid	08/05/20 15:40	08/07/20 09:20	
600-209487-41	S-11213301-080520-CN-DPW-15-8'	Solid	08/05/20 12:15	08/07/20 09:20	

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080320-CN-DP-1-5' **Lab Sample ID: 600-209487-1**
Date Collected: 08/03/20 13:20 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.6**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Chloromethane	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Vinyl chloride	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Bromomethane	ND	*1	0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Chloroethane	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Trichlorofluoromethane	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
1,1-Dichloroethene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
trans-1,2-Dichloroethene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Methyl tert-butyl ether	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Acetone	ND	*1	0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Carbon disulfide	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Methyl acetate	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Methylene Chloride	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Vinyl acetate	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
cis-1,2-Dichloroethene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
1,2-Dichloroethene, Total	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
2-Butanone (MEK)	ND	*1	0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Chlorobromomethane	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Cyclohexane	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Carbon tetrachloride	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Benzene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
1,2-Dichloroethane	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Trichloroethene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
1,1,1-Trichloroethane	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
1,1-Dichloroethane	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
1,2-Dichloropropane	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Chloroform	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Bromodichloromethane	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Methylcyclohexane	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
cis-1,3-Dichloropropene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
4-Methyl-2-pentanone (MIBK)	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Toluene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
trans-1,3-Dichloropropene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
1,1,2-Trichloroethane	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Tetrachloroethene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
2-Hexanone	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Dibromochloromethane	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
1,2-Dibromoethane	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Chlorobenzene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Ethylbenzene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
m-Xylene & p-Xylene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Xylenes, Total	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
o-Xylene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Styrene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Bromoform	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
Isopropylbenzene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
1,1,2,2-Tetrachloroethane	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
1,3-Dichlorobenzene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080320-CN-DP-1-5' Lab Sample ID: 600-209487-1

Date Collected: 08/03/20 13:20 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.6**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
1,2-Dichlorobenzene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
1,2-Dibromo-3-Chloropropane	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1
1,2,4-Trichlorobenzene	ND		0.0062		mg/Kg	☼	08/08/20 10:45	08/08/20 15:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*61 - 130*	*08/08/20 10:45*	*08/08/20 15:13*	*1*
Dibromofluoromethane	*84*		*68 - 140*	*08/08/20 10:45*	*08/08/20 15:13*	*1*
Toluene-d8 (Surr)	*94*		*50 - 130*	*08/08/20 10:45*	*08/08/20 15:13*	*1*
4-Bromofluorobenzene	*105*		*57 - 140*	*08/08/20 10:45*	*08/08/20 15:13*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/08/20 07:14	08/08/20 14:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*92*		*70 - 130*	*08/08/20 07:14*	*08/08/20 14:00*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		15		mg/Kg	☼	08/12/20 08:32	08/14/20 21:49	1
C28-C36	**49**		15		mg/Kg	☼	08/12/20 08:32	08/14/20 21:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*75*		*60 - 140*	*08/12/20 08:32*	*08/14/20 21:49*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**80**	**F2 F1**	4.8		mg/Kg	☼		08/13/20 14:03	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**16.4**		1.0		%			08/11/20 08:50	1
Percent Solids	**83.6**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080320-CN-DP-1-12' Lab Sample ID: 600-209487-2

Date Collected: 08/03/20 13:30 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 80.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Chloromethane	ND		0.072		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Vinyl chloride	ND		0.072		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Bromomethane	ND	*1	0.072		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Chloroethane	ND		0.072		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Trichlorofluoromethane	ND		0.072		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
1,1-Dichloroethene	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
trans-1,2-Dichloroethene	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Methyl tert-butyl ether	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Acetone	**0.63**	***1**	0.072		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080320-CN-DP-1-12' **Lab Sample ID: 600-209487-2**
Date Collected: 08/03/20 13:30 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 80.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		0.072		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Methyl acetate	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Methylene Chloride	ND		0.072		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Vinyl acetate	ND		0.072		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
cis-1,2-Dichloroethene	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
1,2-Dichloroethene, Total	ND		0.072		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
2-Butanone (MEK)	**1.4**	***1**	0.072		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Chlorobromomethane	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Cyclohexane	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Carbon tetrachloride	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Benzene	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
1,2-Dichloroethane	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Trichloroethene	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
1,1,1-Trichloroethane	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
1,1-Dichloroethane	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
1,2-Dichloropropane	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Chloroform	ND		0.072		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Bromodichloromethane	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Methylcyclohexane	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
cis-1,3-Dichloropropene	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
4-Methyl-2-pentanone (MIBK)	ND		0.072		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Toluene	**0.45**		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
trans-1,3-Dichloropropene	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
1,1,2-Trichloroethane	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Tetrachloroethene	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
2-Hexanone	ND		0.072		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Dibromochloromethane	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
1,2-Dibromoethane	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Chlorobenzene	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Ethylbenzene	**0.36**		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
m-Xylene & p-Xylene	**1.4**		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Xylenes, Total	**2.3**		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
o-Xylene	**0.89**		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Styrene	**1.1**		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Bromoform	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
Isopropylbenzene	**0.23**		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
1,1,2,2-Tetrachloroethane	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
1,3-Dichlorobenzene	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
1,4-Dichlorobenzene	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
1,2-Dichlorobenzene	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
1,2-Dibromo-3-Chloropropane	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1
1,2,4-Trichlorobenzene	ND		0.036		mg/Kg	☼	08/08/20 10:45	08/08/20 15:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*61 - 130*	*08/08/20 10:45*	*08/08/20 15:37*	*1*
Dibromofluoromethane	*85*		*68 - 140*	*08/08/20 10:45*	*08/08/20 15:37*	*1*
Toluene-d8 (Surr)	*96*		*50 - 130*	*08/08/20 10:45*	*08/08/20 15:37*	*1*
4-Bromofluorobenzene	*121*		*57 - 140*	*08/08/20 10:45*	*08/08/20 15:37*	*1*

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080320-CN-DP-1-12' Lab Sample ID: 600-209487-2

Date Collected: 08/03/20 13:30 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 80.0**

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	110		26		mg/Kg	☼	08/08/20 07:14	08/08/20 14:50	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*117*		*70 - 130*	*08/08/20 07:14*	*08/08/20 14:50*	*20*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	350		31		mg/Kg	☼	08/17/20 12:40	08/18/20 15:54	1
C28-C36	280		31		mg/Kg	☼	08/17/20 12:40	08/18/20 15:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*96*		*60 - 140*	*08/17/20 12:40*	*08/18/20 15:54*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	87		5.0		mg/Kg	☼		08/13/20 15:04	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20.0		1.0		%			08/11/20 08:50	1
Percent Solids	80.0		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080320-CN-DP-1-15' Lab Sample ID: 600-209487-3

Date Collected: 08/03/20 13:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Chloromethane	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Vinyl chloride	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Bromomethane	ND	*1	0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Chloroethane	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Trichlorofluoromethane	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
1,1-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
trans-1,2-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Methyl tert-butyl ether	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Acetone	ND	*1	0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Carbon disulfide	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Methyl acetate	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Methylene Chloride	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Vinyl acetate	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
cis-1,2-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
1,2-Dichloroethene, Total	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
2-Butanone (MEK)	ND	*1	0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Chlorobromomethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Cyclohexane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Carbon tetrachloride	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Benzene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080320-CN-DP-1-15' **Lab Sample ID: 600-209487-3**
Date Collected: 08/03/20 13:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Trichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
1,1,1-Trichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
1,1-Dichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
1,2-Dichloropropane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Chloroform	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Bromodichloromethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Methylcyclohexane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
cis-1,3-Dichloropropene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
4-Methyl-2-pentanone (MIBK)	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Toluene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
trans-1,3-Dichloropropene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
1,1,2-Trichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Tetrachloroethene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
2-Hexanone	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Dibromochloromethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
1,2-Dibromoethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Chlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Ethylbenzene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
m-Xylene & p-Xylene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Xylenes, Total	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
o-Xylene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Styrene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Bromoform	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
Isopropylbenzene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
1,1,2,2-Tetrachloroethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
1,3-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
1,4-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
1,2-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
1,2-Dibromo-3-Chloropropane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1
1,2,4-Trichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/08/20 16:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*61 - 130*	*08/08/20 10:45*	*08/08/20 16:00*	*1*
Dibromofluoromethane	*87*		*68 - 140*	*08/08/20 10:45*	*08/08/20 16:00*	*1*
Toluene-d8 (Surr)	*94*		*50 - 130*	*08/08/20 10:45*	*08/08/20 16:00*	*1*
4-Bromofluorobenzene	*104*		*57 - 140*	*08/08/20 10:45*	*08/08/20 16:00*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.3		mg/Kg	☼	08/08/20 07:14	08/08/20 15:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*99*		*70 - 130*	*08/08/20 07:14*	*08/08/20 15:15*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		15		mg/Kg	☼	08/12/20 08:32	08/14/20 23:02	1
C28-C36	ND		15		mg/Kg	☼	08/12/20 08:32	08/14/20 23:02	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080320-CN-DP-1-15' Lab Sample ID: 600-209487-3

Date Collected: 08/03/20 13:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.2**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	75		60 - 140	08/12/20 08:32	08/14/20 23:02	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	230		4.8		mg/Kg	☼		08/13/20 15:24	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16.8		1.0		%			08/11/20 08:50	1
Percent Solids	83.2		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080320-CN-DP-2-5' Lab Sample ID: 600-209487-4

Date Collected: 08/03/20 14:40 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Chloromethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Vinyl chloride	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Bromomethane	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Chloroethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Trichlorofluoromethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
1,1-Dichloroethene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
trans-1,2-Dichloroethene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Methyl tert-butyl ether	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Acetone	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Carbon disulfide	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Methyl acetate	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Methylene Chloride	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Vinyl acetate	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
cis-1,2-Dichloroethene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
1,2-Dichloroethene, Total	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
2-Butanone (MEK)	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Chlorobromomethane	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Cyclohexane	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Carbon tetrachloride	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Benzene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
1,2-Dichloroethane	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Trichloroethene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
1,1,1-Trichloroethane	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
1,1-Dichloroethane	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
1,2-Dichloropropane	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Chloroform	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Bromodichloromethane	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Methylcyclohexane	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
cis-1,3-Dichloropropene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
4-Methyl-2-pentanone (MIBK)	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Toluene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
trans-1,3-Dichloropropene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080320-CN-DP-2-5' **Lab Sample ID: 600-209487-4**
Date Collected: 08/03/20 14:40 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Tetrachloroethene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
2-Hexanone	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Dibromochloromethane	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
1,2-Dibromoethane	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Chlorobenzene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Ethylbenzene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
m-Xylene & p-Xylene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Xylenes, Total	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
o-Xylene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Styrene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Bromoform	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
Isopropylbenzene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
1,1,2,2-Tetrachloroethane	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
1,3-Dichlorobenzene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
1,4-Dichlorobenzene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
1,2-Dichlorobenzene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
1,2-Dibromo-3-Chloropropane	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1
1,2,4-Trichlorobenzene	ND		0.0063		mg/Kg	☼	08/08/20 10:45	08/08/20 16:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*61 - 130*	*08/08/20 10:45*	*08/08/20 16:24*	*1*
Dibromofluoromethane	*84*		*68 - 140*	*08/08/20 10:45*	*08/08/20 16:24*	*1*
Toluene-d8 (Surr)	*91*		*50 - 130*	*08/08/20 10:45*	*08/08/20 16:24*	*1*
4-Bromofluorobenzene	*102*		*57 - 140*	*08/08/20 10:45*	*08/08/20 16:24*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/08/20 07:14	08/08/20 15:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*100*		*70 - 130*	*08/08/20 07:14*	*08/08/20 15:41*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		15		mg/Kg	☼	08/12/20 08:32	08/14/20 23:38	1
C28-C36	**57**		15		mg/Kg	☼	08/12/20 08:32	08/14/20 23:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*97*		*60 - 140*	*08/12/20 08:32*	*08/14/20 23:38*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**37**		4.8		mg/Kg	☼		08/13/20 15:45	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**16.7**		1.0		%			08/11/20 08:50	1
Percent Solids	**83.3**		1.0		%			08/11/20 08:50	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080320-CN-DP-2-10' **Lab Sample ID: 600-209487-5**
Date Collected: 08/03/20 15:00 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Chloromethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Vinyl chloride	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Bromomethane	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Chloroethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Trichlorofluoromethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
1,1-Dichloroethene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
trans-1,2-Dichloroethene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Methyl tert-butyl ether	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Acetone	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Carbon disulfide	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Methyl acetate	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Methylene Chloride	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Vinyl acetate	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
cis-1,2-Dichloroethene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
1,2-Dichloroethene, Total	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
2-Butanone (MEK)	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Chlorobromomethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Cyclohexane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Carbon tetrachloride	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Benzene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
1,2-Dichloroethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Trichloroethene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
1,1,1-Trichloroethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
1,1-Dichloroethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
1,2-Dichloropropane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Chloroform	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Bromodichloromethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Methylcyclohexane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
cis-1,3-Dichloropropene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
4-Methyl-2-pentanone (MIBK)	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Toluene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
trans-1,3-Dichloropropene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
1,1,2-Trichloroethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Tetrachloroethene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
2-Hexanone	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Dibromochloromethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
1,2-Dibromoethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Chlorobenzene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Ethylbenzene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
m-Xylene & p-Xylene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Xylenes, Total	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
o-Xylene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Styrene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Bromoform	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
Isopropylbenzene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
1,1,2,2-Tetrachloroethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
1,3-Dichlorobenzene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080320-CN-DP-2-10' Lab Sample ID: 600-209487-5

Date Collected: 08/03/20 15:00 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 82.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
1,2-Dichlorobenzene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
1,2-Dibromo-3-Chloropropane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1
1,2,4-Trichlorobenzene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/08/20 16:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*61 - 130*	*08/08/20 10:45*	*08/08/20 16:48*	*1*
Dibromofluoromethane	*83*		*68 - 140*	*08/08/20 10:45*	*08/08/20 16:48*	*1*
Toluene-d8 (Surr)	*97*		*50 - 130*	*08/08/20 10:45*	*08/08/20 16:48*	*1*
4-Bromofluorobenzene	*104*		*57 - 140*	*08/08/20 10:45*	*08/08/20 16:48*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/08/20 07:14	08/08/20 16:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*103*		*70 - 130*	*08/08/20 07:14*	*08/08/20 16:06*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		15		mg/Kg	☼	08/12/20 08:32	08/15/20 00:14	1
C28-C36	**54**		15		mg/Kg	☼	08/12/20 08:32	08/15/20 00:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*68*		*60 - 140*	*08/12/20 08:32*	*08/15/20 00:14*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**28**		4.9		mg/Kg	☼		08/13/20 16:05	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**18.0**		1.0		%			08/11/20 08:50	1
Percent Solids	**82.0**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080320-CN-DP-2-11' Lab Sample ID: 600-209487-6

Date Collected: 08/03/20 15:10 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 91.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Chloromethane	ND		0.010		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Vinyl chloride	ND		0.010		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Bromomethane	ND		0.010		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Chloroethane	ND		0.010		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Trichlorofluoromethane	ND		0.010		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
1,1-Dichloroethene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
trans-1,2-Dichloroethene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Methyl tert-butyl ether	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Acetone	ND	*1	0.010		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080320-CN-DP-2-11' **Lab Sample ID: 600-209487-6**
Date Collected: 08/03/20 15:10 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 91.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		0.010		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Methyl acetate	ND	*1	0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Methylene Chloride	ND		0.010		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Vinyl acetate	ND	*1	0.010		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
cis-1,2-Dichloroethene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
1,2-Dichloroethene, Total	ND		0.010		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
2-Butanone (MEK)	ND		0.010		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Chlorobromomethane	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Cyclohexane	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Carbon tetrachloride	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Benzene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
1,2-Dichloroethane	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Trichloroethene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
1,1,1-Trichloroethane	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
1,1-Dichloroethane	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
1,2-Dichloropropane	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Chloroform	ND		0.010		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Bromodichloromethane	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Methylcyclohexane	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
cis-1,3-Dichloropropene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.010		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Toluene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
trans-1,3-Dichloropropene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
1,1,2-Trichloroethane	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Tetrachloroethene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
2-Hexanone	ND	*1	0.010		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Dibromochloromethane	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
1,2-Dibromoethane	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Chlorobenzene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Ethylbenzene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
m-Xylene & p-Xylene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Xylenes, Total	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
o-Xylene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Styrene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Bromoform	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
Isopropylbenzene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
1,3-Dichlorobenzene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
1,4-Dichlorobenzene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
1,2-Dichlorobenzene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
1,2-Dibromo-3-Chloropropane	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1
1,2,4-Trichlorobenzene	ND		0.0051		mg/Kg	☼	08/08/20 10:45	08/10/20 15:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*61 - 130*	*08/08/20 10:45*	*08/10/20 15:56*	*1*
Dibromofluoromethane	*87*		*68 - 140*	*08/08/20 10:45*	*08/10/20 15:56*	*1*
Toluene-d8 (Surr)	*94*		*50 - 130*	*08/08/20 10:45*	*08/10/20 15:56*	*1*
4-Bromofluorobenzene	*86*		*57 - 140*	*08/08/20 10:45*	*08/10/20 15:56*	*1*

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080320-CN-DP-2-11' Lab Sample ID: 600-209487-6

Date Collected: 08/03/20 15:10 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 91.2

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.1		mg/Kg	☼	08/08/20 07:14	08/08/20 16:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*102*		*70 - 130*	*08/08/20 07:14*	*08/08/20 16:31*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**85**		27		mg/Kg	☼	08/17/20 12:40	08/18/20 16:31	1
C28-C36	**170**		27		mg/Kg	☼	08/17/20 12:40	08/18/20 16:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*109*		*60 - 140*	*08/17/20 12:40*	*08/18/20 16:31*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**38**		4.4		mg/Kg	☼		08/13/20 16:25	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**8.8**		1.0		%			08/11/20 08:50	1
Percent Solids	**91.2**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080420-CN-DP-3-5' Lab Sample ID: 600-209487-7

Date Collected: 08/04/20 09:50 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 83.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Chloromethane	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Vinyl chloride	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Bromomethane	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Chloroethane	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Trichlorofluoromethane	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
1,1-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
trans-1,2-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Methyl tert-butyl ether	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Acetone	ND	*1	0.012		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Carbon disulfide	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Methyl acetate	ND	*1	0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Methylene Chloride	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Vinyl acetate	ND	*1	0.012		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
cis-1,2-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
1,2-Dichloroethene, Total	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
2-Butanone (MEK)	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Chlorobromomethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Cyclohexane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Carbon tetrachloride	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Benzene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
1,2-Dichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-3-5' **Lab Sample ID: 600-209487-7**
Date Collected: 08/04/20 09:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
1,1,1-Trichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
1,1-Dichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
1,2-Dichloropropane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Chloroform	ND		0.012		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Bromodichloromethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Methylcyclohexane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
cis-1,3-Dichloropropene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.012		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Toluene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
trans-1,3-Dichloropropene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
1,1,2-Trichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Tetrachloroethene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
2-Hexanone	ND	*1	0.012		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Dibromochloromethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
1,2-Dibromoethane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Chlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Ethylbenzene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
m-Xylene & p-Xylene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Xylenes, Total	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
o-Xylene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Styrene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Bromoform	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
Isopropylbenzene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
1,3-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
1,4-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
1,2-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
1,2-Dibromo-3-Chloropropane	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1
1,2,4-Trichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 10:45	08/10/20 16:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*61 - 130*	*08/08/20 10:45*	*08/10/20 16:22*	*1*
Dibromofluoromethane	*87*		*68 - 140*	*08/08/20 10:45*	*08/10/20 16:22*	*1*
Toluene-d8 (Surr)	*89*		*50 - 130*	*08/08/20 10:45*	*08/10/20 16:22*	*1*
4-Bromofluorobenzene	*85*		*57 - 140*	*08/08/20 10:45*	*08/10/20 16:22*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		36		mg/Kg	☼	08/08/20 07:14	08/08/20 16:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*101*		*70 - 130*	*08/08/20 07:14*	*08/08/20 16:56*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**28**		15		mg/Kg	☼	08/12/20 08:32	08/15/20 01:27	1
C28-C36	**43**		15		mg/Kg	☼	08/12/20 08:32	08/15/20 01:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*80*		*60 - 140*	*08/12/20 08:32*	*08/15/20 01:27*	*1*

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-3-5' Lab Sample ID: 600-209487-7

Date Collected: 08/04/20 09:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.8**

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	180		4.8		mg/Kg	☼		08/13/20 17:27	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16.2		1.0		%			08/11/20 08:50	1
Percent Solids	83.8		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080420-CN-DP-3-10' Lab Sample ID: 600-209487-8

Date Collected: 08/04/20 09:55 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 81.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Chloromethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Vinyl chloride	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Bromomethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Chloroethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Trichlorofluoromethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
1,1-Dichloroethene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
trans-1,2-Dichloroethene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Methyl tert-butyl ether	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Acetone	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Carbon disulfide	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Methyl acetate	ND	*1	0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Methylene Chloride	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Vinyl acetate	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
cis-1,2-Dichloroethene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
1,2-Dichloroethene, Total	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
2-Butanone (MEK)	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Chlorobromomethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Cyclohexane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Carbon tetrachloride	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Benzene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
1,2-Dichloroethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Trichloroethene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
1,1,1-Trichloroethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
1,1-Dichloroethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
1,2-Dichloropropane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Chloroform	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Bromodichloromethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Methylcyclohexane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
cis-1,3-Dichloropropene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Toluene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
trans-1,3-Dichloropropene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
1,1,2-Trichloroethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Tetrachloroethene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
2-Hexanone	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-3-10' **Lab Sample ID: 600-209487-8**
Date Collected: 08/04/20 09:55 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 81.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
1,2-Dibromoethane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Chlorobenzene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Ethylbenzene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
m-Xylene & p-Xylene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Xylenes, Total	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
o-Xylene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Styrene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Bromoform	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
Isopropylbenzene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
1,3-Dichlorobenzene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
1,4-Dichlorobenzene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
1,2-Dichlorobenzene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
1,2-Dibromo-3-Chloropropane	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1
1,2,4-Trichlorobenzene	ND		0.0065		mg/Kg	☼	08/08/20 10:45	08/10/20 16:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*61 - 130*	*08/08/20 10:45*	*08/10/20 16:48*	*1*
Dibromofluoromethane	*85*		*68 - 140*	*08/08/20 10:45*	*08/10/20 16:48*	*1*
Toluene-d8 (Surr)	*96*		*50 - 130*	*08/08/20 10:45*	*08/10/20 16:48*	*1*
4-Bromofluorobenzene	*92*		*57 - 140*	*08/08/20 10:45*	*08/10/20 16:48*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/08/20 07:14	08/08/20 17:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*101*		*70 - 130*	*08/08/20 07:14*	*08/08/20 17:21*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		30		mg/Kg	☼	08/17/20 12:40	08/18/20 17:08	1
C28-C36	ND		30		mg/Kg	☼	08/17/20 12:40	08/18/20 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*112*		*60 - 140*	*08/17/20 12:40*	*08/18/20 17:08*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**96**		4.9		mg/Kg	☼		08/13/20 17:47	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**18.2**		1.0		%			08/11/20 08:50	1
Percent Solids	**81.8**		1.0		%			08/11/20 08:50	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-3-15' **Lab Sample ID: 600-209487-9**
Date Collected: 08/04/20 10:00 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Chloromethane	ND		0.011		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Vinyl chloride	ND		0.011		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Bromomethane	ND		0.011		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Chloroethane	ND		0.011		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Trichlorofluoromethane	ND		0.011		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
1,1-Dichloroethene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
trans-1,2-Dichloroethene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Methyl tert-butyl ether	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Acetone	**0.057**	***1**	0.011		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Carbon disulfide	ND		0.011		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Methyl acetate	ND	*1	0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Methylene Chloride	ND		0.011		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Vinyl acetate	ND	*1	0.011		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
cis-1,2-Dichloroethene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
1,2-Dichloroethene, Total	ND		0.011		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
2-Butanone (MEK)	ND		0.011		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Chlorobromomethane	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Cyclohexane	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Carbon tetrachloride	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Benzene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
1,2-Dichloroethane	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Trichloroethene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
1,1,1-Trichloroethane	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
1,1-Dichloroethane	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
1,2-Dichloropropane	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Chloroform	ND		0.011		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Bromodichloromethane	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Methylcyclohexane	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
cis-1,3-Dichloropropene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.011		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Toluene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
trans-1,3-Dichloropropene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
1,1,2-Trichloroethane	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Tetrachloroethene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
2-Hexanone	ND	*1	0.011		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Dibromochloromethane	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
1,2-Dibromoethane	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Chlorobenzene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Ethylbenzene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
m-Xylene & p-Xylene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Xylenes, Total	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
o-Xylene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Styrene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Bromoform	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
Isopropylbenzene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
1,3-Dichlorobenzene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-3-15' Lab Sample ID: 600-209487-9

Date Collected: 08/04/20 10:00 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 82.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
1,2-Dichlorobenzene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
1,2-Dibromo-3-Chloropropane	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1
1,2,4-Trichlorobenzene	ND		0.0054		mg/Kg	☼	08/08/20 10:45	08/10/20 17:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*61 - 130*	*08/08/20 10:45*	*08/10/20 17:14*	*1*
Dibromofluoromethane	*83*		*68 - 140*	*08/08/20 10:45*	*08/10/20 17:14*	*1*
Toluene-d8 (Surr)	*87*		*50 - 130*	*08/08/20 10:45*	*08/10/20 17:14*	*1*
4-Bromofluorobenzene	*85*		*57 - 140*	*08/08/20 10:45*	*08/10/20 17:14*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/08/20 13:51	08/08/20 17:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*98*		*70 - 130*	*08/08/20 13:51*	*08/08/20 17:46*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		30		mg/Kg	☼	08/17/20 12:40	08/18/20 17:45	1
C28-C36	ND		30		mg/Kg	☼	08/17/20 12:40	08/18/20 17:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*101*		*60 - 140*	*08/17/20 12:40*	*08/18/20 17:45*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**390**		4.9		mg/Kg	☼		08/13/20 18:07	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**18.0**		1.0		%			08/11/20 08:50	1
Percent Solids	**82.0**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080420-CN-DP-4.5' Lab Sample ID: 600-209487-10

Date Collected: 08/04/20 10:30 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 82.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Chloromethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Vinyl chloride	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Bromomethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Chloroethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Trichlorofluoromethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
1,1-Dichloroethene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
trans-1,2-Dichloroethene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Methyl tert-butyl ether	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Acetone	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-4.5' **Lab Sample ID: 600-209487-10**
Date Collected: 08/04/20 10:30 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Methyl acetate	ND	*1	0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Methylene Chloride	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Vinyl acetate	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
cis-1,2-Dichloroethene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
1,2-Dichloroethene, Total	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
2-Butanone (MEK)	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Chlorobromomethane	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Cyclohexane	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Carbon tetrachloride	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Benzene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
1,2-Dichloroethane	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Trichloroethene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
1,1,1-Trichloroethane	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
1,1-Dichloroethane	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
1,2-Dichloropropane	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Chloroform	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Bromodichloromethane	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Methylcyclohexane	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
cis-1,3-Dichloropropene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Toluene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
trans-1,3-Dichloropropene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
1,1,2-Trichloroethane	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Tetrachloroethene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
2-Hexanone	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Dibromochloromethane	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
1,2-Dibromoethane	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Chlorobenzene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Ethylbenzene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
m-Xylene & p-Xylene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Xylenes, Total	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
o-Xylene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Styrene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Bromoform	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
Isopropylbenzene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
1,3-Dichlorobenzene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
1,4-Dichlorobenzene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
1,2-Dichlorobenzene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
1,2-Dibromo-3-Chloropropane	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1
1,2,4-Trichlorobenzene	ND		0.0067		mg/Kg	☼	08/08/20 10:45	08/10/20 17:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*61 - 130*	*08/08/20 10:45*	*08/10/20 17:40*	*1*
Dibromofluoromethane	*88*		*68 - 140*	*08/08/20 10:45*	*08/10/20 17:40*	*1*
Toluene-d8 (Surr)	*94*		*50 - 130*	*08/08/20 10:45*	*08/10/20 17:40*	*1*
4-Bromofluorobenzene	*94*		*57 - 140*	*08/08/20 10:45*	*08/10/20 17:40*	*1*

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-4.5' Lab Sample ID: 600-209487-10

Date Collected: 08/04/20 10:30 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 82.8

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/08/20 13:51	08/08/20 18:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*101*		*70 - 130*	*08/08/20 13:51*	*08/08/20 18:11*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		15		mg/Kg	☼	08/12/20 08:32	08/15/20 04:27	1
C28-C36	**46**		15		mg/Kg	☼	08/12/20 08:32	08/15/20 04:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*73*		*60 - 140*	*08/12/20 08:32*	*08/15/20 04:27*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**27**		4.8		mg/Kg	☼		08/13/20 18:28	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**17.2**		1.0		%			08/11/20 08:50	1
Percent Solids	**82.8**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080420-CN-DP-4-10' Lab Sample ID: 600-209487-11

Date Collected: 08/04/20 10:35 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 72.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Chloromethane	ND		0.015		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Vinyl chloride	ND		0.015		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Bromomethane	ND		0.015		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Chloroethane	ND		0.015		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Trichlorofluoromethane	ND		0.015		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
1,1-Dichloroethene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
trans-1,2-Dichloroethene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Methyl tert-butyl ether	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Acetone	ND	*1	0.015		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Carbon disulfide	ND		0.015		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Methyl acetate	ND	*1	0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Methylene Chloride	ND		0.015		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Vinyl acetate	ND	*1	0.015		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
cis-1,2-Dichloroethene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
1,2-Dichloroethene, Total	ND		0.015		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
2-Butanone (MEK)	ND		0.015		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Chlorobromomethane	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Cyclohexane	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Carbon tetrachloride	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Benzene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
1,2-Dichloroethane	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-4-10' **Lab Sample ID: 600-209487-11**
Date Collected: 08/04/20 10:35 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 72.1**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
1,1,1-Trichloroethane	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
1,1-Dichloroethane	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
1,2-Dichloropropane	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Chloroform	ND		0.015		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Bromodichloromethane	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Methylcyclohexane	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
cis-1,3-Dichloropropene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.015		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Toluene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
trans-1,3-Dichloropropene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
1,1,2-Trichloroethane	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Tetrachloroethene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
2-Hexanone	ND	*1	0.015		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Dibromochloromethane	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
1,2-Dibromoethane	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Chlorobenzene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Ethylbenzene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
m-Xylene & p-Xylene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Xylenes, Total	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
o-Xylene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Styrene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Bromoform	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
Isopropylbenzene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
1,3-Dichlorobenzene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
1,4-Dichlorobenzene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
1,2-Dichlorobenzene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
1,2-Dibromo-3-Chloropropane	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1
1,2,4-Trichlorobenzene	ND		0.0076		mg/Kg	☼	08/08/20 10:45	08/10/20 18:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*61 - 130*	*08/08/20 10:45*	*08/10/20 18:06*	*1*
Dibromofluoromethane	*83*		*68 - 140*	*08/08/20 10:45*	*08/10/20 18:06*	*1*
Toluene-d8 (Surr)	*87*		*50 - 130*	*08/08/20 10:45*	*08/10/20 18:06*	*1*
4-Bromofluorobenzene	*83*		*57 - 140*	*08/08/20 10:45*	*08/10/20 18:06*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.5		mg/Kg	☼	08/08/20 13:51	08/08/20 18:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*70 - 130*	*08/08/20 13:51*	*08/08/20 18:36*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		35		mg/Kg	☼	08/17/20 12:40	08/18/20 18:21	1
C28-C36	ND		35		mg/Kg	☼	08/17/20 12:40	08/18/20 18:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*112*		*60 - 140*	*08/17/20 12:40*	*08/18/20 18:21*	*1*

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-4-10' Lab Sample ID: 600-209487-11

Date Collected: 08/04/20 10:35 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 72.1**

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**84**		55		mg/Kg	☼		08/13/20 18:48	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**27.9**		1.0		%			08/11/20 08:50	1
Percent Solids	**72.1**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080420-CN-DP-4-15' Lab Sample ID: 600-209487-12

Date Collected: 08/04/20 10:40 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Chloromethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Vinyl chloride	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Bromomethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Chloroethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Trichlorofluoromethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
1,1-Dichloroethene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
trans-1,2-Dichloroethene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Methyl tert-butyl ether	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Acetone	**0.041**	***1**	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Carbon disulfide	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Methyl acetate	ND	*1	0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Methylene Chloride	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Vinyl acetate	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
cis-1,2-Dichloroethene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
1,2-Dichloroethene, Total	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
2-Butanone (MEK)	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Chlorobromomethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Cyclohexane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Carbon tetrachloride	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Benzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
1,2-Dichloroethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Trichloroethene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
1,1,1-Trichloroethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
1,1-Dichloroethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
1,2-Dichloropropane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Chloroform	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Bromodichloromethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Methylcyclohexane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
cis-1,3-Dichloropropene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Toluene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
trans-1,3-Dichloropropene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
1,1,2-Trichloroethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Tetrachloroethene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
2-Hexanone	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-4-15' **Lab Sample ID: 600-209487-12**
Date Collected: 08/04/20 10:40 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
1,2-Dibromoethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Chlorobenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Ethylbenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
m-Xylene & p-Xylene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Xylenes, Total	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
o-Xylene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Styrene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Bromoform	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
Isopropylbenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
1,3-Dichlorobenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
1,4-Dichlorobenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
1,2-Dichlorobenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
1,2-Dibromo-3-Chloropropane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1
1,2,4-Trichlorobenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*61 - 130*	*08/08/20 10:45*	*08/10/20 18:32*	*1*
Dibromofluoromethane	*84*		*68 - 140*	*08/08/20 10:45*	*08/10/20 18:32*	*1*
Toluene-d8 (Surr)	*91*		*50 - 130*	*08/08/20 10:45*	*08/10/20 18:32*	*1*
4-Bromofluorobenzene	*92*		*57 - 140*	*08/08/20 10:45*	*08/10/20 18:32*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/11/20 08:53	08/11/20 12:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*79*		*70 - 130*	*08/11/20 08:53*	*08/11/20 12:07*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		30		mg/Kg	☼	08/17/20 12:40	08/18/20 18:58	1
C28-C36	ND		30		mg/Kg	☼	08/17/20 12:40	08/18/20 18:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*118*		*60 - 140*	*08/17/20 12:40*	*08/18/20 18:58*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**290**		120		mg/Kg	☼		08/13/20 19:55	25

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**17.2**		1.0		%			08/11/20 08:50	1
Percent Solids	**82.8**		1.0		%			08/11/20 08:50	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-5-5' **Lab Sample ID: 600-209487-13**
Date Collected: 08/04/20 11:10 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 80.6**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Chloromethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Vinyl chloride	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Bromomethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Chloroethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Trichlorofluoromethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
1,1-Dichloroethene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
trans-1,2-Dichloroethene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Methyl tert-butyl ether	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Acetone	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Carbon disulfide	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Methyl acetate	ND	*1	0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Methylene Chloride	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Vinyl acetate	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
cis-1,2-Dichloroethene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
1,2-Dichloroethene, Total	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
2-Butanone (MEK)	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Chlorobromomethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Cyclohexane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Carbon tetrachloride	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Benzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
1,2-Dichloroethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Trichloroethene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
1,1,1-Trichloroethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
1,1-Dichloroethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
1,2-Dichloropropane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Chloroform	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Bromodichloromethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Methylcyclohexane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
cis-1,3-Dichloropropene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Toluene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
trans-1,3-Dichloropropene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
1,1,2-Trichloroethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Tetrachloroethene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
2-Hexanone	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Dibromochloromethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
1,2-Dibromoethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Chlorobenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Ethylbenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
m-Xylene & p-Xylene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Xylenes, Total	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
o-Xylene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Styrene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Bromoform	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
Isopropylbenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
1,3-Dichlorobenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-5-5' Lab Sample ID: 600-209487-13

Date Collected: 08/04/20 11:10 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 80.6**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
1,2-Dichlorobenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
1,2-Dibromo-3-Chloropropane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1
1,2,4-Trichlorobenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 18:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*61 - 130*	*08/08/20 10:45*	*08/10/20 18:58*	*1*
Dibromofluoromethane	*79*		*68 - 140*	*08/08/20 10:45*	*08/10/20 18:58*	*1*
Toluene-d8 (Surr)	*89*		*50 - 130*	*08/08/20 10:45*	*08/10/20 18:58*	*1*
4-Bromofluorobenzene	*82*		*57 - 140*	*08/08/20 10:45*	*08/10/20 18:58*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/11/20 08:53	08/11/20 11:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*81*		*70 - 130*	*08/11/20 08:53*	*08/11/20 11:39*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		31		mg/Kg	☼	08/17/20 12:40	08/18/20 19:34	1
C28-C36	ND		31		mg/Kg	☼	08/17/20 12:40	08/18/20 19:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*117*		*60 - 140*	*08/17/20 12:40*	*08/18/20 19:34*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**340**		50		mg/Kg	☼		08/13/20 20:18	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**19.4**		1.0		%			08/11/20 08:50	1
Percent Solids	**80.6**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080420-CN-DP-5-8' Lab Sample ID: 600-209487-14

Date Collected: 08/04/20 11:15 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 81.4**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Chloromethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Vinyl chloride	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Bromomethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Chloroethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Trichlorofluoromethane	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
1,1-Dichloroethene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
trans-1,2-Dichloroethene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Methyl tert-butyl ether	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Acetone	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-5-8' **Lab Sample ID: 600-209487-14**
Date Collected: 08/04/20 11:15 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 81.4**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Methyl acetate	ND	*1	0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Methylene Chloride	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Vinyl acetate	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
cis-1,2-Dichloroethene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
1,2-Dichloroethene, Total	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
2-Butanone (MEK)	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Chlorobromomethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Cyclohexane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Carbon tetrachloride	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Benzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
1,2-Dichloroethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Trichloroethene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
1,1,1-Trichloroethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
1,1-Dichloroethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
1,2-Dichloropropane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Chloroform	ND		0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Bromodichloromethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Methylcyclohexane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
cis-1,3-Dichloropropene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Toluene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
trans-1,3-Dichloropropene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
1,1,2-Trichloroethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Tetrachloroethene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
2-Hexanone	ND	*1	0.013		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Dibromochloromethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
1,2-Dibromoethane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Chlorobenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Ethylbenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
m-Xylene & p-Xylene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Xylenes, Total	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
o-Xylene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Styrene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Bromoform	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
Isopropylbenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
1,3-Dichlorobenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
1,4-Dichlorobenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
1,2-Dichlorobenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
1,2-Dibromo-3-Chloropropane	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1
1,2,4-Trichlorobenzene	ND		0.0066		mg/Kg	☼	08/08/20 10:45	08/10/20 19:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*61 - 130*	*08/08/20 10:45*	*08/10/20 19:24*	*1*
Dibromofluoromethane	*79*		*68 - 140*	*08/08/20 10:45*	*08/10/20 19:24*	*1*
Toluene-d8 (Surr)	*91*		*50 - 130*	*08/08/20 10:45*	*08/10/20 19:24*	*1*
4-Bromofluorobenzene	*83*		*57 - 140*	*08/08/20 10:45*	*08/10/20 19:24*	*1*

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-5-8' Lab Sample ID: 600-209487-14

Date Collected: 08/04/20 11:15 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 81.4**

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.3		mg/Kg	☼	08/11/20 08:53	08/11/20 12:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*70 - 130*	*08/11/20 08:53*	*08/11/20 12:38*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		31		mg/Kg	☼	08/17/20 12:40	08/18/20 20:47	1
C28-C36	ND		31		mg/Kg	☼	08/17/20 12:40	08/18/20 20:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*117*		*60 - 140*	*08/17/20 12:40*	*08/18/20 20:47*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**130**		25		mg/Kg	☼		08/14/20 07:51	5

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**18.6**		1.0		%			08/11/20 08:50	1
Percent Solids	**81.4**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080420-CN-DP-6-5' Lab Sample ID: 600-209487-15

Date Collected: 08/04/20 11:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Chloromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Vinyl chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Bromomethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Chloroethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Trichlorofluoromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
1,1-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
trans-1,2-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Methyl tert-butyl ether	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Acetone	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Carbon disulfide	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Methyl acetate	ND	*1	0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Methylene Chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Vinyl acetate	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
cis-1,2-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
1,2-Dichloroethene, Total	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
2-Butanone (MEK)	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Chlorobromomethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Cyclohexane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Carbon tetrachloride	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Benzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
1,2-Dichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-6-5' **Lab Sample ID: 600-209487-15**
Date Collected: 08/04/20 11:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
1,1,1-Trichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
1,1-Dichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
1,2-Dichloropropane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Chloroform	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Bromodichloromethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Methylcyclohexane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
cis-1,3-Dichloropropene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Toluene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
trans-1,3-Dichloropropene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
1,1,2-Trichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Tetrachloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
2-Hexanone	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Dibromochloromethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
1,2-Dibromoethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Chlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Ethylbenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
m-Xylene & p-Xylene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Xylenes, Total	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
o-Xylene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Styrene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Bromoform	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
Isopropylbenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
1,3-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
1,4-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
1,2-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
1,2-Dibromo-3-Chloropropane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1
1,2,4-Trichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 19:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*61 - 130*	*08/08/20 15:31*	*08/10/20 19:49*	*1*
Dibromofluoromethane	*77*		*68 - 140*	*08/08/20 15:31*	*08/10/20 19:49*	*1*
Toluene-d8 (Surr)	*94*		*50 - 130*	*08/08/20 15:31*	*08/10/20 19:49*	*1*
4-Bromofluorobenzene	*93*		*57 - 140*	*08/08/20 15:31*	*08/10/20 19:49*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/11/20 08:53	08/11/20 13:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*95*		*70 - 130*	*08/11/20 08:53*	*08/11/20 13:10*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		30		mg/Kg	☼	08/17/20 12:40	08/18/20 21:23	1
C28-C36	ND		30		mg/Kg	☼	08/17/20 12:40	08/18/20 21:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*119*		*60 - 140*	*08/17/20 12:40*	*08/18/20 21:23*	*1*

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-6-5' Lab Sample ID: 600-209487-15

Date Collected: 08/04/20 11:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.2**

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	390		49		mg/Kg	☼		08/14/20 08:55	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17.8		1.0		%			08/11/20 08:50	1
Percent Solids	82.2		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080420-CN-DP-6-8' Lab Sample ID: 600-209487-16

Date Collected: 08/04/20 11:55 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.1**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Chloromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Vinyl chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Bromomethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Chloroethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Trichlorofluoromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
1,1-Dichloroethene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
trans-1,2-Dichloroethene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Methyl tert-butyl ether	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Acetone	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Carbon disulfide	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Methyl acetate	ND	*1	0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Methylene Chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Vinyl acetate	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
cis-1,2-Dichloroethene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
1,2-Dichloroethene, Total	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
2-Butanone (MEK)	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Chlorobromomethane	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Cyclohexane	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Carbon tetrachloride	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Benzene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
1,2-Dichloroethane	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Trichloroethene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
1,1,1-Trichloroethane	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
1,1-Dichloroethane	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
1,2-Dichloropropane	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Chloroform	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Bromodichloromethane	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Methylcyclohexane	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
cis-1,3-Dichloropropene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Toluene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
trans-1,3-Dichloropropene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
1,1,2-Trichloroethane	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Tetrachloroethene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
2-Hexanone	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-6-8' **Lab Sample ID: 600-209487-16**
Date Collected: 08/04/20 11:55 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.1**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
1,2-Dibromoethane	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Chlorobenzene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Ethylbenzene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
m-Xylene & p-Xylene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Xylenes, Total	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
o-Xylene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Styrene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Bromoform	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
Isopropylbenzene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
1,3-Dichlorobenzene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
1,4-Dichlorobenzene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
1,2-Dichlorobenzene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
1,2-Dibromo-3-Chloropropane	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1
1,2,4-Trichlorobenzene	ND		0.0062		mg/Kg	☼	08/08/20 15:31	08/10/20 20:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*61 - 130*	*08/08/20 15:31*	*08/10/20 20:15*	*1*
Dibromofluoromethane	*78*		*68 - 140*	*08/08/20 15:31*	*08/10/20 20:15*	*1*
Toluene-d8 (Surr)	*97*		*50 - 130*	*08/08/20 15:31*	*08/10/20 20:15*	*1*
4-Bromofluorobenzene	*80*		*57 - 140*	*08/08/20 15:31*	*08/10/20 20:15*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/11/20 08:53	08/11/20 13:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*95*		*70 - 130*	*08/11/20 08:53*	*08/11/20 13:44*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		30		mg/Kg	☼	08/17/20 12:40	08/18/20 21:58	1
C28-C36	ND		30		mg/Kg	☼	08/17/20 12:40	08/18/20 21:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*99*		*60 - 140*	*08/17/20 12:40*	*08/18/20 21:58*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**200**		24		mg/Kg	☼		08/14/20 09:15	5

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**17.9**		1.0		%			08/11/20 08:50	1
Percent Solids	**82.1**		1.0		%			08/11/20 08:50	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-7-6' **Lab Sample ID: 600-209487-17**
Date Collected: 08/04/20 13:55 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 81.6**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Chloromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Vinyl chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Bromomethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Chloroethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Trichlorofluoromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
1,1-Dichloroethene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
trans-1,2-Dichloroethene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Methyl tert-butyl ether	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Acetone	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Carbon disulfide	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Methyl acetate	ND	*1	0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Methylene Chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Vinyl acetate	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
cis-1,2-Dichloroethene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
1,2-Dichloroethene, Total	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
2-Butanone (MEK)	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Chlorobromomethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Cyclohexane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Carbon tetrachloride	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Benzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
1,2-Dichloroethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Trichloroethene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
1,1,1-Trichloroethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
1,1-Dichloroethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
1,2-Dichloropropane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Chloroform	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Bromodichloromethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Methylcyclohexane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
cis-1,3-Dichloropropene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Toluene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
trans-1,3-Dichloropropene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
1,1,2-Trichloroethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Tetrachloroethene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
2-Hexanone	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Dibromochloromethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
1,2-Dibromoethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Chlorobenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Ethylbenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
m-Xylene & p-Xylene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Xylenes, Total	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
o-Xylene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Styrene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Bromoform	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
Isopropylbenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
1,3-Dichlorobenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-7-6' Lab Sample ID: 600-209487-17

Date Collected: 08/04/20 13:55 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 81.6**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
1,2-Dichlorobenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
1,2-Dibromo-3-Chloropropane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1
1,2,4-Trichlorobenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/10/20 20:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*61 - 130*	*08/08/20 15:31*	*08/10/20 20:40*	*1*
Dibromofluoromethane	*78*		*68 - 140*	*08/08/20 15:31*	*08/10/20 20:40*	*1*
Toluene-d8 (Surr)	*91*		*50 - 130*	*08/08/20 15:31*	*08/10/20 20:40*	*1*
4-Bromofluorobenzene	*84*		*57 - 140*	*08/08/20 15:31*	*08/10/20 20:40*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/11/20 08:53	08/11/20 14:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*70 - 130*	*08/11/20 08:53*	*08/11/20 14:20*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		15		mg/Kg	☼	08/12/20 08:32	08/14/20 01:19	1
C28-C36	**36**		15		mg/Kg	☼	08/12/20 08:32	08/14/20 01:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*60*		*60 - 140*	*08/12/20 08:32*	*08/14/20 01:19*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**100**		49		mg/Kg	☼		08/14/20 09:36	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**18.4**		1.0		%			08/11/20 08:50	1
Percent Solids	**81.6**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080420-CN-DP-7-9' Lab Sample ID: 600-209487-18

Date Collected: 08/04/20 14:00 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 84.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Chloromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Vinyl chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Bromomethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Chloroethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Trichlorofluoromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
1,1-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
trans-1,2-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Methyl tert-butyl ether	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Acetone	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-7-9' **Lab Sample ID: 600-209487-18**
Date Collected: 08/04/20 14:00 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 84.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Methyl acetate	ND	*1	0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Methylene Chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Vinyl acetate	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
cis-1,2-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
1,2-Dichloroethene, Total	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
2-Butanone (MEK)	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Chlorobromomethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Cyclohexane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Carbon tetrachloride	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Benzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
1,2-Dichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Trichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
1,1,1-Trichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
1,1-Dichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
1,2-Dichloropropane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Chloroform	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Bromodichloromethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Methylcyclohexane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
cis-1,3-Dichloropropene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Toluene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
trans-1,3-Dichloropropene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
1,1,2-Trichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Tetrachloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
2-Hexanone	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Dibromochloromethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
1,2-Dibromoethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Chlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Ethylbenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
m-Xylene & p-Xylene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Xylenes, Total	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
o-Xylene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Styrene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Bromoform	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
Isopropylbenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
1,3-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
1,4-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
1,2-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
1,2-Dibromo-3-Chloropropane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1
1,2,4-Trichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*61 - 130*	*08/08/20 15:31*	*08/10/20 21:06*	*1*
Dibromofluoromethane	*79*		*68 - 140*	*08/08/20 15:31*	*08/10/20 21:06*	*1*
Toluene-d8 (Surr)	*100*		*50 - 130*	*08/08/20 15:31*	*08/10/20 21:06*	*1*
4-Bromofluorobenzene	*85*		*57 - 140*	*08/08/20 15:31*	*08/10/20 21:06*	*1*

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-7-9' Lab Sample ID: 600-209487-18

Date Collected: 08/04/20 14:00 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 84.8

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/11/20 08:53	08/11/20 14:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*101*		*70 - 130*	*08/11/20 08:53*	*08/11/20 14:59*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		15		mg/Kg	☼	08/12/20 08:32	08/14/20 01:52	1
C28-C36	ND		15		mg/Kg	☼	08/12/20 08:32	08/14/20 01:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*78*		*60 - 140*	*08/12/20 08:32*	*08/14/20 01:52*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**73**		47		mg/Kg	☼		08/14/20 09:56	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**15.2**		1.0		%			08/11/20 08:50	1
Percent Solids	**84.8**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080420-CN-DP-8-6' Lab Sample ID: 600-209487-19

Date Collected: 08/04/20 15:00 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 82.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Chloromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Vinyl chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Bromomethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Chloroethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Trichlorofluoromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
1,1-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
trans-1,2-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Methyl tert-butyl ether	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Acetone	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Carbon disulfide	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Methyl acetate	ND	*1	0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Methylene Chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Vinyl acetate	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
cis-1,2-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
1,2-Dichloroethene, Total	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
2-Butanone (MEK)	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Chlorobromomethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Cyclohexane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Carbon tetrachloride	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Benzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
1,2-Dichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-8-6' **Lab Sample ID: 600-209487-19**
Date Collected: 08/04/20 15:00 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
1,1,1-Trichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
1,1-Dichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
1,2-Dichloropropane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Chloroform	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Bromodichloromethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Methylcyclohexane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
cis-1,3-Dichloropropene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Toluene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
trans-1,3-Dichloropropene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
1,1,2-Trichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Tetrachloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
2-Hexanone	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Dibromochloromethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
1,2-Dibromoethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Chlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Ethylbenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
m-Xylene & p-Xylene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Xylenes, Total	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
o-Xylene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Styrene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Bromoform	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
Isopropylbenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
1,3-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
1,4-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
1,2-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
1,2-Dibromo-3-Chloropropane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1
1,2,4-Trichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 21:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*61 - 130*	*08/08/20 15:31*	*08/10/20 21:31*	*1*
Dibromofluoromethane	*74*		*68 - 140*	*08/08/20 15:31*	*08/10/20 21:31*	*1*
Toluene-d8 (Surr)	*93*		*50 - 130*	*08/08/20 15:31*	*08/10/20 21:31*	*1*
4-Bromofluorobenzene	*84*		*57 - 140*	*08/08/20 15:31*	*08/10/20 21:31*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/11/20 08:53	08/11/20 15:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*91*		*70 - 130*	*08/11/20 08:53*	*08/11/20 15:38*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		30		mg/Kg	☼	08/17/20 12:40	08/18/20 22:34	1
C28-C36	ND		30		mg/Kg	☼	08/17/20 12:40	08/18/20 22:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*106*		*60 - 140*	*08/17/20 12:40*	*08/18/20 22:34*	*1*

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-8-6' Lab Sample ID: 600-209487-19

Date Collected: 08/04/20 15:00 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.8**

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	160		4.8		mg/Kg	☼		08/14/20 10:17	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17.2		1.0		%			08/11/20 08:50	1
Percent Solids	82.8		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080420-CN-DP-8-9' Lab Sample ID: 600-209487-20

Date Collected: 08/04/20 15:05 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 72.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Chloromethane	ND		0.014		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Vinyl chloride	ND		0.014		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Bromomethane	ND		0.014		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Chloroethane	ND		0.014		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Trichlorofluoromethane	ND		0.014		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
1,1-Dichloroethene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
trans-1,2-Dichloroethene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Methyl tert-butyl ether	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Acetone	ND	*1	0.014		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Carbon disulfide	ND		0.014		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Methyl acetate	ND	*1	0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Methylene Chloride	ND		0.014		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Vinyl acetate	ND	*1	0.014		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
cis-1,2-Dichloroethene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
1,2-Dichloroethene, Total	ND		0.014		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
2-Butanone (MEK)	ND		0.014		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Chlorobromomethane	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Cyclohexane	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Carbon tetrachloride	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Benzene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
1,2-Dichloroethane	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Trichloroethene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
1,1,1-Trichloroethane	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
1,1-Dichloroethane	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
1,2-Dichloropropane	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Chloroform	ND		0.014		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Bromodichloromethane	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Methylcyclohexane	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
cis-1,3-Dichloropropene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.014		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Toluene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
trans-1,3-Dichloropropene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
1,1,2-Trichloroethane	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Tetrachloroethene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
2-Hexanone	ND	*1	0.014		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-8-9' **Lab Sample ID: 600-209487-20**
Date Collected: 08/04/20 15:05 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 72.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
1,2-Dibromoethane	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Chlorobenzene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Ethylbenzene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
m-Xylene & p-Xylene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Xylenes, Total	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
o-Xylene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Styrene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Bromoform	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
Isopropylbenzene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
1,3-Dichlorobenzene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
1,4-Dichlorobenzene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
1,2-Dichlorobenzene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
1,2-Dibromo-3-Chloropropane	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1
1,2,4-Trichlorobenzene	ND		0.0070		mg/Kg	☼	08/08/20 15:31	08/10/20 21:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*61 - 130*	*08/08/20 15:31*	*08/10/20 21:56*	*1*
Dibromofluoromethane	*73*		*68 - 140*	*08/08/20 15:31*	*08/10/20 21:56*	*1*
Toluene-d8 (Surr)	*90*		*50 - 130*	*08/08/20 15:31*	*08/10/20 21:56*	*1*
4-Bromofluorobenzene	*86*		*57 - 140*	*08/08/20 15:31*	*08/10/20 21:56*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.4		mg/Kg	☼	08/11/20 08:53	08/13/20 07:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*91*		*70 - 130*	*08/11/20 08:53*	*08/13/20 07:54*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		57		mg/Kg	☼	08/17/20 12:40	08/18/20 23:10	1
C28-C36	ND		57		mg/Kg	☼	08/17/20 12:40	08/18/20 23:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*108*		*60 - 140*	*08/17/20 12:40*	*08/18/20 23:10*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**130**		5.5		mg/Kg	☼		08/14/20 10:37	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**27.7**		1.0		%			08/11/20 08:50	1
Percent Solids	**72.3**		1.0		%			08/11/20 08:50	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-9-6' **Lab Sample ID: 600-209487-21**
Date Collected: 08/04/20 15:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 76.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Chloromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Vinyl chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Bromomethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Chloroethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Trichlorofluoromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
1,1-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
trans-1,2-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Methyl tert-butyl ether	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Acetone	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Carbon disulfide	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Methyl acetate	ND	*1	0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Methylene Chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Vinyl acetate	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
cis-1,2-Dichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
1,2-Dichloroethene, Total	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
2-Butanone (MEK)	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Chlorobromomethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Cyclohexane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Carbon tetrachloride	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Benzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
1,2-Dichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Trichloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
1,1,1-Trichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
1,1-Dichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
1,2-Dichloropropane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Chloroform	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Bromodichloromethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Methylcyclohexane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
cis-1,3-Dichloropropene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Toluene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
trans-1,3-Dichloropropene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
1,1,2-Trichloroethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Tetrachloroethene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
2-Hexanone	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Dibromochloromethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
1,2-Dibromoethane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Chlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Ethylbenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
m-Xylene & p-Xylene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Xylenes, Total	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
o-Xylene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Styrene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Bromoform	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
Isopropylbenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
1,3-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-9-6' Lab Sample ID: 600-209487-21

Date Collected: 08/04/20 15:50 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 76.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
1,2-Dichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
1,2-Dibromo-3-Chloropropane	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1
1,2,4-Trichlorobenzene	ND		0.0058		mg/Kg	☼	08/08/20 15:31	08/10/20 22:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*61 - 130*	*08/08/20 15:31*	*08/10/20 22:22*	*1*
Dibromofluoromethane	*74*		*68 - 140*	*08/08/20 15:31*	*08/10/20 22:22*	*1*
Toluene-d8 (Surr)	*91*		*50 - 130*	*08/08/20 15:31*	*08/10/20 22:22*	*1*
4-Bromofluorobenzene	*84*		*57 - 140*	*08/08/20 15:31*	*08/10/20 22:22*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.3		mg/Kg	☼	08/11/20 08:53	08/13/20 08:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*98*		*70 - 130*	*08/11/20 08:53*	*08/13/20 08:19*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		33		mg/Kg	☼	08/12/20 14:58	08/14/20 04:47	1
C28-C36	**83**		33		mg/Kg	☼	08/12/20 14:58	08/14/20 04:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*120*		*60 - 140*	*08/12/20 14:58*	*08/14/20 04:47*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**54**		5.3		mg/Kg	☼		08/14/20 11:38	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**23.8**		1.0		%			08/11/20 08:50	1
Percent Solids	**76.2**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080420-CN-DP-9-9' Lab Sample ID: 600-209487-22

Date Collected: 08/04/20 15:55 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 82.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Chloromethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Vinyl chloride	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Bromomethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Chloroethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Trichlorofluoromethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
1,1-Dichloroethene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
trans-1,2-Dichloroethene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Methyl tert-butyl ether	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Acetone	ND	*1	0.013		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-9-9' **Lab Sample ID: 600-209487-22**
Date Collected: 08/04/20 15:55 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.6**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Methyl acetate	ND	*1	0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Methylene Chloride	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Vinyl acetate	ND	*1	0.013		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
cis-1,2-Dichloroethene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
1,2-Dichloroethene, Total	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
2-Butanone (MEK)	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Chlorobromomethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Cyclohexane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Carbon tetrachloride	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Benzene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
1,2-Dichloroethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Trichloroethene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
1,1,1-Trichloroethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
1,1-Dichloroethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
1,2-Dichloropropane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Chloroform	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Bromodichloromethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Methylcyclohexane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
cis-1,3-Dichloropropene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.013		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Toluene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
trans-1,3-Dichloropropene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
1,1,2-Trichloroethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Tetrachloroethene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
2-Hexanone	ND	*1	0.013		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Dibromochloromethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
1,2-Dibromoethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Chlorobenzene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Ethylbenzene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
m-Xylene & p-Xylene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Xylenes, Total	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
o-Xylene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Styrene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Bromoform	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
Isopropylbenzene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
1,3-Dichlorobenzene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
1,4-Dichlorobenzene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
1,2-Dichlorobenzene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
1,2-Dibromo-3-Chloropropane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1
1,2,4-Trichlorobenzene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/10/20 22:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*61 - 130*	*08/08/20 15:31*	*08/10/20 22:47*	*1*
Dibromofluoromethane	*75*		*68 - 140*	*08/08/20 15:31*	*08/10/20 22:47*	*1*
Toluene-d8 (Surr)	*92*		*50 - 130*	*08/08/20 15:31*	*08/10/20 22:47*	*1*
4-Bromofluorobenzene	*81*		*57 - 140*	*08/08/20 15:31*	*08/10/20 22:47*	*1*

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-9-9' Lab Sample ID: 600-209487-22

Date Collected: 08/04/20 15:55 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.6**

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.1		mg/Kg	☼	08/11/20 08:53	08/12/20 16:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*91*		*70 - 130*	*08/11/20 08:53*	*08/12/20 16:27*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		30		mg/Kg	☼	08/12/20 14:58	08/14/20 05:22	1
C28-C36	ND		30		mg/Kg	☼	08/12/20 14:58	08/14/20 05:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*122*		*60 - 140*	*08/12/20 14:58*	*08/14/20 05:22*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		48		mg/Kg	☼		08/14/20 11:59	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**17.4**		1.0		%			08/11/20 08:50	1
Percent Solids	**82.6**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080520-CN-DP-10-5' Lab Sample ID: 600-209487-23

Date Collected: 08/05/20 08:15 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 85.1**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Chloromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Vinyl chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Bromomethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Chloroethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Trichlorofluoromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
1,1-Dichloroethene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
trans-1,2-Dichloroethene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Methyl tert-butyl ether	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Acetone	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Carbon disulfide	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Methyl acetate	ND	*1	0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Methylene Chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Vinyl acetate	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
cis-1,2-Dichloroethene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
1,2-Dichloroethene, Total	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
2-Butanone (MEK)	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Chlorobromomethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Cyclohexane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Carbon tetrachloride	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Benzene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
1,2-Dichloroethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-10-5' **Lab Sample ID: 600-209487-23**
Date Collected: 08/05/20 08:15 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 85.1**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
1,1,1-Trichloroethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
1,1-Dichloroethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
1,2-Dichloropropane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Chloroform	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Bromodichloromethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Methylcyclohexane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
cis-1,3-Dichloropropene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Toluene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
trans-1,3-Dichloropropene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
1,1,2-Trichloroethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Tetrachloroethene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
2-Hexanone	ND	*1	0.012		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Dibromochloromethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
1,2-Dibromoethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Chlorobenzene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Ethylbenzene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
m-Xylene & p-Xylene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Xylenes, Total	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
o-Xylene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Styrene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Bromoform	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
Isopropylbenzene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
1,3-Dichlorobenzene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
1,4-Dichlorobenzene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
1,2-Dichlorobenzene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
1,2-Dibromo-3-Chloropropane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1
1,2,4-Trichlorobenzene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/10/20 23:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*61 - 130*	*08/08/20 15:31*	*08/10/20 23:12*	*1*
Dibromofluoromethane	*77*		*68 - 140*	*08/08/20 15:31*	*08/10/20 23:12*	*1*
Toluene-d8 (Surr)	*98*		*50 - 130*	*08/08/20 15:31*	*08/10/20 23:12*	*1*
4-Bromofluorobenzene	*89*		*57 - 140*	*08/08/20 15:31*	*08/10/20 23:12*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.1		mg/Kg	☼	08/11/20 08:53	08/12/20 16:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*102*		*70 - 130*	*08/11/20 08:53*	*08/12/20 16:53*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		29		mg/Kg	☼	08/12/20 14:58	08/14/20 06:33	1
C28-C36	ND		29		mg/Kg	☼	08/12/20 14:58	08/14/20 06:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*126*		*60 - 140*	*08/12/20 14:58*	*08/14/20 06:33*	*1*

Eurofins TestAmerica, Houston

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-10-5' Lab Sample ID: 600-209487-23

Date Collected: 08/05/20 08:15 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 85.1**

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	480		240		mg/Kg	☼		08/14/20 13:00	50

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	14.9		1.0		%			08/11/20 08:50	1
Percent Solids	85.1		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080520-CN-DP-10-8' Lab Sample ID: 600-209487-24

Date Collected: 08/05/20 08:20 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 100.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Chloromethane	ND		0.0094		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Vinyl chloride	ND		0.0094		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Bromomethane	ND		0.0094		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Chloroethane	ND		0.0094		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Trichlorofluoromethane	ND		0.0094		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
1,1-Dichloroethene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
trans-1,2-Dichloroethene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Methyl tert-butyl ether	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Acetone	ND	*1	0.0094		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Carbon disulfide	ND		0.0094		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Methyl acetate	ND	*1	0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Methylene Chloride	ND		0.0094		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Vinyl acetate	ND	*1	0.0094		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
cis-1,2-Dichloroethene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
1,2-Dichloroethene, Total	ND		0.0094		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
2-Butanone (MEK)	ND		0.0094		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Chlorobromomethane	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Cyclohexane	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Carbon tetrachloride	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Benzene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
1,2-Dichloroethane	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Trichloroethene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
1,1,1-Trichloroethane	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
1,1-Dichloroethane	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
1,2-Dichloropropane	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Chloroform	ND		0.0094		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Bromodichloromethane	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Methylcyclohexane	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
cis-1,3-Dichloropropene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
4-Methyl-2-pentanone (MIBK)	ND	*1	0.0094		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Toluene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
trans-1,3-Dichloropropene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
1,1,2-Trichloroethane	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Tetrachloroethene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
2-Hexanone	ND	*1	0.0094		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-10-8' **Lab Sample ID: 600-209487-24**
Date Collected: 08/05/20 08:20 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 100.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
1,2-Dibromoethane	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Chlorobenzene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Ethylbenzene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
m-Xylene & p-Xylene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Xylenes, Total	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
o-Xylene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Styrene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Bromoform	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
Isopropylbenzene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
1,1,2,2-Tetrachloroethane	ND	*1	0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
1,3-Dichlorobenzene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
1,4-Dichlorobenzene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
1,2-Dichlorobenzene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
1,2-Dibromo-3-Chloropropane	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1
1,2,4-Trichlorobenzene	ND		0.0047		mg/Kg	☼	08/08/20 15:31	08/10/20 23:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*61 - 130*	*08/08/20 15:31*	*08/10/20 23:37*	*1*
Dibromofluoromethane	*79*		*68 - 140*	*08/08/20 15:31*	*08/10/20 23:37*	*1*
Toluene-d8 (Surr)	*98*		*50 - 130*	*08/08/20 15:31*	*08/10/20 23:37*	*1*
4-Bromofluorobenzene	*79*		*57 - 140*	*08/08/20 15:31*	*08/10/20 23:37*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.0		mg/Kg	☼	08/11/20 08:53	08/12/20 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*70 - 130*	*08/11/20 08:53*	*08/12/20 17:18*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		25		mg/Kg	☼	08/12/20 14:58	08/14/20 07:28	1
C28-C36	ND		25		mg/Kg	☼	08/12/20 14:58	08/14/20 07:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*117*		*60 - 140*	*08/12/20 14:58*	*08/14/20 07:28*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**160**		40		mg/Kg	☼		08/14/20 14:01	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**0.0**		1.0		%			08/11/20 08:50	1
Percent Solids	**100.0**		1.0		%			08/11/20 08:50	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-11-5' **Lab Sample ID: 600-209487-25**
Date Collected: 08/05/20 09:00 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 80.6**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Chloromethane	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Vinyl chloride	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Bromomethane	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Chloroethane	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Trichlorofluoromethane	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
1,1-Dichloroethene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
trans-1,2-Dichloroethene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Methyl tert-butyl ether	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Acetone	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Carbon disulfide	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Methyl acetate	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Methylene Chloride	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Vinyl acetate	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
cis-1,2-Dichloroethene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
1,2-Dichloroethene, Total	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
2-Butanone (MEK)	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Chlorobromomethane	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Cyclohexane	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Carbon tetrachloride	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Benzene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
1,2-Dichloroethane	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Trichloroethene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
1,1,1-Trichloroethane	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
1,1-Dichloroethane	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
1,2-Dichloropropane	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Chloroform	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Bromodichloromethane	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Methylcyclohexane	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
cis-1,3-Dichloropropene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
4-Methyl-2-pentanone (MIBK)	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Toluene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
trans-1,3-Dichloropropene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
1,1,2-Trichloroethane	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Tetrachloroethene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
2-Hexanone	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Dibromochloromethane	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
1,2-Dibromoethane	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Chlorobenzene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Ethylbenzene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
m-Xylene & p-Xylene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Xylenes, Total	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
o-Xylene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Styrene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Bromoform	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
Isopropylbenzene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
1,1,2,2-Tetrachloroethane	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
1,3-Dichlorobenzene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-11-5' Lab Sample ID: 600-209487-25

Date Collected: 08/05/20 09:00 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 80.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
1,2-Dichlorobenzene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
1,2-Dibromo-3-Chloropropane	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1
1,2,4-Trichlorobenzene	ND		0.0057		mg/Kg	☼	08/09/20 12:02	08/11/20 18:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*61 - 130*	*08/09/20 12:02*	*08/11/20 18:31*	*1*
Dibromofluoromethane	*83*		*68 - 140*	*08/09/20 12:02*	*08/11/20 18:31*	*1*
Toluene-d8 (Surr)	*91*		*50 - 130*	*08/09/20 12:02*	*08/11/20 18:31*	*1*
4-Bromofluorobenzene	*101*		*57 - 140*	*08/09/20 12:02*	*08/11/20 18:31*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.3		mg/Kg	☼	08/11/20 08:53	08/12/20 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*95*		*70 - 130*	*08/11/20 08:53*	*08/12/20 17:44*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		31		mg/Kg	☼	08/12/20 14:58	08/14/20 10:23	1
C28-C36	ND		31		mg/Kg	☼	08/12/20 14:58	08/14/20 10:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*123*		*60 - 140*	*08/12/20 14:58*	*08/14/20 10:23*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**180**		50		mg/Kg	☼		08/14/20 14:22	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**19.4**		1.0		%			08/11/20 08:50	1
Percent Solids	**80.6**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080520-CN-DP-11-8 Lab Sample ID: 600-209487-26

Date Collected: 08/05/20 09:05 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 91.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Chloromethane	ND		0.011		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Vinyl chloride	ND		0.011		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Bromomethane	ND		0.011		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Chloroethane	ND		0.011		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Trichlorofluoromethane	ND		0.011		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
1,1-Dichloroethene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
trans-1,2-Dichloroethene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Methyl tert-butyl ether	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Acetone	ND		0.011		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-11-8 **Lab Sample ID: 600-209487-26**
Date Collected: 08/05/20 09:05 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 91.1**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		0.011		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Methyl acetate	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Methylene Chloride	ND		0.011		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Vinyl acetate	ND		0.011		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
cis-1,2-Dichloroethene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
1,2-Dichloroethene, Total	ND		0.011		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
2-Butanone (MEK)	ND		0.011		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Chlorobromomethane	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Cyclohexane	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Carbon tetrachloride	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Benzene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
1,2-Dichloroethane	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Trichloroethene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
1,1,1-Trichloroethane	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
1,1-Dichloroethane	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
1,2-Dichloropropane	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Chloroform	ND		0.011		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Bromodichloromethane	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Methylcyclohexane	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
cis-1,3-Dichloropropene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
4-Methyl-2-pentanone (MIBK)	ND		0.011		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Toluene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
trans-1,3-Dichloropropene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
1,1,2-Trichloroethane	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Tetrachloroethene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
2-Hexanone	ND		0.011		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Dibromochloromethane	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
1,2-Dibromoethane	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Chlorobenzene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Ethylbenzene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
m-Xylene & p-Xylene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Xylenes, Total	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
o-Xylene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Styrene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Bromoform	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
Isopropylbenzene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
1,1,2,2-Tetrachloroethane	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
1,3-Dichlorobenzene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
1,4-Dichlorobenzene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
1,2-Dichlorobenzene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
1,2-Dibromo-3-Chloropropane	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1
1,2,4-Trichlorobenzene	ND		0.0054		mg/Kg	☼	08/08/20 15:31	08/11/20 11:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*61 - 130*	*08/08/20 15:31*	*08/11/20 11:22*	*1*
Dibromofluoromethane	*93*		*68 - 140*	*08/08/20 15:31*	*08/11/20 11:22*	*1*
Toluene-d8 (Surr)	*94*		*50 - 130*	*08/08/20 15:31*	*08/11/20 11:22*	*1*
4-Bromofluorobenzene	*110*		*57 - 140*	*08/08/20 15:31*	*08/11/20 11:22*	*1*

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-11-8 Lab Sample ID: 600-209487-26

Date Collected: 08/05/20 09:05 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 91.1**

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.0		mg/Kg	☼	08/11/20 08:53	08/13/20 08:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*102*		*70 - 130*	*08/11/20 08:53*	*08/13/20 08:44*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		27		mg/Kg	☼	08/12/20 14:58	08/14/20 08:02	1
C28-C36	ND		27		mg/Kg	☼	08/12/20 14:58	08/14/20 08:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*123*		*60 - 140*	*08/12/20 14:58*	*08/14/20 08:02*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**130**		44		mg/Kg	☼		08/14/20 14:42	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**8.9**		1.0		%			08/11/20 08:50	1
Percent Solids	**91.1**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080520-CN-DP-12-6' Lab Sample ID: 600-209487-27

Date Collected: 08/05/20 09:45 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 81.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Chloromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Vinyl chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Bromomethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Chloroethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Trichlorofluoromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
1,1-Dichloroethene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
trans-1,2-Dichloroethene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Methyl tert-butyl ether	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Acetone	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Carbon disulfide	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Methyl acetate	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Methylene Chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Vinyl acetate	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
cis-1,2-Dichloroethene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
1,2-Dichloroethene, Total	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
2-Butanone (MEK)	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Chlorobromomethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Cyclohexane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Carbon tetrachloride	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Benzene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
1,2-Dichloroethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-12-6' **Lab Sample ID: 600-209487-27**
Date Collected: 08/05/20 09:45 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 81.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
1,1,1-Trichloroethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
1,1-Dichloroethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
1,2-Dichloropropane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Chloroform	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Bromodichloromethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Methylcyclohexane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
cis-1,3-Dichloropropene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
4-Methyl-2-pentanone (MIBK)	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Toluene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
trans-1,3-Dichloropropene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
1,1,2-Trichloroethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Tetrachloroethene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
2-Hexanone	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Dibromochloromethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
1,2-Dibromoethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Chlorobenzene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Ethylbenzene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
m-Xylene & p-Xylene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Xylenes, Total	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
o-Xylene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Styrene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Bromoform	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
Isopropylbenzene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
1,1,2,2-Tetrachloroethane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
1,3-Dichlorobenzene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
1,4-Dichlorobenzene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
1,2-Dichlorobenzene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
1,2-Dibromo-3-Chloropropane	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1
1,2,4-Trichlorobenzene	ND		0.0061		mg/Kg	☼	08/08/20 15:31	08/11/20 11:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*61 - 130*	*08/08/20 15:31*	*08/11/20 11:45*	*1*
Dibromofluoromethane	*86*		*68 - 140*	*08/08/20 15:31*	*08/11/20 11:45*	*1*
Toluene-d8 (Surr)	*91*		*50 - 130*	*08/08/20 15:31*	*08/11/20 11:45*	*1*
4-Bromofluorobenzene	*109*		*57 - 140*	*08/08/20 15:31*	*08/11/20 11:45*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/11/20 08:53	08/13/20 09:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*94*		*70 - 130*	*08/11/20 08:53*	*08/13/20 09:08*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		31		mg/Kg	☼	08/12/20 14:58	08/14/20 11:12	1
C28-C36	ND		31		mg/Kg	☼	08/12/20 14:58	08/14/20 11:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*123*		*60 - 140*	*08/12/20 14:58*	*08/14/20 11:12*	*1*

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-12-6' Lab Sample ID: 600-209487-27

Date Collected: 08/05/20 09:45 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 81.2**

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		99		mg/Kg	☼		08/14/20 15:02	20

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18.8		1.0		%			08/11/20 08:50	1
Percent Solids	81.2		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080520-CN-DP-12-9' Lab Sample ID: 600-209487-28

Date Collected: 08/05/20 09:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 84.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Chloromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Vinyl chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Bromomethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Chloroethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Trichlorofluoromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
1,1-Dichloroethene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
trans-1,2-Dichloroethene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Methyl tert-butyl ether	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Acetone	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Carbon disulfide	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Methyl acetate	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Methylene Chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Vinyl acetate	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
cis-1,2-Dichloroethene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
1,2-Dichloroethene, Total	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
2-Butanone (MEK)	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Chlorobromomethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Cyclohexane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Carbon tetrachloride	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Benzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
1,2-Dichloroethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Trichloroethene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
1,1,1-Trichloroethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
1,1-Dichloroethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
1,2-Dichloropropane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Chloroform	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Bromodichloromethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Methylcyclohexane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
cis-1,3-Dichloropropene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
4-Methyl-2-pentanone (MIBK)	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Toluene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
trans-1,3-Dichloropropene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
1,1,2-Trichloroethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Tetrachloroethene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
2-Hexanone	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-12-9' **Lab Sample ID: 600-209487-28**
Date Collected: 08/05/20 09:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 84.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
1,2-Dibromoethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Chlorobenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Ethylbenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
m-Xylene & p-Xylene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Xylenes, Total	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
o-Xylene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Styrene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Bromoform	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
Isopropylbenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
1,1,2,2-Tetrachloroethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
1,3-Dichlorobenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
1,4-Dichlorobenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
1,2-Dichlorobenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
1,2-Dibromo-3-Chloropropane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1
1,2,4-Trichlorobenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 12:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*61 - 130*	*08/08/20 15:31*	*08/11/20 12:08*	*1*
Dibromofluoromethane	*86*		*68 - 140*	*08/08/20 15:31*	*08/11/20 12:08*	*1*
Toluene-d8 (Surr)	*91*		*50 - 130*	*08/08/20 15:31*	*08/11/20 12:08*	*1*
4-Bromofluorobenzene	*104*		*57 - 140*	*08/08/20 15:31*	*08/11/20 12:08*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/11/20 08:53	08/13/20 09:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*97*		*70 - 130*	*08/11/20 08:53*	*08/13/20 09:33*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		30		mg/Kg	☼	08/12/20 14:58	08/14/20 08:37	1
C28-C36	ND		30		mg/Kg	☼	08/12/20 14:58	08/14/20 08:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*126*		*60 - 140*	*08/12/20 14:58*	*08/14/20 08:37*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		48		mg/Kg	☼		08/14/20 15:23	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**16.0**		1.0		%			08/11/20 08:50	1
Percent Solids	**84.0**		1.0		%			08/11/20 08:50	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-13-6' **Lab Sample ID: 600-209487-29**
Date Collected: 08/05/20 10:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.4**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Chloromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Vinyl chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Bromomethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Chloroethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Trichlorofluoromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
1,1-Dichloroethene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
trans-1,2-Dichloroethene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Methyl tert-butyl ether	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Acetone	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Carbon disulfide	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Methyl acetate	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Methylene Chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Vinyl acetate	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
cis-1,2-Dichloroethene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
1,2-Dichloroethene, Total	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
2-Butanone (MEK)	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Chlorobromomethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Cyclohexane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Carbon tetrachloride	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Benzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
1,2-Dichloroethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Trichloroethene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
1,1,1-Trichloroethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
1,1-Dichloroethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
1,2-Dichloropropane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Chloroform	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Bromodichloromethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Methylcyclohexane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
cis-1,3-Dichloropropene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
4-Methyl-2-pentanone (MIBK)	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Toluene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
trans-1,3-Dichloropropene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
1,1,2-Trichloroethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Tetrachloroethene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
2-Hexanone	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Dibromochloromethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
1,2-Dibromoethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Chlorobenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Ethylbenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
m-Xylene & p-Xylene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Xylenes, Total	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
o-Xylene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Styrene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Bromoform	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
Isopropylbenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
1,1,2,2-Tetrachloroethane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
1,3-Dichlorobenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-13-6' Lab Sample ID: 600-209487-29

Date Collected: 08/05/20 10:50 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 83.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
1,2-Dichlorobenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
1,2-Dibromo-3-Chloropropane	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1
1,2,4-Trichlorobenzene	ND		0.0060		mg/Kg	☼	08/08/20 15:31	08/11/20 13:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*61 - 130*	*08/08/20 15:31*	*08/11/20 13:43*	*1*
Dibromofluoromethane	*87*		*68 - 140*	*08/08/20 15:31*	*08/11/20 13:43*	*1*
Toluene-d8 (Surr)	*94*		*50 - 130*	*08/08/20 15:31*	*08/11/20 13:43*	*1*
4-Bromofluorobenzene	*105*		*57 - 140*	*08/08/20 15:31*	*08/11/20 13:43*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/11/20 08:53	08/13/20 09:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*94*		*70 - 130*	*08/11/20 08:53*	*08/13/20 09:58*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		30		mg/Kg	☼	08/12/20 14:58	08/14/20 11:48	1
C28-C36	**130**		30		mg/Kg	☼	08/12/20 14:58	08/14/20 11:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*117*		*60 - 140*	*08/12/20 14:58*	*08/14/20 11:48*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**640**		48		mg/Kg	☼		08/18/20 11:12	10

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**16.6**		1.0		%			08/11/20 08:50	1
Percent Solids	**83.4**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080520-CN-DP-13-9' Lab Sample ID: 600-209487-30

Date Collected: 08/05/20 10:55 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 76.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Chloromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Vinyl chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Bromomethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Chloroethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Trichlorofluoromethane	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
1,1-Dichloroethene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
trans-1,2-Dichloroethene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Methyl tert-butyl ether	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Acetone	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-13-9' **Lab Sample ID: 600-209487-30**
Date Collected: 08/05/20 10:55 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 76.5**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Methyl acetate	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Methylene Chloride	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Vinyl acetate	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
cis-1,2-Dichloroethene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
1,2-Dichloroethene, Total	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
2-Butanone (MEK)	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Chlorobromomethane	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Cyclohexane	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Carbon tetrachloride	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Benzene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
1,2-Dichloroethane	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Trichloroethene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
1,1,1-Trichloroethane	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
1,1-Dichloroethane	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
1,2-Dichloropropane	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Chloroform	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Bromodichloromethane	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Methylcyclohexane	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
cis-1,3-Dichloropropene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
4-Methyl-2-pentanone (MIBK)	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Toluene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
trans-1,3-Dichloropropene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
1,1,2-Trichloroethane	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Tetrachloroethene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
2-Hexanone	ND		0.012		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Dibromochloromethane	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
1,2-Dibromoethane	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Chlorobenzene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Ethylbenzene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
m-Xylene & p-Xylene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Xylenes, Total	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
o-Xylene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Styrene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Bromoform	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
Isopropylbenzene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
1,1,2,2-Tetrachloroethane	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
1,3-Dichlorobenzene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
1,4-Dichlorobenzene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
1,2-Dichlorobenzene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
1,2-Dibromo-3-Chloropropane	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1
1,2,4-Trichlorobenzene	ND		0.0059		mg/Kg	☼	08/08/20 15:31	08/11/20 14:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*61 - 130*	*08/08/20 15:31*	*08/11/20 14:07*	*1*
Dibromofluoromethane	*89*		*68 - 140*	*08/08/20 15:31*	*08/11/20 14:07*	*1*
Toluene-d8 (Surr)	*93*		*50 - 130*	*08/08/20 15:31*	*08/11/20 14:07*	*1*
4-Bromofluorobenzene	*109*		*57 - 140*	*08/08/20 15:31*	*08/11/20 14:07*	*1*

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-13-9' Lab Sample ID: 600-209487-30

Date Collected: 08/05/20 10:55 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 76.5**

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.3		mg/Kg	☼	08/11/20 08:53	08/13/20 10:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*94*		*70 - 130*	*08/11/20 08:53*	*08/13/20 10:23*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		32		mg/Kg	☼	08/12/20 14:58	08/14/20 09:12	1
C28-C36	ND		32		mg/Kg	☼	08/12/20 14:58	08/14/20 09:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*111*		*60 - 140*	*08/12/20 14:58*	*08/14/20 09:12*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**22**		5.2		mg/Kg	☼		08/18/20 12:13	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**23.5**		1.0		%			08/11/20 08:50	1
Percent Solids	**76.5**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080520-CN-DP-14-6' Lab Sample ID: 600-209487-31

Date Collected: 08/05/20 11:25 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Chloromethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Vinyl chloride	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Bromomethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Chloroethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Trichlorofluoromethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
1,1-Dichloroethene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
trans-1,2-Dichloroethene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Methyl tert-butyl ether	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Acetone	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Carbon disulfide	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Methyl acetate	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Methylene Chloride	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Vinyl acetate	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
cis-1,2-Dichloroethene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
1,2-Dichloroethene, Total	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
2-Butanone (MEK)	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Chlorobromomethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Cyclohexane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Carbon tetrachloride	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Benzene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
1,2-Dichloroethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-14-6' **Lab Sample ID: 600-209487-31**
Date Collected: 08/05/20 11:25 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
1,1,1-Trichloroethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
1,1-Dichloroethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
1,2-Dichloropropane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Chloroform	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Bromodichloromethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Methylcyclohexane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
cis-1,3-Dichloropropene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
4-Methyl-2-pentanone (MIBK)	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Toluene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
trans-1,3-Dichloropropene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
1,1,2-Trichloroethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Tetrachloroethene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
2-Hexanone	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Dibromochloromethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
1,2-Dibromoethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Chlorobenzene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Ethylbenzene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
m-Xylene & p-Xylene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Xylenes, Total	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
o-Xylene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Styrene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Bromoform	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
Isopropylbenzene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
1,1,2,2-Tetrachloroethane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
1,3-Dichlorobenzene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
1,4-Dichlorobenzene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
1,2-Dichlorobenzene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
1,2-Dibromo-3-Chloropropane	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1
1,2,4-Trichlorobenzene	ND		0.0063		mg/Kg	☼	08/08/20 15:31	08/11/20 14:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*61 - 130*	*08/08/20 15:31*	*08/11/20 14:31*	*1*
Dibromofluoromethane	*83*		*68 - 140*	*08/08/20 15:31*	*08/11/20 14:31*	*1*
Toluene-d8 (Surr)	*91*		*50 - 130*	*08/08/20 15:31*	*08/11/20 14:31*	*1*
4-Bromofluorobenzene	*107*		*57 - 140*	*08/08/20 15:31*	*08/11/20 14:31*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/11/20 08:53	08/12/20 16:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*91*		*70 - 130*	*08/11/20 08:53*	*08/12/20 16:01*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		15		mg/Kg	☼	08/12/20 14:58	08/14/20 12:24	1
C28-C36	**64**		15		mg/Kg	☼	08/12/20 14:58	08/14/20 12:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*110*		*60 - 140*	*08/12/20 14:58*	*08/14/20 12:24*	*1*

Eurofins TestAmerica, Houston

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-14-6' Lab Sample ID: 600-209487-31

Date Collected: 08/05/20 11:25 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.3**

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		4.8		mg/Kg	☼		08/18/20 12:34	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16.7		1.0		%			08/11/20 08:50	1
Percent Solids	83.3		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080520-CN-DP-14-9' Lab Sample ID: 600-209487-32

Date Collected: 08/05/20 11:30 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 79.4**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Chloromethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Vinyl chloride	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Bromomethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Chloroethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Trichlorofluoromethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
1,1-Dichloroethene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
trans-1,2-Dichloroethene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Methyl tert-butyl ether	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Acetone	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Carbon disulfide	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Methyl acetate	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Methylene Chloride	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Vinyl acetate	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
cis-1,2-Dichloroethene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
1,2-Dichloroethene, Total	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
2-Butanone (MEK)	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Chlorobromomethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Cyclohexane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Carbon tetrachloride	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Benzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
1,2-Dichloroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Trichloroethene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
1,1,1-Trichloroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
1,1-Dichloroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
1,2-Dichloropropane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Chloroform	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Bromodichloromethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Methylcyclohexane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
cis-1,3-Dichloropropene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
4-Methyl-2-pentanone (MIBK)	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Toluene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
trans-1,3-Dichloropropene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
1,1,2-Trichloroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Tetrachloroethene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
2-Hexanone	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-14-9' **Lab Sample ID: 600-209487-32**
Date Collected: 08/05/20 11:30 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 79.4**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
1,2-Dibromoethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Chlorobenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Ethylbenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
m-Xylene & p-Xylene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Xylenes, Total	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
o-Xylene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Styrene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Bromoform	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
Isopropylbenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
1,1,2,2-Tetrachloroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
1,3-Dichlorobenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
1,4-Dichlorobenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
1,2-Dichlorobenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
1,2-Dibromo-3-Chloropropane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1
1,2,4-Trichlorobenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 14:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*61 - 130*	*08/08/20 15:31*	*08/11/20 14:55*	*1*
Dibromofluoromethane	*86*		*68 - 140*	*08/08/20 15:31*	*08/11/20 14:55*	*1*
Toluene-d8 (Surr)	*89*		*50 - 130*	*08/08/20 15:31*	*08/11/20 14:55*	*1*
4-Bromofluorobenzene	*105*		*57 - 140*	*08/08/20 15:31*	*08/11/20 14:55*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.3		mg/Kg	☼	08/08/20 15:03	08/12/20 09:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*84*		*70 - 130*	*08/08/20 15:03*	*08/12/20 09:32*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		31		mg/Kg	☼	08/12/20 14:58	08/14/20 14:20	1
C28-C36	ND		31		mg/Kg	☼	08/12/20 14:58	08/14/20 14:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*106*		*60 - 140*	*08/12/20 14:58*	*08/14/20 14:20*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**68**		25		mg/Kg	☼		08/18/20 12:54	5

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**20.6**		1.0		%			08/11/20 08:50	1
Percent Solids	**79.4**		1.0		%			08/11/20 08:50	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-15-5' **Lab Sample ID: 600-209487-33**
Date Collected: 08/05/20 12:10 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Chloromethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Vinyl chloride	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Bromomethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Chloroethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Trichlorofluoromethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
1,1-Dichloroethene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
trans-1,2-Dichloroethene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Methyl tert-butyl ether	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Acetone	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Carbon disulfide	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Methyl acetate	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Methylene Chloride	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Vinyl acetate	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
cis-1,2-Dichloroethene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
1,2-Dichloroethene, Total	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
2-Butanone (MEK)	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Chlorobromomethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Cyclohexane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Carbon tetrachloride	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Benzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
1,2-Dichloroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Trichloroethene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
1,1,1-Trichloroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
1,1-Dichloroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
1,2-Dichloropropane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Chloroform	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Bromodichloromethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Methylcyclohexane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
cis-1,3-Dichloropropene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
4-Methyl-2-pentanone (MIBK)	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Toluene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
trans-1,3-Dichloropropene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
1,1,2-Trichloroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Tetrachloroethene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
2-Hexanone	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Dibromochloromethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
1,2-Dibromoethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Chlorobenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Ethylbenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
m-Xylene & p-Xylene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Xylenes, Total	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
o-Xylene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Styrene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Bromoform	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
Isopropylbenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
1,1,2,2-Tetrachloroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
1,3-Dichlorobenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-15-5' Lab Sample ID: 600-209487-33

Date Collected: 08/05/20 12:10 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 82.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
1,2-Dichlorobenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
1,2-Dibromo-3-Chloropropane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1
1,2,4-Trichlorobenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*61 - 130*	*08/08/20 15:31*	*08/11/20 15:19*	*1*
Dibromofluoromethane	*91*		*68 - 140*	*08/08/20 15:31*	*08/11/20 15:19*	*1*
Toluene-d8 (Surr)	*93*		*50 - 130*	*08/08/20 15:31*	*08/11/20 15:19*	*1*
4-Bromofluorobenzene	*107*		*57 - 140*	*08/08/20 15:31*	*08/11/20 15:19*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/08/20 15:03	08/12/20 10:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*86*		*70 - 130*	*08/08/20 15:03*	*08/12/20 10:00*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		30		mg/Kg	☼	08/12/20 14:58	08/14/20 14:58	1
C28-C36	**110**		30		mg/Kg	☼	08/12/20 14:58	08/14/20 14:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*114*		*60 - 140*	*08/12/20 14:58*	*08/14/20 14:58*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.8**		4.8		mg/Kg	☼		08/18/20 13:15	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**17.2**		1.0		%			08/11/20 08:50	1
Percent Solids	**82.8**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080520-CN-DP-15-11' Lab Sample ID: 600-209487-34

Date Collected: 08/05/20 17:15 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 79.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Chloromethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Vinyl chloride	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Bromomethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Chloroethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Trichlorofluoromethane	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
1,1-Dichloroethene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
trans-1,2-Dichloroethene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Methyl tert-butyl ether	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Acetone	**0.062**		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-15-11' **Lab Sample ID: 600-209487-34**
Date Collected: 08/05/20 17:15 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 79.4**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	**0.023**		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Methyl acetate	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Methylene Chloride	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Vinyl acetate	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
cis-1,2-Dichloroethene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
1,2-Dichloroethene, Total	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
2-Butanone (MEK)	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Chlorobromomethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Cyclohexane	**0.0074**		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Carbon tetrachloride	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Benzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
1,2-Dichloroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Trichloroethene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
1,1,1-Trichloroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
1,1-Dichloroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
1,2-Dichloropropane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Chloroform	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Bromodichloromethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Methylcyclohexane	**0.017**		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
cis-1,3-Dichloropropene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
4-Methyl-2-pentanone (MIBK)	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Toluene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
trans-1,3-Dichloropropene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
1,1,2-Trichloroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Tetrachloroethene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
2-Hexanone	ND		0.013		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Dibromochloromethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
1,2-Dibromoethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Chlorobenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Ethylbenzene	**0.089**		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Styrene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Bromoform	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
Isopropylbenzene	**0.13**		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
1,1,2,2-Tetrachloroethane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
1,3-Dichlorobenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
1,4-Dichlorobenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
1,2-Dichlorobenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
1,2-Dibromo-3-Chloropropane	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1
1,2,4-Trichlorobenzene	ND		0.0064		mg/Kg	☼	08/08/20 15:31	08/11/20 15:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*61 - 130*	*08/08/20 15:31*	*08/11/20 15:43*	*1*
Dibromofluoromethane	*86*		*68 - 140*	*08/08/20 15:31*	*08/11/20 15:43*	*1*
Toluene-d8 (Surr)	*109*		*50 - 130*	*08/08/20 15:31*	*08/11/20 15:43*	*1*
4-Bromofluorobenzene	*71*		*57 - 140*	*08/08/20 15:31*	*08/11/20 15:43*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	**0.40**		0.037		mg/Kg	☼	08/09/20 12:02	08/12/20 11:17	1
Xylenes, Total	**0.40**		0.037		mg/Kg	☼	08/09/20 12:02	08/12/20 11:17	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-15-11' Lab Sample ID: 600-209487-34

Date Collected: 08/05/20 17:15 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 79.4**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		0.037		mg/Kg	☼	08/09/20 12:02	08/12/20 11:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*61 - 130*	*08/09/20 12:02*	*08/12/20 11:17*	*1*
Dibromofluoromethane	*86*		*68 - 140*	*08/09/20 12:02*	*08/12/20 11:17*	*1*
Toluene-d8 (Surr)	*105*		*50 - 130*	*08/09/20 12:02*	*08/12/20 11:17*	*1*
4-Bromofluorobenzene	*86*		*57 - 140*	*08/09/20 12:02*	*08/12/20 11:17*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	**870**		590		mg/Kg	☼	08/08/20 15:03	08/13/20 10:47	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*501*	*X*	*70 - 130*	*08/08/20 15:03*	*08/13/20 10:47*	*500*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**690**		31		mg/Kg	☼	08/12/20 14:58	08/14/20 15:36	1
C28-C36	**120**		31		mg/Kg	☼	08/12/20 14:58	08/14/20 15:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*132*		*60 - 140*	*08/12/20 14:58*	*08/14/20 15:36*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**13**		5.0		mg/Kg	☼		08/18/20 13:35	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**20.6**		1.0		%			08/11/20 08:50	1
Percent Solids	**79.4**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080520-CN-DP-15-20' Lab Sample ID: 600-209487-35

Date Collected: 08/05/20 17:20 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 71.7**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Chloromethane	ND		0.015		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Vinyl chloride	ND		0.015		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Bromomethane	ND		0.015		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Chloroethane	ND		0.015		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Trichlorofluoromethane	ND		0.015		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
1,1-Dichloroethene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
trans-1,2-Dichloroethene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Methyl tert-butyl ether	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Acetone	ND		0.015		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Carbon disulfide	ND		0.015		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Methyl acetate	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-15-20' **Lab Sample ID: 600-209487-35**
Date Collected: 08/05/20 17:20 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 71.7**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		0.015		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Vinyl acetate	ND		0.015		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
cis-1,2-Dichloroethene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
1,2-Dichloroethene, Total	ND		0.015		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
2-Butanone (MEK)	ND		0.015		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Chlorobromomethane	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Cyclohexane	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Carbon tetrachloride	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Benzene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
1,2-Dichloroethane	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Trichloroethene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
1,1,1-Trichloroethane	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
1,1-Dichloroethane	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
1,2-Dichloropropane	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Chloroform	ND		0.015		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Bromodichloromethane	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Methylcyclohexane	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
cis-1,3-Dichloropropene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
4-Methyl-2-pentanone (MIBK)	ND		0.015		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Toluene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
trans-1,3-Dichloropropene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
1,1,2-Trichloroethane	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Tetrachloroethene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
2-Hexanone	ND		0.015		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Dibromochloromethane	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
1,2-Dibromoethane	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Chlorobenzene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Ethylbenzene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
m-Xylene & p-Xylene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Xylenes, Total	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
o-Xylene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Styrene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Bromoform	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
Isopropylbenzene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
1,1,2,2-Tetrachloroethane	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
1,3-Dichlorobenzene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
1,4-Dichlorobenzene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
1,2-Dichlorobenzene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
1,2-Dibromo-3-Chloropropane	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1
1,2,4-Trichlorobenzene	ND		0.0076		mg/Kg	☼	08/09/20 12:02	08/11/20 16:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*61 - 130*	*08/09/20 12:02*	*08/11/20 16:07*	*1*
Dibromofluoromethane	*83*		*68 - 140*	*08/09/20 12:02*	*08/11/20 16:07*	*1*
Toluene-d8 (Surr)	*93*		*50 - 130*	*08/09/20 12:02*	*08/11/20 16:07*	*1*
4-Bromofluorobenzene	*96*		*57 - 140*	*08/09/20 12:02*	*08/11/20 16:07*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.4		mg/Kg	☼	08/08/20 15:03	08/12/20 14:16	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-15-20' Lab Sample ID: 600-209487-35

Date Collected: 08/05/20 17:20 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 71.7**

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*82*		*70 - 130*	*08/08/20 15:03*	*08/12/20 14:16*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		35		mg/Kg	☼	08/12/20 14:58	08/14/20 16:14	1
C28-C36	**110**		35		mg/Kg	☼	08/12/20 14:58	08/14/20 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*61*		*60 - 140*	*08/12/20 14:58*	*08/14/20 16:14*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**40**	**^**	5.6		mg/Kg	☼		08/20/20 13:44	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**28.3**		1.0		%			08/11/20 08:50	1
Percent Solids	**71.7**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080520-CN-DP-16-5' Lab Sample ID: 600-209487-36

Date Collected: 08/05/20 14:45 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Chloromethane	ND		0.012		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Vinyl chloride	ND		0.012		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Bromomethane	ND		0.012		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Chloroethane	ND		0.012		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Trichlorofluoromethane	ND		0.012		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
1,1-Dichloroethene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
trans-1,2-Dichloroethene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Methyl tert-butyl ether	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Acetone	ND		0.012		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Carbon disulfide	ND		0.012		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Methyl acetate	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Methylene Chloride	ND		0.012		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Vinyl acetate	ND		0.012		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
cis-1,2-Dichloroethene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
1,2-Dichloroethene, Total	ND		0.012		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
2-Butanone (MEK)	ND		0.012		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Chlorobromomethane	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Cyclohexane	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Carbon tetrachloride	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Benzene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
1,2-Dichloroethane	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Trichloroethene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
1,1,1-Trichloroethane	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
1,1-Dichloroethane	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-16-5' **Lab Sample ID: 600-209487-36**
Date Collected: 08/05/20 14:45 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Chloroform	ND		0.012		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Bromodichloromethane	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Methylcyclohexane	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
cis-1,3-Dichloropropene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
4-Methyl-2-pentanone (MIBK)	ND		0.012		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Toluene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
trans-1,3-Dichloropropene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
1,1,2-Trichloroethane	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Tetrachloroethene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
2-Hexanone	ND		0.012		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Dibromochloromethane	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
1,2-Dibromoethane	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Chlorobenzene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Ethylbenzene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
m-Xylene & p-Xylene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Xylenes, Total	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
o-Xylene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Styrene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Bromoform	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
Isopropylbenzene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
1,1,2,2-Tetrachloroethane	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
1,3-Dichlorobenzene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
1,4-Dichlorobenzene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
1,2-Dichlorobenzene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
1,2-Dibromo-3-Chloropropane	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1
1,2,4-Trichlorobenzene	ND		0.0062		mg/Kg	☼	08/09/20 12:02	08/11/20 16:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*61 - 130*	*08/09/20 12:02*	*08/11/20 16:31*	*1*
Dibromofluoromethane	*85*		*68 - 140*	*08/09/20 12:02*	*08/11/20 16:31*	*1*
Toluene-d8 (Surr)	*92*		*50 - 130*	*08/09/20 12:02*	*08/11/20 16:31*	*1*
4-Bromofluorobenzene	*101*		*57 - 140*	*08/09/20 12:02*	*08/11/20 16:31*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/08/20 15:03	08/12/20 14:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*84*		*70 - 130*	*08/08/20 15:03*	*08/12/20 14:44*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		30		mg/Kg	☼	08/12/20 14:58	08/14/20 16:52	1
C28-C36	**100**		30		mg/Kg	☼	08/12/20 14:58	08/14/20 16:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*125*		*60 - 140*	*08/12/20 14:58*	*08/14/20 16:52*	*1*

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-16-5' Lab Sample ID: 600-209487-36

Date Collected: 08/05/20 14:45 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.0**

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23	^	4.8		mg/Kg	☼		08/20/20 14:45	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17.0		1.0		%			08/11/20 08:50	1
Percent Solids	83.0		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080520-CN-DP-16-8' Lab Sample ID: 600-209487-37

Date Collected: 08/05/20 14:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 78.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Chloromethane	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Vinyl chloride	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Bromomethane	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Chloroethane	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Trichlorofluoromethane	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
1,1-Dichloroethene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
trans-1,2-Dichloroethene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Methyl tert-butyl ether	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Acetone	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Carbon disulfide	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Methyl acetate	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Methylene Chloride	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Vinyl acetate	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
cis-1,2-Dichloroethene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
1,2-Dichloroethene, Total	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
2-Butanone (MEK)	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Chlorobromomethane	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Cyclohexane	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Carbon tetrachloride	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Benzene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
1,2-Dichloroethane	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Trichloroethene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
1,1,1-Trichloroethane	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
1,1-Dichloroethane	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
1,2-Dichloropropane	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Chloroform	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Bromodichloromethane	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Methylcyclohexane	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
cis-1,3-Dichloropropene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
4-Methyl-2-pentanone (MIBK)	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Toluene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
trans-1,3-Dichloropropene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
1,1,2-Trichloroethane	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Tetrachloroethene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
2-Hexanone	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-16-8' **Lab Sample ID: 600-209487-37**
Date Collected: 08/05/20 14:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 78.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
1,2-Dibromoethane	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Chlorobenzene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Ethylbenzene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
m-Xylene & p-Xylene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Xylenes, Total	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
o-Xylene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Styrene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Bromoform	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
Isopropylbenzene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
1,1,2,2-Tetrachloroethane	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
1,3-Dichlorobenzene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
1,4-Dichlorobenzene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
1,2-Dichlorobenzene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
1,2-Dibromo-3-Chloropropane	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1
1,2,4-Trichlorobenzene	ND		0.0065		mg/Kg	☼	08/09/20 12:02	08/11/20 16:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*61 - 130*	*08/09/20 12:02*	*08/11/20 16:55*	*1*
Dibromofluoromethane	*87*		*68 - 140*	*08/09/20 12:02*	*08/11/20 16:55*	*1*
Toluene-d8 (Surr)	*92*		*50 - 130*	*08/09/20 12:02*	*08/11/20 16:55*	*1*
4-Bromofluorobenzene	*103*		*57 - 140*	*08/09/20 12:02*	*08/11/20 16:55*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.3		mg/Kg	☼	08/08/20 15:03	08/12/20 15:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*95*		*70 - 130*	*08/08/20 15:03*	*08/12/20 15:35*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		32		mg/Kg	☼	08/12/20 14:58	08/14/20 17:30	1
C28-C36	ND		32		mg/Kg	☼	08/12/20 14:58	08/14/20 17:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*113*		*60 - 140*	*08/12/20 14:58*	*08/14/20 17:30*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**28**	**^**	5.1		mg/Kg	☼		08/20/20 15:05	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**21.2**		1.0		%			08/11/20 08:50	1
Percent Solids	**78.8**		1.0		%			08/11/20 08:50	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-17-5' **Lab Sample ID: 600-209487-38**
Date Collected: 08/05/20 15:35 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 93.6**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Chloromethane	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Vinyl chloride	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Bromomethane	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Chloroethane	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Trichlorofluoromethane	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
1,1-Dichloroethene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
trans-1,2-Dichloroethene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Methyl tert-butyl ether	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Acetone	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Carbon disulfide	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Methyl acetate	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Methylene Chloride	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Vinyl acetate	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
cis-1,2-Dichloroethene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
1,2-Dichloroethene, Total	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
2-Butanone (MEK)	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Chlorobromomethane	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Cyclohexane	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Carbon tetrachloride	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Benzene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
1,2-Dichloroethane	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Trichloroethene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
1,1,1-Trichloroethane	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
1,1-Dichloroethane	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
1,2-Dichloropropane	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Chloroform	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Bromodichloromethane	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Methylcyclohexane	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
cis-1,3-Dichloropropene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
4-Methyl-2-pentanone (MIBK)	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Toluene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
trans-1,3-Dichloropropene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
1,1,2-Trichloroethane	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Tetrachloroethene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
2-Hexanone	ND		0.011		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Dibromochloromethane	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
1,2-Dibromoethane	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Chlorobenzene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Ethylbenzene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
m-Xylene & p-Xylene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Xylenes, Total	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
o-Xylene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Styrene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Bromoform	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
Isopropylbenzene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
1,1,2,2-Tetrachloroethane	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
1,3-Dichlorobenzene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-17-5' Lab Sample ID: 600-209487-38

Date Collected: 08/05/20 15:35 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 93.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
1,2-Dichlorobenzene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
1,2-Dibromo-3-Chloropropane	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1
1,2,4-Trichlorobenzene	ND		0.0053		mg/Kg	☼	08/09/20 12:02	08/11/20 17:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*61 - 130*	*08/09/20 12:02*	*08/11/20 17:19*	*1*
Dibromofluoromethane	*85*		*68 - 140*	*08/09/20 12:02*	*08/11/20 17:19*	*1*
Toluene-d8 (Surr)	*97*		*50 - 130*	*08/09/20 12:02*	*08/11/20 17:19*	*1*
4-Bromofluorobenzene	*107*		*57 - 140*	*08/09/20 12:02*	*08/11/20 17:19*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.1		mg/Kg	☼	08/08/20 15:03	08/12/20 12:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*90*		*70 - 130*	*08/08/20 15:03*	*08/12/20 12:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		27		mg/Kg	☼	08/12/20 14:58	08/14/20 18:08	1
C28-C36	**82**		27		mg/Kg	☼	08/12/20 14:58	08/14/20 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*135*		*60 - 140*	*08/12/20 14:58*	*08/14/20 18:08*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**20**	^	4.3		mg/Kg	☼		08/20/20 15:26	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**6.4**		1.0		%			08/11/20 08:50	1
Percent Solids	**93.6**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080520-CN-DP-17-8' Lab Sample ID: 600-209487-39

Date Collected: 08/05/20 15:40 Matrix: Solid
Date Received: 08/07/20 09:20 Percent Solids: 79.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Chloromethane	ND		0.014		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Vinyl chloride	ND		0.014		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Bromomethane	ND		0.014		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Chloroethane	ND		0.014		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Trichlorofluoromethane	ND		0.014		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
1,1-Dichloroethene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
trans-1,2-Dichloroethene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Methyl tert-butyl ether	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Acetone	ND		0.014		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-17-8' **Lab Sample ID: 600-209487-39**
Date Collected: 08/05/20 15:40 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 79.1**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		0.014		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Methyl acetate	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Methylene Chloride	ND		0.014		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Vinyl acetate	ND		0.014		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
cis-1,2-Dichloroethene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
1,2-Dichloroethene, Total	ND		0.014		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
2-Butanone (MEK)	ND		0.014		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Chlorobromomethane	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Cyclohexane	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Carbon tetrachloride	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Benzene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
1,2-Dichloroethane	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Trichloroethene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
1,1,1-Trichloroethane	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
1,1-Dichloroethane	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
1,2-Dichloropropane	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Chloroform	ND		0.014		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Bromodichloromethane	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Methylcyclohexane	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
cis-1,3-Dichloropropene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
4-Methyl-2-pentanone (MIBK)	ND		0.014		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Toluene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
trans-1,3-Dichloropropene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
1,1,2-Trichloroethane	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Tetrachloroethene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
2-Hexanone	ND		0.014		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Dibromochloromethane	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
1,2-Dibromoethane	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Chlorobenzene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Ethylbenzene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
m-Xylene & p-Xylene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Xylenes, Total	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
o-Xylene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Styrene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Bromoform	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
Isopropylbenzene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
1,1,2,2-Tetrachloroethane	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
1,3-Dichlorobenzene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
1,4-Dichlorobenzene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
1,2-Dichlorobenzene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
1,2-Dibromo-3-Chloropropane	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1
1,2,4-Trichlorobenzene	ND		0.0070		mg/Kg	☼	08/09/20 12:02	08/11/20 17:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*61 - 130*	*08/09/20 12:02*	*08/11/20 17:43*	*1*
Dibromofluoromethane	*84*		*68 - 140*	*08/09/20 12:02*	*08/11/20 17:43*	*1*
Toluene-d8 (Surr)	*91*		*50 - 130*	*08/09/20 12:02*	*08/11/20 17:43*	*1*
4-Bromofluorobenzene	*103*		*57 - 140*	*08/09/20 12:02*	*08/11/20 17:43*	*1*

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-17-8' Lab Sample ID: 600-209487-39

Date Collected: 08/05/20 15:40 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 79.1**

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.2		mg/Kg	☼	08/08/20 15:03	08/12/20 12:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*87*		*70 - 130*	*08/08/20 15:03*	*08/12/20 12:52*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**60**		52		mg/Kg	☼	08/12/20 14:58	08/14/20 18:45	1
C28-C36	**160**		52		mg/Kg	☼	08/12/20 14:58	08/14/20 18:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*119*		*60 - 140*	*08/12/20 14:58*	*08/14/20 18:45*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**51**	^	5.1		mg/Kg	☼		08/20/20 15:46	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**20.9**		1.0		%			08/11/20 08:50	1
Percent Solids	**79.1**		1.0		%			08/11/20 08:50	1

Client Sample ID: S-11213301-080520-CN-DPW-15-8' Lab Sample ID: 600-209487-41

Date Collected: 08/05/20 12:15 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 79.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Chloromethane	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Vinyl chloride	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Bromomethane	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Chloroethane	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Trichlorofluoromethane	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
1,1-Dichloroethene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
trans-1,2-Dichloroethene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Methyl tert-butyl ether	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Acetone	**0.025**		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Carbon disulfide	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Methyl acetate	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Methylene Chloride	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Vinyl acetate	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
cis-1,2-Dichloroethene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
1,2-Dichloroethene, Total	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
2-Butanone (MEK)	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Chlorobromomethane	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Cyclohexane	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Carbon tetrachloride	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Benzene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
1,2-Dichloroethane	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DPW-15-8' **Lab Sample ID: 600-209487-41**
Date Collected: 08/05/20 12:15 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 79.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
1,1,1-Trichloroethane	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
1,1-Dichloroethane	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
1,2-Dichloropropane	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Chloroform	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Bromodichloromethane	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Methylcyclohexane	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
cis-1,3-Dichloropropene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
4-Methyl-2-pentanone (MIBK)	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Toluene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
trans-1,3-Dichloropropene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
1,1,2-Trichloroethane	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Tetrachloroethene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
2-Hexanone	ND		0.013		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Dibromochloromethane	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
1,2-Dibromoethane	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Chlorobenzene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Ethylbenzene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
m-Xylene & p-Xylene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Xylenes, Total	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
o-Xylene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Styrene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Bromoform	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
Isopropylbenzene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
1,1,2,2-Tetrachloroethane	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
1,3-Dichlorobenzene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
1,4-Dichlorobenzene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
1,2-Dichlorobenzene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
1,2-Dibromo-3-Chloropropane	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1
1,2,4-Trichlorobenzene	ND		0.0063		mg/Kg	☼	08/09/20 12:02	08/11/20 18:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*61 - 130*	*08/09/20 12:02*	*08/11/20 18:07*	*1*
Dibromofluoromethane	*88*		*68 - 140*	*08/09/20 12:02*	*08/11/20 18:07*	*1*
Toluene-d8 (Surr)	*98*		*50 - 130*	*08/09/20 12:02*	*08/11/20 18:07*	*1*
4-Bromofluorobenzene	*98*		*57 - 140*	*08/09/20 12:02*	*08/11/20 18:07*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	**36**		31		mg/Kg	☼	08/08/20 15:03	08/13/20 11:12	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*114*		*70 - 130*	*08/08/20 15:03*	*08/13/20 11:12*	*25*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**170**		31		mg/Kg	☼	08/12/20 14:58	08/14/20 19:23	1
C28-C36	ND		31		mg/Kg	☼	08/12/20 14:58	08/14/20 19:23	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DPW-15-8' **Lab Sample ID: 600-209487-41**
Date Collected: 08/05/20 12:15 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 79.8**

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*119*		*60 - 140*	*08/12/20 14:58*	*08/14/20 19:23*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18	^	5.0		mg/Kg	☼		08/20/20 16:06	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20.2		1.0		%			08/11/20 08:50	1
Percent Solids	79.8		1.0		%			08/11/20 08:50	1

Definitions/Glossary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.

GC VOA

Qualifier	Qualifier Description
X	Surrogate recovery exceeds control limits

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
X	Surrogate recovery exceeds control limits

HPLC/IC

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits

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

Surrogate Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCA (61-130)	DBFM (68-140)	TOL (50-130)	BFB (57-140)
600-209487-1	S-11213301-080320-CN-DP-1-5	86	84	94	105
600-209487-2	S-11213301-080320-CN-DP-1-12'	90	85	96	121
600-209487-3	S-11213301-080320-CN-DP-1-15'	90	87	94	104
600-209487-4	S-11213301-080320-CN-DP-2-5'	83	84	91	102
600-209487-5	S-11213301-080320-CN-DP-2-10'	80	83	97	104
600-209487-6	S-11213301-080320-CN-DP-2-11'	106	87	94	86
600-209487-7	S-11213301-080420-CN-DP-3-5'	108	87	89	85
600-209487-8	S-11213301-080420-CN-DP-3-10'	105	85	96	92
600-209487-9	S-11213301-080420-CN-DP-3-15'	101	83	87	85
600-209487-10	S-11213301-080420-CN-DP-4.5'	112	88	94	94
600-209487-11	S-11213301-080420-CN-DP-4-10'	108	83	87	83
600-209487-12	S-11213301-080420-CN-DP-4-15'	106	84	91	92
600-209487-13	S-11213301-080420-CN-DP-5-5'	99	79	89	82
600-209487-14	S-11213301-080420-CN-DP-5-8'	97	79	91	83
600-209487-15	S-11213301-080420-CN-DP-6-5'	100	77	94	93
600-209487-16	S-11213301-080420-CN-DP-6-8'	97	78	97	80
600-209487-17	S-11213301-080420-CN-DP-7-6'	104	78	91	84
600-209487-18	S-11213301-080420-CN-DP-7-9'	99	79	100	85
600-209487-19	S-11213301-080420-CN-DP-8-6'	100	74	93	84
600-209487-20	S-11213301-080420-CN-DP-8-9'	103	73	90	86
600-209487-21	S-11213301-080420-CN-DP-9-6'	103	74	91	84
600-209487-22	S-11213301-080420-CN-DP-9-9'	97	75	92	81
600-209487-23	S-11213301-080520-CN-DP-10-5'	98	77	98	89
600-209487-24	S-11213301-080520-CN-DP-10-8'	98	79	98	79
600-209487-25	S-11213301-080520-CN-DP-11-5'	81	83	91	101
600-209487-26	S-11213301-080520-CN-DP-11-8	98	93	94	110
600-209487-27	S-11213301-080520-CN-DP-12-6'	84	86	91	109
600-209487-28	S-11213301-080520-CN-DP-12-9'	92	86	91	104

Surrogate Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCA (61-130)	DBFM (68-140)	TOL (50-130)	BFB (57-140)
600-209487-29	S-11213301-080520-CN-DP-13-	91	87	94	105
600-209487-30	S-11213301-080520-CN-DP-13-9'	89	89	93	109
600-209487-31	S-11213301-080520-CN-DP-14-6'	93	83	91	107
600-209487-32	S-11213301-080520-CN-DP-14-9'	92	86	89	105
600-209487-33	S-11213301-080520-CN-DP-15-5'	96	91	93	107
600-209487-34	S-11213301-080520-CN-DP-15-11'	92	86	109	71
600-209487-34 - DL	S-11213301-080520-CN-DP-15-11'	88	86	105	86
600-209487-35	S-11213301-080520-CN-DP-15-20'	83	83	93	96
600-209487-36	S-11213301-080520-CN-DP-16-5'	85	85	92	101
600-209487-37	S-11213301-080520-CN-DP-16-8'	90	87	92	103
600-209487-38	S-11213301-080520-CN-DP-17-5'	83	85	97	107
600-209487-39	S-11213301-080520-CN-DP-17-8'	85	84	91	103
600-209487-41	S-11213301-080520-CN-DPW-15-8'	86	88	98	98
LCS 600-300707/3	Lab Control Sample	90	88	95	110
LCS 600-300771/4	Lab Control Sample	101	91	91	88
LCS 600-300850/3	Lab Control Sample	85	87	94	111
LCS 600-300952/3	Lab Control Sample	80	86	100	109
LCSD 600-300707/4	Lab Control Sample Dup	89	88	91	107
LCSD 600-300771/5	Lab Control Sample Dup	85	79	85	85
LCSD 600-300850/4	Lab Control Sample Dup	86	88	93	106
LCSD 600-300952/4	Lab Control Sample Dup	77	83	95	106
MB 600-300707/6	Method Blank	108	87	92	113
MB 600-300771/7	Method Blank	100	87	97	87
MB 600-300850/6	Method Blank	103	92	97	105
MB 600-300952/6	Method Blank	95	88	99	103

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8015B - Gasoline Range Organics - (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	TFT1 (70-130)
600-209487-1	S-11213301-080320-CN-DP-1-5	92
600-209487-2	S-11213301-080320-CN-DP-1-12'	117

Surrogate Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	TFT1 (70-130)							
600-209487-3	S-11213301-080320-CN-DP-1-1	99							
600-209487-4	S-11213301-080320-CN-DP-2-5'	100							
600-209487-5	S-11213301-080320-CN-DP-2-10'	103							
600-209487-6	S-11213301-080320-CN-DP-2-11'	102							
600-209487-7	S-11213301-080420-CN-DP-3-5'	101							
600-209487-8	S-11213301-080420-CN-DP-3-10'	101							
600-209487-9	S-11213301-080420-CN-DP-3-15'	98							
600-209487-10	S-11213301-080420-CN-DP-4.5'	101							
600-209487-11	S-11213301-080420-CN-DP-4-10'	96							
600-209487-12	S-11213301-080420-CN-DP-4-15'	79							
600-209487-13	S-11213301-080420-CN-DP-5-5'	81							
600-209487-14	S-11213301-080420-CN-DP-5-8'	96							
600-209487-15	S-11213301-080420-CN-DP-6-5'	95							
600-209487-16	S-11213301-080420-CN-DP-6-8'	95							
600-209487-17	S-11213301-080420-CN-DP-7-6'	96							
600-209487-18	S-11213301-080420-CN-DP-7-9'	101							
600-209487-19	S-11213301-080420-CN-DP-8-6'	91							
600-209487-20	S-11213301-080420-CN-DP-8-9'	91							
600-209487-21	S-11213301-080420-CN-DP-9-6'	98							
600-209487-22	S-11213301-080420-CN-DP-9-9'	91							
600-209487-23	S-11213301-080520-CN-DP-10-5'	102							
600-209487-24	S-11213301-080520-CN-DP-10-8'	96							
600-209487-25	S-11213301-080520-CN-DP-11-5'	95							
600-209487-26	S-11213301-080520-CN-DP-11-8	102							
600-209487-27	S-11213301-080520-CN-DP-12-6'	94							
600-209487-28	S-11213301-080520-CN-DP-12-9'	97							
600-209487-29	S-11213301-080520-CN-DP-13-6'	94							
600-209487-30	S-11213301-080520-CN-DP-13-9'	94							
600-209487-31	S-11213301-080520-CN-DP-14-6'	91							

Surrogate Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	TFT1 (70-130)
600-209487-32	S-11213301-080520-CN-DP-14-	84
600-209487-33	S-11213301-080520-CN-DP-15 -5'	86
600-209487-34	S-11213301-080520-CN-DP-15 -11'	501 X
600-209487-35	S-11213301-080520-CN-DP-15 -20'	82
600-209487-36	S-11213301-080520-CN-DP-16 -5'	84
600-209487-37	S-11213301-080520-CN-DP-16 -8'	95
600-209487-38	S-11213301-080520-CN-DP-17 -5'	90
600-209487-39	S-11213301-080520-CN-DP-17 -8'	87
600-209487-41	S-11213301-080520-CN-DPW- 15-8'	114
LCS 600-300708/1-A	Lab Control Sample	96
LCS 600-300717/1-A	Lab Control Sample	94
LCS 600-300863/1-A	Lab Control Sample	90
LCSD 600-300708/2-A	Lab Control Sample Dup	96
LCSD 600-300717/2-A	Lab Control Sample Dup	93
LCSD 600-300863/2-A	Lab Control Sample Dup	89
MB 600-300708/3-A	Method Blank	95
MB 600-300717/3-A	Method Blank	89
MB 600-300863/3-A	Method Blank	87

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	OTPH (60-140)
600-209487-1	S-11213301-080320-CN-DP-1-5	75
600-209487-2	S-11213301-080320-CN-DP-1- 12'	96
600-209487-3	S-11213301-080320-CN-DP-1- 15'	75
600-209487-4	S-11213301-080320-CN-DP-2- 5'	97
600-209487-5	S-11213301-080320-CN-DP-2- 10'	68
600-209487-6	S-11213301-080320-CN-DP-2- 11'	109
600-209487-7	S-11213301-080420-CN-DP-3- 5'	80
600-209487-8	S-11213301-080420-CN-DP-3- 10'	112
600-209487-9	S-11213301-080420-CN-DP-3- 15'	101
600-209487-10	S-11213301-080420-CN-DP-4. 5'	73

Surrogate Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	OTPH (60-140)
600-209487-11	S-11213301-080420-CN-DP-4-1	112
600-209487-12	S-11213301-080420-CN-DP-4-15'	118
600-209487-13	S-11213301-080420-CN-DP-5-5'	117
600-209487-13 MS	S-11213301-080420-CN-DP-5-5'	91
600-209487-13 MSD	S-11213301-080420-CN-DP-5-5'	41 X
600-209487-14	S-11213301-080420-CN-DP-5-8'	117
600-209487-15	S-11213301-080420-CN-DP-6-5'	119
600-209487-16	S-11213301-080420-CN-DP-6-8'	99
600-209487-17	S-11213301-080420-CN-DP-7-6'	60
600-209487-18	S-11213301-080420-CN-DP-7-9'	78
600-209487-19	S-11213301-080420-CN-DP-8-6'	106
600-209487-20	S-11213301-080420-CN-DP-8-9'	108
600-209487-21	S-11213301-080420-CN-DP-9-6'	120
600-209487-22	S-11213301-080420-CN-DP-9-9'	122
600-209487-23	S-11213301-080520-CN-DP-10-5'	126
600-209487-24	S-11213301-080520-CN-DP-10-8'	117
600-209487-25	S-11213301-080520-CN-DP-11-5'	123
600-209487-26	S-11213301-080520-CN-DP-11-8	123
600-209487-27	S-11213301-080520-CN-DP-12-6'	123
600-209487-28	S-11213301-080520-CN-DP-12-9'	126
600-209487-29	S-11213301-080520-CN-DP-13-6'	117
600-209487-30	S-11213301-080520-CN-DP-13-9'	111
600-209487-31	S-11213301-080520-CN-DP-14-6'	110
600-209487-31 MS	S-11213301-080520-CN-DP-14-6'	138
600-209487-31 MSD	S-11213301-080520-CN-DP-14-6'	137
600-209487-32	S-11213301-080520-CN-DP-14-9'	106
600-209487-33	S-11213301-080520-CN-DP-15-5'	114
600-209487-34	S-11213301-080520-CN-DP-15-11'	132
600-209487-35	S-11213301-080520-CN-DP-15-20'	61

Surrogate Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	OTPH (60-140)								
600-209487-36	S-11213301-080520-CN-DP-16-	125								
600-209487-37	S-11213301-080520-CN-DP-16-8'	113								
600-209487-38	S-11213301-080520-CN-DP-17-5'	135								
600-209487-39	S-11213301-080520-CN-DP-17-8'	119								
600-209487-41	S-11213301-080520-CN-DPW-15-8'	119								
LCS 600-300964/2-A	Lab Control Sample	119								
LCS 600-301022/2-A	Lab Control Sample	136								
LCS 600-301371/2-A	Lab Control Sample	135								
LCSD 600-301371/3-A	Lab Control Sample Dup	139								
MB 600-300964/1-A	Method Blank	103								
MB 600-301022/1-A	Method Blank	127								
MB 600-301371/1-A	Method Blank	120								

Surrogate Legend

OTPH = o-Terphenyl

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: MB 600-300707/6
Matrix: Solid
Analysis Batch: 300707

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0050		mg/Kg			08/08/20 09:03	1
Chloromethane	ND		0.010		mg/Kg			08/08/20 09:03	1
Vinyl chloride	ND		0.010		mg/Kg			08/08/20 09:03	1
Bromomethane	ND		0.010		mg/Kg			08/08/20 09:03	1
Chloroethane	ND		0.010		mg/Kg			08/08/20 09:03	1
Trichlorofluoromethane	ND		0.010		mg/Kg			08/08/20 09:03	1
1,1-Dichloroethene	ND		0.0050		mg/Kg			08/08/20 09:03	1
trans-1,2-Dichloroethene	ND		0.0050		mg/Kg			08/08/20 09:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0050		mg/Kg			08/08/20 09:03	1
Methyl tert-butyl ether	ND		0.0050		mg/Kg			08/08/20 09:03	1
Acetone	ND		0.010		mg/Kg			08/08/20 09:03	1
Carbon disulfide	ND		0.010		mg/Kg			08/08/20 09:03	1
Methyl acetate	ND		0.0050		mg/Kg			08/08/20 09:03	1
Methylene Chloride	ND		0.010		mg/Kg			08/08/20 09:03	1
Vinyl acetate	ND		0.010		mg/Kg			08/08/20 09:03	1
cis-1,2-Dichloroethene	ND		0.0050		mg/Kg			08/08/20 09:03	1
1,2-Dichloroethene, Total	ND		0.010		mg/Kg			08/08/20 09:03	1
2-Butanone (MEK)	ND		0.010		mg/Kg			08/08/20 09:03	1
Chlorobromomethane	ND		0.0050		mg/Kg			08/08/20 09:03	1
Cyclohexane	ND		0.0050		mg/Kg			08/08/20 09:03	1
Carbon tetrachloride	ND		0.0050		mg/Kg			08/08/20 09:03	1
Benzene	ND		0.0050		mg/Kg			08/08/20 09:03	1
1,2-Dichloroethane	ND		0.0050		mg/Kg			08/08/20 09:03	1
Trichloroethene	ND		0.0050		mg/Kg			08/08/20 09:03	1
1,1,1-Trichloroethane	ND		0.0050		mg/Kg			08/08/20 09:03	1
1,1-Dichloroethane	ND		0.0050		mg/Kg			08/08/20 09:03	1
1,2-Dichloropropane	ND		0.0050		mg/Kg			08/08/20 09:03	1
Chloroform	ND		0.010		mg/Kg			08/08/20 09:03	1
Bromodichloromethane	ND		0.0050		mg/Kg			08/08/20 09:03	1
Methylcyclohexane	ND		0.0050		mg/Kg			08/08/20 09:03	1
cis-1,3-Dichloropropene	ND		0.0050		mg/Kg			08/08/20 09:03	1
4-Methyl-2-pentanone (MIBK)	ND		0.010		mg/Kg			08/08/20 09:03	1
Toluene	ND		0.0050		mg/Kg			08/08/20 09:03	1
trans-1,3-Dichloropropene	ND		0.0050		mg/Kg			08/08/20 09:03	1
1,1,2-Trichloroethane	ND		0.0050		mg/Kg			08/08/20 09:03	1
Tetrachloroethene	ND		0.0050		mg/Kg			08/08/20 09:03	1
2-Hexanone	ND		0.010		mg/Kg			08/08/20 09:03	1
Dibromochloromethane	ND		0.0050		mg/Kg			08/08/20 09:03	1
1,2-Dibromoethane	ND		0.0050		mg/Kg			08/08/20 09:03	1
Chlorobenzene	ND		0.0050		mg/Kg			08/08/20 09:03	1
Ethylbenzene	ND		0.0050		mg/Kg			08/08/20 09:03	1
m-Xylene & p-Xylene	ND		0.0050		mg/Kg			08/08/20 09:03	1
Xylenes, Total	ND		0.0050		mg/Kg			08/08/20 09:03	1
o-Xylene	ND		0.0050		mg/Kg			08/08/20 09:03	1
Styrene	ND		0.0050		mg/Kg			08/08/20 09:03	1
Bromoform	ND		0.0050		mg/Kg			08/08/20 09:03	1
Isopropylbenzene	ND		0.0050		mg/Kg			08/08/20 09:03	1
1,1,2,2-Tetrachloroethane	ND		0.0050		mg/Kg			08/08/20 09:03	1

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: MB 600-300707/6 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300707

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		0.0050		mg/Kg			08/08/20 09:03	1
1,4-Dichlorobenzene	ND		0.0050		mg/Kg			08/08/20 09:03	1
1,2-Dichlorobenzene	ND		0.0050		mg/Kg			08/08/20 09:03	1
1,2-Dibromo-3-Chloropropane	ND		0.0050		mg/Kg			08/08/20 09:03	1
1,2,4-Trichlorobenzene	ND		0.0050		mg/Kg			08/08/20 09:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*61 - 130*		*08/08/20 09:03*	*1*
Dibromofluoromethane	*87*		*68 - 140*		*08/08/20 09:03*	*1*
Toluene-d8 (Surr)	*92*		*50 - 130*		*08/08/20 09:03*	*1*
4-Bromofluorobenzene	*113*		*57 - 140*		*08/08/20 09:03*	*1*

Lab Sample ID: LCS 600-300707/3 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300707

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	0.0500	0.0643		mg/Kg		129	24 - 147
Chloromethane	0.0500	0.0682		mg/Kg		136	44 - 141
Vinyl chloride	0.0500	0.0567		mg/Kg		113	40 - 148
Bromomethane	0.0500	0.0480		mg/Kg		96	37 - 147
Chloroethane	0.0500	0.0496		mg/Kg		99	40 - 150
Trichlorofluoromethane	0.0500	0.0579		mg/Kg		116	53 - 134
1,1-Dichloroethene	0.0500	0.0446		mg/Kg		89	62 - 142
trans-1,2-Dichloroethene	0.0500	0.0478		mg/Kg		96	69 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0426		mg/Kg		85	48 - 150
Methyl tert-butyl ether	0.0500	0.0506		mg/Kg		101	63 - 132
Acetone	0.100	0.0992		mg/Kg		99	13 - 150
Carbon disulfide	0.0500	0.0419		mg/Kg		84	51 - 141
Methyl acetate	0.100	0.106		mg/Kg		106	10 - 150
Methylene Chloride	0.0500	0.0467		mg/Kg		93	61 - 150
Vinyl acetate	0.100	0.121		mg/Kg		121	40 - 150
cis-1,2-Dichloroethene	0.0500	0.0439		mg/Kg		88	70 - 130
1,2-Dichloroethene, Total	0.100	0.0917		mg/Kg		92	70 - 130
2-Butanone (MEK)	0.100	0.0818		mg/Kg		82	33 - 150
Chlorobromomethane	0.0500	0.0416		mg/Kg		83	70 - 132
Cyclohexane	0.0500	0.0441		mg/Kg		88	54 - 130
Carbon tetrachloride	0.0500	0.0508		mg/Kg		102	58 - 130
Benzene	0.0500	0.0455		mg/Kg		91	70 - 131
1,2-Dichloroethane	0.0500	0.0535		mg/Kg		107	58 - 137
Trichloroethene	0.0500	0.0416		mg/Kg		83	63 - 135
1,1,1-Trichloroethane	0.0500	0.0523		mg/Kg		105	59 - 130
1,1-Dichloroethane	0.0500	0.0511		mg/Kg		102	63 - 140
1,2-Dichloropropane	0.0500	0.0471		mg/Kg		94	70 - 130
Chloroform	0.0500	0.0500		mg/Kg		100	69 - 130
Bromodichloromethane	0.0500	0.0503		mg/Kg		101	67 - 138
Methylcyclohexane	0.0500	0.0434		mg/Kg		87	51 - 137
cis-1,3-Dichloropropene	0.0500	0.0488		mg/Kg		98	65 - 130

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: LCS 600-300707/3 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300707

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
4-Methyl-2-pentanone (MIBK)			0.100	0.106		mg/Kg		106	21 - 150		
Toluene			0.0500	0.0460		mg/Kg		92	67 - 130		
trans-1,3-Dichloropropene			0.0500	0.0492		mg/Kg		98	70 - 130		
1,1,2-Trichloroethane			0.0500	0.0451		mg/Kg		90	67 - 134		
Tetrachloroethene			0.0500	0.0433		mg/Kg		87	43 - 143		
2-Hexanone			0.100	0.101		mg/Kg		101	35 - 150		
Dibromochloromethane			0.0500	0.0466		mg/Kg		93	65 - 134		
1,2-Dibromoethane			0.0500	0.0432		mg/Kg		86	65 - 136		
Chlorobenzene			0.0500	0.0453		mg/Kg		91	63 - 131		
Ethylbenzene			0.0500	0.0444		mg/Kg		89	66 - 130		
m-Xylene & p-Xylene			0.0500	0.0465		mg/Kg		93	64 - 130		
Xylenes, Total			0.100	0.0914		mg/Kg		91	63 - 130		
o-Xylene			0.0500	0.0449		mg/Kg		90	62 - 130		
Styrene			0.0500	0.0442		mg/Kg		88	65 - 133		
Bromoform			0.0500	0.0482		mg/Kg		96	43 - 150		
Isopropylbenzene			0.0500	0.0534		mg/Kg		107	64 - 131		
1,1,2,2-Tetrachloroethane			0.0500	0.0476		mg/Kg		95	61 - 138		
1,3-Dichlorobenzene			0.0500	0.0485		mg/Kg		97	63 - 132		
1,4-Dichlorobenzene			0.0500	0.0493		mg/Kg		99	65 - 131		
1,2-Dichlorobenzene			0.0500	0.0496		mg/Kg		99	61 - 131		
1,2-Dibromo-3-Chloropropane			0.0500	0.0460		mg/Kg		92	29 - 150		
1,2,4-Trichlorobenzene			0.0500	0.0492		mg/Kg		98	53 - 136		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*61 - 130*
Dibromofluoromethane	*88*		*68 - 140*
Toluene-d8 (Surr)	*95*		*50 - 130*
4-Bromofluorobenzene	*110*		*57 - 140*

Lab Sample ID: LCSD 600-300707/4 **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300707

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dichlorodifluoromethane			0.0500	0.0566		mg/Kg		113	24 - 147	13	30
Chloromethane			0.0500	0.0578		mg/Kg		116	44 - 141	16	30
Vinyl chloride			0.0500	0.0484		mg/Kg		97	40 - 148	16	30
Bromomethane			0.0500	0.0345	*1	mg/Kg		69	37 - 147	33	30
Chloroethane			0.0500	0.0451		mg/Kg		90	40 - 150	10	30
Trichlorofluoromethane			0.0500	0.0533		mg/Kg		107	53 - 134	8	30
1,1-Dichloroethene			0.0500	0.0399		mg/Kg		80	62 - 142	11	30
trans-1,2-Dichloroethene			0.0500	0.0431		mg/Kg		86	69 - 130	10	30
1,1,2-Trichloro-1,2,2-trifluoroethane			0.0500	0.0380		mg/Kg		76	48 - 150	11	30
Methyl tert-butyl ether			0.0500	0.0491		mg/Kg		98	63 - 132	3	30
Acetone			0.100	0.0672	*1	mg/Kg		67	13 - 150	38	30
Carbon disulfide			0.0500	0.0343		mg/Kg		69	51 - 141	20	30
Methyl acetate			0.100	0.0835		mg/Kg		84	10 - 150	24	30
Methylene Chloride			0.0500	0.0408		mg/Kg		82	61 - 150	13	30

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: LCSD 600-300707/4 **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300707

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vinyl acetate	0.100	0.113		mg/Kg		113	40 - 150	7	30
cis-1,2-Dichloroethene	0.0500	0.0437		mg/Kg		87	70 - 130	0	30
1,2-Dichloroethene, Total	0.100	0.0868		mg/Kg		87	70 - 130	5	30
2-Butanone (MEK)	0.100	0.0572	*1	mg/Kg		57	33 - 150	35	30
Chlorobromomethane	0.0500	0.0403		mg/Kg		81	70 - 132	3	30
Cyclohexane	0.0500	0.0415		mg/Kg		83	54 - 130	6	30
Carbon tetrachloride	0.0500	0.0487		mg/Kg		97	58 - 130	4	30
Benzene	0.0500	0.0440		mg/Kg		88	70 - 131	3	30
1,2-Dichloroethane	0.0500	0.0511		mg/Kg		102	58 - 137	5	30
Trichloroethene	0.0500	0.0402		mg/Kg		80	63 - 135	4	30
1,1,1-Trichloroethane	0.0500	0.0505		mg/Kg		101	59 - 130	4	30
1,1-Dichloroethane	0.0500	0.0484		mg/Kg		97	63 - 140	6	30
1,2-Dichloropropane	0.0500	0.0457		mg/Kg		91	70 - 130	3	30
Chloroform	0.0500	0.0479		mg/Kg		96	69 - 130	4	30
Bromodichloromethane	0.0500	0.0477		mg/Kg		95	67 - 138	5	30
Methylcyclohexane	0.0500	0.0418		mg/Kg		84	51 - 137	4	30
cis-1,3-Dichloropropene	0.0500	0.0454		mg/Kg		91	65 - 130	7	30
4-Methyl-2-pentanone (MIBK)	0.100	0.0881		mg/Kg		88	21 - 150	18	30
Toluene	0.0500	0.0433		mg/Kg		87	67 - 130	6	30
trans-1,3-Dichloropropene	0.0500	0.0463		mg/Kg		93	70 - 130	6	30
1,1,2-Trichloroethane	0.0500	0.0418		mg/Kg		84	67 - 134	8	30
Tetrachloroethene	0.0500	0.0418		mg/Kg		84	43 - 143	3	30
2-Hexanone	0.100	0.0789		mg/Kg		79	35 - 150	24	30
Dibromochloromethane	0.0500	0.0437		mg/Kg		87	65 - 134	6	30
1,2-Dibromoethane	0.0500	0.0404		mg/Kg		81	65 - 136	7	30
Chlorobenzene	0.0500	0.0432		mg/Kg		86	63 - 131	5	30
Ethylbenzene	0.0500	0.0423		mg/Kg		85	66 - 130	5	30
m-Xylene & p-Xylene	0.0500	0.0447		mg/Kg		89	64 - 130	4	30
Xylenes, Total	0.100	0.0879		mg/Kg		88	63 - 130	4	30
o-Xylene	0.0500	0.0432		mg/Kg		86	62 - 130	4	30
Styrene	0.0500	0.0428		mg/Kg		86	65 - 133	3	30
Bromoform	0.0500	0.0447		mg/Kg		89	43 - 150	8	30
Isopropylbenzene	0.0500	0.0501		mg/Kg		100	64 - 131	6	30
1,1,2,2-Tetrachloroethane	0.0500	0.0419		mg/Kg		84	61 - 138	13	30
1,3-Dichlorobenzene	0.0500	0.0462		mg/Kg		92	63 - 132	5	30
1,4-Dichlorobenzene	0.0500	0.0470		mg/Kg		94	65 - 131	5	30
1,2-Dichlorobenzene	0.0500	0.0469		mg/Kg		94	61 - 131	6	30
1,2-Dibromo-3-Chloropropane	0.0500	0.0412		mg/Kg		82	29 - 150	11	30
1,2,4-Trichlorobenzene	0.0500	0.0456		mg/Kg		91	53 - 136	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*61 - 130*
Dibromofluoromethane	*88*		*68 - 140*
Toluene-d8 (Surr)	*91*		*50 - 130*
4-Bromofluorobenzene	*107*		*57 - 140*

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: MB 600-300771/7 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300771

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0050		mg/Kg			08/10/20 15:30	1
Chloromethane	ND		0.010		mg/Kg			08/10/20 15:30	1
Vinyl chloride	ND		0.010		mg/Kg			08/10/20 15:30	1
Bromomethane	ND		0.010		mg/Kg			08/10/20 15:30	1
Chloroethane	ND		0.010		mg/Kg			08/10/20 15:30	1
Trichlorofluoromethane	ND		0.010		mg/Kg			08/10/20 15:30	1
1,1-Dichloroethene	ND		0.0050		mg/Kg			08/10/20 15:30	1
trans-1,2-Dichloroethene	ND		0.0050		mg/Kg			08/10/20 15:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0050		mg/Kg			08/10/20 15:30	1
Methyl tert-butyl ether	ND		0.0050		mg/Kg			08/10/20 15:30	1
Acetone	ND		0.010		mg/Kg			08/10/20 15:30	1
Carbon disulfide	ND		0.010		mg/Kg			08/10/20 15:30	1
Methyl acetate	ND		0.0050		mg/Kg			08/10/20 15:30	1
Methylene Chloride	ND		0.010		mg/Kg			08/10/20 15:30	1
Vinyl acetate	ND		0.010		mg/Kg			08/10/20 15:30	1
cis-1,2-Dichloroethene	ND		0.0050		mg/Kg			08/10/20 15:30	1
1,2-Dichloroethene, Total	ND		0.010		mg/Kg			08/10/20 15:30	1
2-Butanone (MEK)	ND		0.010		mg/Kg			08/10/20 15:30	1
Chlorobromomethane	ND		0.0050		mg/Kg			08/10/20 15:30	1
Cyclohexane	ND		0.0050		mg/Kg			08/10/20 15:30	1
Carbon tetrachloride	ND		0.0050		mg/Kg			08/10/20 15:30	1
Benzene	ND		0.0050		mg/Kg			08/10/20 15:30	1
1,2-Dichloroethane	ND		0.0050		mg/Kg			08/10/20 15:30	1
Trichloroethene	ND		0.0050		mg/Kg			08/10/20 15:30	1
1,1,1-Trichloroethane	ND		0.0050		mg/Kg			08/10/20 15:30	1
1,1-Dichloroethane	ND		0.0050		mg/Kg			08/10/20 15:30	1
1,2-Dichloropropane	ND		0.0050		mg/Kg			08/10/20 15:30	1
Chloroform	ND		0.010		mg/Kg			08/10/20 15:30	1
Bromodichloromethane	ND		0.0050		mg/Kg			08/10/20 15:30	1
Methylcyclohexane	ND		0.0050		mg/Kg			08/10/20 15:30	1
cis-1,3-Dichloropropene	ND		0.0050		mg/Kg			08/10/20 15:30	1
4-Methyl-2-pentanone (MIBK)	ND		0.010		mg/Kg			08/10/20 15:30	1
Toluene	ND		0.0050		mg/Kg			08/10/20 15:30	1
trans-1,3-Dichloropropene	ND		0.0050		mg/Kg			08/10/20 15:30	1
1,1,2-Trichloroethane	ND		0.0050		mg/Kg			08/10/20 15:30	1
Tetrachloroethene	ND		0.0050		mg/Kg			08/10/20 15:30	1
2-Hexanone	ND		0.010		mg/Kg			08/10/20 15:30	1
Dibromochloromethane	ND		0.0050		mg/Kg			08/10/20 15:30	1
1,2-Dibromoethane	ND		0.0050		mg/Kg			08/10/20 15:30	1
Chlorobenzene	ND		0.0050		mg/Kg			08/10/20 15:30	1
Ethylbenzene	ND		0.0050		mg/Kg			08/10/20 15:30	1
m-Xylene & p-Xylene	ND		0.0050		mg/Kg			08/10/20 15:30	1
Xylenes, Total	ND		0.0050		mg/Kg			08/10/20 15:30	1
o-Xylene	ND		0.0050		mg/Kg			08/10/20 15:30	1
Styrene	ND		0.0050		mg/Kg			08/10/20 15:30	1
Bromoform	ND		0.0050		mg/Kg			08/10/20 15:30	1
Isopropylbenzene	ND		0.0050		mg/Kg			08/10/20 15:30	1
1,1,2,2-Tetrachloroethane	ND		0.0050		mg/Kg			08/10/20 15:30	1

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: MB 600-300771/7 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300771

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		0.0050		mg/Kg			08/10/20 15:30	1
1,4-Dichlorobenzene	ND		0.0050		mg/Kg			08/10/20 15:30	1
1,2-Dichlorobenzene	ND		0.0050		mg/Kg			08/10/20 15:30	1
1,2-Dibromo-3-Chloropropane	ND		0.0050		mg/Kg			08/10/20 15:30	1
1,2,4-Trichlorobenzene	ND		0.0050		mg/Kg			08/10/20 15:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*61 - 130*		*08/10/20 15:30*	*1*
Dibromofluoromethane	*87*		*68 - 140*		*08/10/20 15:30*	*1*
Toluene-d8 (Surr)	*97*		*50 - 130*		*08/10/20 15:30*	*1*
4-Bromofluorobenzene	*87*		*57 - 140*		*08/10/20 15:30*	*1*

Lab Sample ID: LCS 600-300771/4 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300771

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	0.0500	0.0361		mg/Kg		72	24 - 147
Chloromethane	0.0500	0.0556		mg/Kg		111	44 - 141
Vinyl chloride	0.0500	0.0474		mg/Kg		95	40 - 148
Bromomethane	0.0500	0.0488		mg/Kg		98	37 - 147
Chloroethane	0.0500	0.0448		mg/Kg		90	40 - 150
Trichlorofluoromethane	0.0500	0.0400		mg/Kg		80	53 - 134
1,1-Dichloroethene	0.0500	0.0409		mg/Kg		82	62 - 142
trans-1,2-Dichloroethene	0.0500	0.0482		mg/Kg		96	69 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0431		mg/Kg		86	48 - 150
Methyl tert-butyl ether	0.0500	0.0534		mg/Kg		107	63 - 132
Acetone	0.100	0.150		mg/Kg		150	13 - 150
Carbon disulfide	0.0500	0.0400		mg/Kg		80	51 - 141
Methyl acetate	0.100	0.129		mg/Kg		129	10 - 150
Methylene Chloride	0.0500	0.0674		mg/Kg		135	61 - 150
Vinyl acetate	0.100	0.147		mg/Kg		147	40 - 150
cis-1,2-Dichloroethene	0.0500	0.0520		mg/Kg		104	70 - 130
1,2-Dichloroethene, Total	0.100	0.100		mg/Kg		100	70 - 130
2-Butanone (MEK)	0.100	0.110		mg/Kg		110	33 - 150
Chlorobromomethane	0.0500	0.0559		mg/Kg		112	70 - 132
Cyclohexane	0.0500	0.0441		mg/Kg		88	54 - 130
Carbon tetrachloride	0.0500	0.0454		mg/Kg		91	58 - 130
Benzene	0.0500	0.0522		mg/Kg		104	70 - 131
1,2-Dichloroethane	0.0500	0.0562		mg/Kg		112	58 - 137
Trichloroethene	0.0500	0.0500		mg/Kg		100	63 - 135
1,1,1-Trichloroethane	0.0500	0.0467		mg/Kg		93	59 - 130
1,1-Dichloroethane	0.0500	0.0513		mg/Kg		103	63 - 140
1,2-Dichloropropane	0.0500	0.0551		mg/Kg		110	70 - 130
Chloroform	0.0500	0.0511		mg/Kg		102	69 - 130
Bromodichloromethane	0.0500	0.0565		mg/Kg		113	67 - 138
Methylcyclohexane	0.0500	0.0448		mg/Kg		90	51 - 137
cis-1,3-Dichloropropene	0.0500	0.0591		mg/Kg		118	65 - 130

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: LCS 600-300771/4 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300771

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
4-Methyl-2-pentanone (MIBK)			0.100	0.120		mg/Kg		120	21 - 150		
Toluene			0.0500	0.0529		mg/Kg		106	67 - 130		
trans-1,3-Dichloropropene			0.0500	0.0596		mg/Kg		119	70 - 130		
1,1,2-Trichloroethane			0.0500	0.0591		mg/Kg		118	67 - 134		
Tetrachloroethene			0.0500	0.0494		mg/Kg		99	43 - 143		
2-Hexanone			0.100	0.130		mg/Kg		130	35 - 150		
Dibromochloromethane			0.0500	0.0589		mg/Kg		118	65 - 134		
1,2-Dibromoethane			0.0500	0.0619		mg/Kg		124	65 - 136		
Chlorobenzene			0.0500	0.0541		mg/Kg		108	63 - 131		
Ethylbenzene			0.0500	0.0510		mg/Kg		102	66 - 130		
m-Xylene & p-Xylene			0.0500	0.0522		mg/Kg		104	64 - 130		
Xylenes, Total			0.100	0.106		mg/Kg		106	63 - 130		
o-Xylene			0.0500	0.0534		mg/Kg		107	62 - 130		
Styrene			0.0500	0.0582		mg/Kg		116	65 - 133		
Bromoform			0.0500	0.0506		mg/Kg		101	43 - 150		
Isopropylbenzene			0.0500	0.0451		mg/Kg		90	64 - 131		
1,1,2,2-Tetrachloroethane			0.0500	0.0617		mg/Kg		123	61 - 138		
1,3-Dichlorobenzene			0.0500	0.0523		mg/Kg		105	63 - 132		
1,4-Dichlorobenzene			0.0500	0.0506		mg/Kg		101	65 - 131		
1,2-Dichlorobenzene			0.0500	0.0531		mg/Kg		106	61 - 131		
1,2-Dibromo-3-Chloropropane			0.0500	0.0585		mg/Kg		117	29 - 150		
1,2,4-Trichlorobenzene			0.0500	0.0556		mg/Kg		111	53 - 136		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*61 - 130*
Dibromofluoromethane	*91*		*68 - 140*
Toluene-d8 (Surr)	*91*		*50 - 130*
4-Bromofluorobenzene	*88*		*57 - 140*

Lab Sample ID: LCSD 600-300771/5 **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300771

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dichlorodifluoromethane			0.0500	0.0478		mg/Kg		96	24 - 147	28	30
Chloromethane			0.0500	0.0597		mg/Kg		119	44 - 141	7	30
Vinyl chloride			0.0500	0.0522		mg/Kg		104	40 - 148	10	30
Bromomethane			0.0500	0.0524		mg/Kg		105	37 - 147	7	30
Chloroethane			0.0500	0.0475		mg/Kg		95	40 - 150	6	30
Trichlorofluoromethane			0.0500	0.0427		mg/Kg		85	53 - 134	6	30
1,1-Dichloroethene			0.0500	0.0346		mg/Kg		69	62 - 142	17	30
trans-1,2-Dichloroethene			0.0500	0.0394		mg/Kg		79	69 - 130	20	30
1,1,2-Trichloro-1,2,2-trifluoroethane			0.0500	0.0386		mg/Kg		77	48 - 150	11	30
Methyl tert-butyl ether			0.0500	0.0412		mg/Kg		82	63 - 132	26	30
Acetone			0.100	0.102	*1	mg/Kg		102	13 - 150	38	30
Carbon disulfide			0.0500	0.0341		mg/Kg		68	51 - 141	16	30
Methyl acetate			0.100	0.0877	*1	mg/Kg		88	10 - 150	38	30
Methylene Chloride			0.0500	0.0514		mg/Kg		103	61 - 150	27	30

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: LCSD 600-300771/5 **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300771

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vinyl acetate			0.100	0.106	*1	mg/Kg		106	40 - 150	32	30
cis-1,2-Dichloroethene			0.0500	0.0418		mg/Kg		84	70 - 130	22	30
1,2-Dichloroethene, Total			0.100	0.0812		mg/Kg		81	70 - 130	21	30
2-Butanone (MEK)			0.100	0.0858		mg/Kg		86	33 - 150	25	30
Chlorobromomethane			0.0500	0.0430		mg/Kg		86	70 - 132	26	30
Cyclohexane			0.0500	0.0375		mg/Kg		75	54 - 130	16	30
Carbon tetrachloride			0.0500	0.0398		mg/Kg		80	58 - 130	13	30
Benzene			0.0500	0.0441		mg/Kg		88	70 - 131	17	30
1,2-Dichloroethane			0.0500	0.0444		mg/Kg		89	58 - 137	23	30
Trichloroethene			0.0500	0.0429		mg/Kg		86	63 - 135	15	30
1,1,1-Trichloroethane			0.0500	0.0404		mg/Kg		81	59 - 130	14	30
1,1-Dichloroethane			0.0500	0.0425		mg/Kg		85	63 - 140	19	30
1,2-Dichloropropane			0.0500	0.0470		mg/Kg		94	70 - 130	16	30
Chloroform			0.0500	0.0421		mg/Kg		84	69 - 130	19	30
Bromodichloromethane			0.0500	0.0455		mg/Kg		91	67 - 138	22	30
Methylcyclohexane			0.0500	0.0396		mg/Kg		79	51 - 137	12	30
cis-1,3-Dichloropropene			0.0500	0.0464		mg/Kg		93	65 - 130	24	30
4-Methyl-2-pentanone (MIBK)			0.100	0.0842	*1	mg/Kg		84	21 - 150	35	30
Toluene			0.0500	0.0449		mg/Kg		90	67 - 130	16	30
trans-1,3-Dichloropropene			0.0500	0.0471		mg/Kg		94	70 - 130	24	30
1,1,2-Trichloroethane			0.0500	0.0445		mg/Kg		89	67 - 134	28	30
Tetrachloroethene			0.0500	0.0413		mg/Kg		83	43 - 143	18	30
2-Hexanone			0.100	0.0922	*1	mg/Kg		92	35 - 150	34	30
Dibromochloromethane			0.0500	0.0449		mg/Kg		90	65 - 134	27	30
1,2-Dibromoethane			0.0500	0.0459		mg/Kg		92	65 - 136	30	30
Chlorobenzene			0.0500	0.0444		mg/Kg		89	63 - 131	20	30
Ethylbenzene			0.0500	0.0440		mg/Kg		88	66 - 130	15	30
m-Xylene & p-Xylene			0.0500	0.0441		mg/Kg		88	64 - 130	17	30
Xylenes, Total			0.100	0.0885		mg/Kg		89	63 - 130	18	30
o-Xylene			0.0500	0.0444		mg/Kg		89	62 - 130	18	30
Styrene			0.0500	0.0486		mg/Kg		97	65 - 133	18	30
Bromoform			0.0500	0.0416		mg/Kg		83	43 - 150	20	30
Isopropylbenzene			0.0500	0.0400		mg/Kg		80	64 - 131	12	30
1,1,2,2-Tetrachloroethane			0.0500	0.0436	*1	mg/Kg		87	61 - 138	34	30
1,3-Dichlorobenzene			0.0500	0.0452		mg/Kg		90	63 - 132	15	30
1,4-Dichlorobenzene			0.0500	0.0434		mg/Kg		87	65 - 131	15	30
1,2-Dichlorobenzene			0.0500	0.0456		mg/Kg		91	61 - 131	15	30
1,2-Dibromo-3-Chloropropane			0.0500	0.0439		mg/Kg		88	29 - 150	28	30
1,2,4-Trichlorobenzene			0.0500	0.0476		mg/Kg		95	53 - 136	16	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*85*		*61 - 130*
Dibromofluoromethane	*79*		*68 - 140*
Toluene-d8 (Surr)	*85*		*50 - 130*
4-Bromofluorobenzene	*85*		*57 - 140*

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: MB 600-300850/6 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300850

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0050		mg/Kg			08/11/20 10:50	1
Chloromethane	ND		0.010		mg/Kg			08/11/20 10:50	1
Vinyl chloride	ND		0.010		mg/Kg			08/11/20 10:50	1
Bromomethane	ND		0.010		mg/Kg			08/11/20 10:50	1
Chloroethane	ND		0.010		mg/Kg			08/11/20 10:50	1
Trichlorofluoromethane	ND		0.010		mg/Kg			08/11/20 10:50	1
1,1-Dichloroethene	ND		0.0050		mg/Kg			08/11/20 10:50	1
trans-1,2-Dichloroethene	ND		0.0050		mg/Kg			08/11/20 10:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0050		mg/Kg			08/11/20 10:50	1
Methyl tert-butyl ether	ND		0.0050		mg/Kg			08/11/20 10:50	1
Acetone	ND		0.010		mg/Kg			08/11/20 10:50	1
Carbon disulfide	ND		0.010		mg/Kg			08/11/20 10:50	1
Methyl acetate	ND		0.0050		mg/Kg			08/11/20 10:50	1
Methylene Chloride	ND		0.010		mg/Kg			08/11/20 10:50	1
Vinyl acetate	ND		0.010		mg/Kg			08/11/20 10:50	1
cis-1,2-Dichloroethene	ND		0.0050		mg/Kg			08/11/20 10:50	1
1,2-Dichloroethene, Total	ND		0.010		mg/Kg			08/11/20 10:50	1
2-Butanone (MEK)	ND		0.010		mg/Kg			08/11/20 10:50	1
Chlorobromomethane	ND		0.0050		mg/Kg			08/11/20 10:50	1
Cyclohexane	ND		0.0050		mg/Kg			08/11/20 10:50	1
Carbon tetrachloride	ND		0.0050		mg/Kg			08/11/20 10:50	1
Benzene	ND		0.0050		mg/Kg			08/11/20 10:50	1
1,2-Dichloroethane	ND		0.0050		mg/Kg			08/11/20 10:50	1
Trichloroethene	ND		0.0050		mg/Kg			08/11/20 10:50	1
1,1,1-Trichloroethane	ND		0.0050		mg/Kg			08/11/20 10:50	1
1,1-Dichloroethane	ND		0.0050		mg/Kg			08/11/20 10:50	1
1,2-Dichloropropane	ND		0.0050		mg/Kg			08/11/20 10:50	1
Chloroform	ND		0.010		mg/Kg			08/11/20 10:50	1
Bromodichloromethane	ND		0.0050		mg/Kg			08/11/20 10:50	1
Methylcyclohexane	ND		0.0050		mg/Kg			08/11/20 10:50	1
cis-1,3-Dichloropropene	ND		0.0050		mg/Kg			08/11/20 10:50	1
4-Methyl-2-pentanone (MIBK)	ND		0.010		mg/Kg			08/11/20 10:50	1
Toluene	ND		0.0050		mg/Kg			08/11/20 10:50	1
trans-1,3-Dichloropropene	ND		0.0050		mg/Kg			08/11/20 10:50	1
1,1,2-Trichloroethane	ND		0.0050		mg/Kg			08/11/20 10:50	1
Tetrachloroethene	ND		0.0050		mg/Kg			08/11/20 10:50	1
2-Hexanone	ND		0.010		mg/Kg			08/11/20 10:50	1
Dibromochloromethane	ND		0.0050		mg/Kg			08/11/20 10:50	1
1,2-Dibromoethane	ND		0.0050		mg/Kg			08/11/20 10:50	1
Chlorobenzene	ND		0.0050		mg/Kg			08/11/20 10:50	1
Ethylbenzene	ND		0.0050		mg/Kg			08/11/20 10:50	1
m-Xylene & p-Xylene	ND		0.0050		mg/Kg			08/11/20 10:50	1
Xylenes, Total	ND		0.0050		mg/Kg			08/11/20 10:50	1
o-Xylene	ND		0.0050		mg/Kg			08/11/20 10:50	1
Styrene	ND		0.0050		mg/Kg			08/11/20 10:50	1
Bromoform	ND		0.0050		mg/Kg			08/11/20 10:50	1
Isopropylbenzene	ND		0.0050		mg/Kg			08/11/20 10:50	1
1,1,2,2-Tetrachloroethane	ND		0.0050		mg/Kg			08/11/20 10:50	1

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: MB 600-300850/6 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300850

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		0.0050		mg/Kg			08/11/20 10:50	1
1,4-Dichlorobenzene	ND		0.0050		mg/Kg			08/11/20 10:50	1
1,2-Dichlorobenzene	ND		0.0050		mg/Kg			08/11/20 10:50	1
1,2-Dibromo-3-Chloropropane	ND		0.0050		mg/Kg			08/11/20 10:50	1
1,2,4-Trichlorobenzene	ND		0.0050		mg/Kg			08/11/20 10:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*61 - 130*		*08/11/20 10:50*	*1*
Dibromofluoromethane	*92*		*68 - 140*		*08/11/20 10:50*	*1*
Toluene-d8 (Surr)	*97*		*50 - 130*		*08/11/20 10:50*	*1*
4-Bromofluorobenzene	*105*		*57 - 140*		*08/11/20 10:50*	*1*

Lab Sample ID: LCS 600-300850/3 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300850

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	0.0500	0.0585		mg/Kg		117	24 - 147
Chloromethane	0.0500	0.0561		mg/Kg		112	44 - 141
Vinyl chloride	0.0500	0.0528		mg/Kg		106	40 - 148
Bromomethane	0.0500	0.0468		mg/Kg		94	37 - 147
Chloroethane	0.0500	0.0482		mg/Kg		96	40 - 150
Trichlorofluoromethane	0.0500	0.0563		mg/Kg		113	53 - 134
1,1-Dichloroethene	0.0500	0.0370		mg/Kg		74	62 - 142
trans-1,2-Dichloroethene	0.0500	0.0383		mg/Kg		77	69 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0372		mg/Kg		74	48 - 150
Methyl tert-butyl ether	0.0500	0.0462		mg/Kg		92	63 - 132
Acetone	0.100	0.0943		mg/Kg		94	13 - 150
Carbon disulfide	0.0500	0.0329		mg/Kg		66	51 - 141
Methyl acetate	0.100	0.0989		mg/Kg		99	10 - 150
Methylene Chloride	0.0500	0.0400		mg/Kg		80	61 - 150
Vinyl acetate	0.100	0.108		mg/Kg		108	40 - 150
cis-1,2-Dichloroethene	0.0500	0.0401		mg/Kg		80	70 - 130
1,2-Dichloroethene, Total	0.100	0.0784		mg/Kg		78	70 - 130
2-Butanone (MEK)	0.100	0.0873		mg/Kg		87	33 - 150
Chlorobromomethane	0.0500	0.0402		mg/Kg		80	70 - 132
Cyclohexane	0.0500	0.0384		mg/Kg		77	54 - 130
Carbon tetrachloride	0.0500	0.0440		mg/Kg		88	58 - 130
Benzene	0.0500	0.0409		mg/Kg		82	70 - 131
1,2-Dichloroethane	0.0500	0.0485		mg/Kg		97	58 - 137
Trichloroethene	0.0500	0.0376		mg/Kg		75	63 - 135
1,1,1-Trichloroethane	0.0500	0.0439		mg/Kg		88	59 - 130
1,1-Dichloroethane	0.0500	0.0435		mg/Kg		87	63 - 140
1,2-Dichloropropane	0.0500	0.0415		mg/Kg		83	70 - 130
Chloroform	0.0500	0.0430		mg/Kg		86	69 - 130
Bromodichloromethane	0.0500	0.0441		mg/Kg		88	67 - 138
Methylcyclohexane	0.0500	0.0374		mg/Kg		75	51 - 137
cis-1,3-Dichloropropene	0.0500	0.0447		mg/Kg		89	65 - 130

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: LCS 600-300850/3 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300850

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
4-Methyl-2-pentanone (MIBK)			0.100	0.0957		mg/Kg		96	21 - 150		
Toluene			0.0500	0.0431		mg/Kg		86	67 - 130		
trans-1,3-Dichloropropene			0.0500	0.0464		mg/Kg		93	70 - 130		
1,1,2-Trichloroethane			0.0500	0.0439		mg/Kg		88	67 - 134		
Tetrachloroethene			0.0500	0.0409		mg/Kg		82	43 - 143		
2-Hexanone			0.100	0.0993		mg/Kg		99	35 - 150		
Dibromochloromethane			0.0500	0.0451		mg/Kg		90	65 - 134		
1,2-Dibromoethane			0.0500	0.0430		mg/Kg		86	65 - 136		
Chlorobenzene			0.0500	0.0420		mg/Kg		84	63 - 131		
Ethylbenzene			0.0500	0.0411		mg/Kg		82	66 - 130		
m-Xylene & p-Xylene			0.0500	0.0419		mg/Kg		84	64 - 130		
Xylenes, Total			0.100	0.0826		mg/Kg		83	63 - 130		
o-Xylene			0.0500	0.0407		mg/Kg		81	62 - 130		
Styrene			0.0500	0.0411		mg/Kg		82	65 - 133		
Bromoform			0.0500	0.0479		mg/Kg		96	43 - 150		
Isopropylbenzene			0.0500	0.0472		mg/Kg		94	64 - 131		
1,1,2,2-Tetrachloroethane			0.0500	0.0485		mg/Kg		97	61 - 138		
1,3-Dichlorobenzene			0.0500	0.0452		mg/Kg		90	63 - 132		
1,4-Dichlorobenzene			0.0500	0.0447		mg/Kg		89	65 - 131		
1,2-Dichlorobenzene			0.0500	0.0458		mg/Kg		92	61 - 131		
1,2-Dibromo-3-Chloropropane			0.0500	0.0461		mg/Kg		92	29 - 150		
1,2,4-Trichlorobenzene			0.0500	0.0408		mg/Kg		82	53 - 136		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*85*		*61 - 130*
Dibromofluoromethane	*87*		*68 - 140*
Toluene-d8 (Surr)	*94*		*50 - 130*
4-Bromofluorobenzene	*111*		*57 - 140*

Lab Sample ID: LCSD 600-300850/4 **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300850

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dichlorodifluoromethane			0.0500	0.0614		mg/Kg		123	24 - 147	5	30
Chloromethane			0.0500	0.0610		mg/Kg		122	44 - 141	8	30
Vinyl chloride			0.0500	0.0544		mg/Kg		109	40 - 148	3	30
Bromomethane			0.0500	0.0518		mg/Kg		104	37 - 147	10	30
Chloroethane			0.0500	0.0510		mg/Kg		102	40 - 150	6	30
Trichlorofluoromethane			0.0500	0.0576		mg/Kg		115	53 - 134	2	30
1,1-Dichloroethene			0.0500	0.0353		mg/Kg		71	62 - 142	5	30
trans-1,2-Dichloroethene			0.0500	0.0360		mg/Kg		72	69 - 130	6	30
1,1,2-Trichloro-1,2,2-trifluoroethane			0.0500	0.0342		mg/Kg		68	48 - 150	9	30
Methyl tert-butyl ether			0.0500	0.0452		mg/Kg		90	63 - 132	2	30
Acetone			0.100	0.0948		mg/Kg		95	13 - 150	1	30
Carbon disulfide			0.0500	0.0310		mg/Kg		62	51 - 141	6	30
Methyl acetate			0.100	0.103		mg/Kg		103	10 - 150	5	30
Methylene Chloride			0.0500	0.0393		mg/Kg		79	61 - 150	2	30

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: LCSD 600-300850/4 **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300850

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vinyl acetate			0.100	0.110		mg/Kg		110	40 - 150	2	30
cis-1,2-Dichloroethene			0.0500	0.0386		mg/Kg		77	70 - 130	4	30
1,2-Dichloroethene, Total			0.100	0.0746		mg/Kg		75	70 - 130	5	30
2-Butanone (MEK)			0.100	0.0914		mg/Kg		91	33 - 150	5	30
Chlorobromomethane			0.0500	0.0393		mg/Kg		79	70 - 132	2	30
Cyclohexane			0.0500	0.0351		mg/Kg		70	54 - 130	9	30
Carbon tetrachloride			0.0500	0.0406		mg/Kg		81	58 - 130	8	30
Benzene			0.0500	0.0387		mg/Kg		77	70 - 131	5	30
1,2-Dichloroethane			0.0500	0.0474		mg/Kg		95	58 - 137	2	30
Trichloroethene			0.0500	0.0357		mg/Kg		71	63 - 135	5	30
1,1,1-Trichloroethane			0.0500	0.0424		mg/Kg		85	59 - 130	3	30
1,1-Dichloroethane			0.0500	0.0409		mg/Kg		82	63 - 140	6	30
1,2-Dichloropropane			0.0500	0.0415		mg/Kg		83	70 - 130	0	30
Chloroform			0.0500	0.0416		mg/Kg		83	69 - 130	3	30
Bromodichloromethane			0.0500	0.0440		mg/Kg		88	67 - 138	0	30
Methylcyclohexane			0.0500	0.0345		mg/Kg		69	51 - 137	8	30
cis-1,3-Dichloropropene			0.0500	0.0426		mg/Kg		85	65 - 130	5	30
4-Methyl-2-pentanone (MIBK)			0.100	0.103		mg/Kg		103	21 - 150	7	30
Toluene			0.0500	0.0399		mg/Kg		80	67 - 130	8	30
trans-1,3-Dichloropropene			0.0500	0.0460		mg/Kg		92	70 - 130	1	30
1,1,2-Trichloroethane			0.0500	0.0424		mg/Kg		85	67 - 134	3	30
Tetrachloroethene			0.0500	0.0374		mg/Kg		75	43 - 143	9	30
2-Hexanone			0.100	0.105		mg/Kg		105	35 - 150	5	30
Dibromochloromethane			0.0500	0.0439		mg/Kg		88	65 - 134	3	30
1,2-Dibromoethane			0.0500	0.0432		mg/Kg		86	65 - 136	0	30
Chlorobenzene			0.0500	0.0407		mg/Kg		81	63 - 131	3	30
Ethylbenzene			0.0500	0.0375		mg/Kg		75	66 - 130	9	30
m-Xylene & p-Xylene			0.0500	0.0395		mg/Kg		79	64 - 130	6	30
Xylenes, Total			0.100	0.0771		mg/Kg		77	63 - 130	7	30
o-Xylene			0.0500	0.0376		mg/Kg		75	62 - 130	8	30
Styrene			0.0500	0.0392		mg/Kg		78	65 - 133	5	30
Bromoform			0.0500	0.0477		mg/Kg		95	43 - 150	0	30
Isopropylbenzene			0.0500	0.0433		mg/Kg		87	64 - 131	9	30
1,1,2,2-Tetrachloroethane			0.0500	0.0474		mg/Kg		95	61 - 138	2	30
1,3-Dichlorobenzene			0.0500	0.0433		mg/Kg		87	63 - 132	4	30
1,4-Dichlorobenzene			0.0500	0.0428		mg/Kg		86	65 - 131	4	30
1,2-Dichlorobenzene			0.0500	0.0438		mg/Kg		88	61 - 131	5	30
1,2-Dibromo-3-Chloropropane			0.0500	0.0523		mg/Kg		105	29 - 150	13	30
1,2,4-Trichlorobenzene			0.0500	0.0433		mg/Kg		87	53 - 136	6	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*86*		*61 - 130*
Dibromofluoromethane	*88*		*68 - 140*
Toluene-d8 (Surr)	*93*		*50 - 130*
4-Bromofluorobenzene	*106*		*57 - 140*

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: MB 600-300952/6 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300952

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0050		mg/Kg			08/12/20 08:50	1
Chloromethane	ND		0.010		mg/Kg			08/12/20 08:50	1
Vinyl chloride	ND		0.010		mg/Kg			08/12/20 08:50	1
Bromomethane	ND		0.010		mg/Kg			08/12/20 08:50	1
Chloroethane	ND		0.010		mg/Kg			08/12/20 08:50	1
Trichlorofluoromethane	ND		0.010		mg/Kg			08/12/20 08:50	1
1,1-Dichloroethene	ND		0.0050		mg/Kg			08/12/20 08:50	1
trans-1,2-Dichloroethene	ND		0.0050		mg/Kg			08/12/20 08:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0050		mg/Kg			08/12/20 08:50	1
Methyl tert-butyl ether	ND		0.0050		mg/Kg			08/12/20 08:50	1
Acetone	ND		0.010		mg/Kg			08/12/20 08:50	1
Carbon disulfide	ND		0.010		mg/Kg			08/12/20 08:50	1
Methyl acetate	ND		0.0050		mg/Kg			08/12/20 08:50	1
Methylene Chloride	ND		0.010		mg/Kg			08/12/20 08:50	1
Vinyl acetate	ND		0.010		mg/Kg			08/12/20 08:50	1
cis-1,2-Dichloroethene	ND		0.0050		mg/Kg			08/12/20 08:50	1
1,2-Dichloroethene, Total	ND		0.010		mg/Kg			08/12/20 08:50	1
2-Butanone (MEK)	ND		0.010		mg/Kg			08/12/20 08:50	1
Chlorobromomethane	ND		0.0050		mg/Kg			08/12/20 08:50	1
Cyclohexane	ND		0.0050		mg/Kg			08/12/20 08:50	1
Carbon tetrachloride	ND		0.0050		mg/Kg			08/12/20 08:50	1
Benzene	ND		0.0050		mg/Kg			08/12/20 08:50	1
1,2-Dichloroethane	ND		0.0050		mg/Kg			08/12/20 08:50	1
Trichloroethene	ND		0.0050		mg/Kg			08/12/20 08:50	1
1,1,1-Trichloroethane	ND		0.0050		mg/Kg			08/12/20 08:50	1
1,1-Dichloroethane	ND		0.0050		mg/Kg			08/12/20 08:50	1
1,2-Dichloropropane	ND		0.0050		mg/Kg			08/12/20 08:50	1
Chloroform	ND		0.010		mg/Kg			08/12/20 08:50	1
Bromodichloromethane	ND		0.0050		mg/Kg			08/12/20 08:50	1
Methylcyclohexane	ND		0.0050		mg/Kg			08/12/20 08:50	1
cis-1,3-Dichloropropene	ND		0.0050		mg/Kg			08/12/20 08:50	1
4-Methyl-2-pentanone (MIBK)	ND		0.010		mg/Kg			08/12/20 08:50	1
Toluene	ND		0.0050		mg/Kg			08/12/20 08:50	1
trans-1,3-Dichloropropene	ND		0.0050		mg/Kg			08/12/20 08:50	1
1,1,2-Trichloroethane	ND		0.0050		mg/Kg			08/12/20 08:50	1
Tetrachloroethene	ND		0.0050		mg/Kg			08/12/20 08:50	1
2-Hexanone	ND		0.010		mg/Kg			08/12/20 08:50	1
Dibromochloromethane	ND		0.0050		mg/Kg			08/12/20 08:50	1
1,2-Dibromoethane	ND		0.0050		mg/Kg			08/12/20 08:50	1
Chlorobenzene	ND		0.0050		mg/Kg			08/12/20 08:50	1
Ethylbenzene	ND		0.0050		mg/Kg			08/12/20 08:50	1
m-Xylene & p-Xylene	ND		0.0050		mg/Kg			08/12/20 08:50	1
Xylenes, Total	ND		0.0050		mg/Kg			08/12/20 08:50	1
o-Xylene	ND		0.0050		mg/Kg			08/12/20 08:50	1
Styrene	ND		0.0050		mg/Kg			08/12/20 08:50	1
Bromoform	ND		0.0050		mg/Kg			08/12/20 08:50	1
Isopropylbenzene	ND		0.0050		mg/Kg			08/12/20 08:50	1
1,1,2,2-Tetrachloroethane	ND		0.0050		mg/Kg			08/12/20 08:50	1

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: MB 600-300952/6 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300952

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		0.0050		mg/Kg			08/12/20 08:50	1
1,4-Dichlorobenzene	ND		0.0050		mg/Kg			08/12/20 08:50	1
1,2-Dichlorobenzene	ND		0.0050		mg/Kg			08/12/20 08:50	1
1,2-Dibromo-3-Chloropropane	ND		0.0050		mg/Kg			08/12/20 08:50	1
1,2,4-Trichlorobenzene	ND		0.0050		mg/Kg			08/12/20 08:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*61 - 130*		*08/12/20 08:50*	*1*
Dibromofluoromethane	*88*		*68 - 140*		*08/12/20 08:50*	*1*
Toluene-d8 (Surr)	*99*		*50 - 130*		*08/12/20 08:50*	*1*
4-Bromofluorobenzene	*103*		*57 - 140*		*08/12/20 08:50*	*1*

Lab Sample ID: LCS 600-300952/3 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300952

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	0.0500	0.0620		mg/Kg		124	24 - 147
Chloromethane	0.0500	0.0559		mg/Kg		112	44 - 141
Vinyl chloride	0.0500	0.0575		mg/Kg		115	40 - 148
Bromomethane	0.0500	0.0541		mg/Kg		108	37 - 147
Chloroethane	0.0500	0.0537		mg/Kg		107	40 - 150
Trichlorofluoromethane	0.0500	0.0567		mg/Kg		113	53 - 134
1,1-Dichloroethene	0.0500	0.0504		mg/Kg		101	62 - 142
trans-1,2-Dichloroethene	0.0500	0.0481		mg/Kg		96	69 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0493		mg/Kg		99	48 - 150
Methyl tert-butyl ether	0.0500	0.0501		mg/Kg		100	63 - 132
Acetone	0.100	0.0823		mg/Kg		82	13 - 150
Carbon disulfide	0.0500	0.0427		mg/Kg		85	51 - 141
Methyl acetate	0.100	0.0935		mg/Kg		93	10 - 150
Methylene Chloride	0.0500	0.0503		mg/Kg		101	61 - 150
Vinyl acetate	0.100	0.110		mg/Kg		110	40 - 150
cis-1,2-Dichloroethene	0.0500	0.0492		mg/Kg		98	70 - 130
1,2-Dichloroethene, Total	0.100	0.0973		mg/Kg		97	70 - 130
2-Butanone (MEK)	0.100	0.0972		mg/Kg		97	33 - 150
Chlorobromomethane	0.0500	0.0474		mg/Kg		95	70 - 132
Cyclohexane	0.0500	0.0494		mg/Kg		99	54 - 130
Carbon tetrachloride	0.0500	0.0507		mg/Kg		101	58 - 130
Benzene	0.0500	0.0508		mg/Kg		102	70 - 131
1,2-Dichloroethane	0.0500	0.0514		mg/Kg		103	58 - 137
Trichloroethene	0.0500	0.0476		mg/Kg		95	63 - 135
1,1,1-Trichloroethane	0.0500	0.0533		mg/Kg		107	59 - 130
1,1-Dichloroethane	0.0500	0.0484		mg/Kg		97	63 - 140
1,2-Dichloropropane	0.0500	0.0512		mg/Kg		102	70 - 130
Chloroform	0.0500	0.0511		mg/Kg		102	69 - 130
Bromodichloromethane	0.0500	0.0497		mg/Kg		99	67 - 138
Methylcyclohexane	0.0500	0.0478		mg/Kg		96	51 - 137
cis-1,3-Dichloropropene	0.0500	0.0546		mg/Kg		109	65 - 130

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: LCS 600-300952/3 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300952

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
4-Methyl-2-pentanone (MIBK)			0.100	0.0958		mg/Kg		96	21 - 150		
Toluene			0.0500	0.0539		mg/Kg		108	67 - 130		
trans-1,3-Dichloropropene			0.0500	0.0550		mg/Kg		110	70 - 130		
1,1,2-Trichloroethane			0.0500	0.0520		mg/Kg		104	67 - 134		
Tetrachloroethene			0.0500	0.0535		mg/Kg		107	43 - 143		
2-Hexanone			0.100	0.0984		mg/Kg		98	35 - 150		
Dibromochloromethane			0.0500	0.0533		mg/Kg		107	65 - 134		
1,2-Dibromoethane			0.0500	0.0500		mg/Kg		100	65 - 136		
Chlorobenzene			0.0500	0.0534		mg/Kg		107	63 - 131		
Ethylbenzene			0.0500	0.0527		mg/Kg		105	66 - 130		
m-Xylene & p-Xylene			0.0500	0.0533		mg/Kg		107	64 - 130		
Xylenes, Total			0.100	0.105		mg/Kg		105	63 - 130		
o-Xylene			0.0500	0.0512		mg/Kg		102	62 - 130		
Styrene			0.0500	0.0515		mg/Kg		103	65 - 133		
Bromoform			0.0500	0.0541		mg/Kg		108	43 - 150		
Isopropylbenzene			0.0500	0.0577		mg/Kg		115	64 - 131		
1,1,2,2-Tetrachloroethane			0.0500	0.0540		mg/Kg		108	61 - 138		
1,3-Dichlorobenzene			0.0500	0.0553		mg/Kg		111	63 - 132		
1,4-Dichlorobenzene			0.0500	0.0542		mg/Kg		108	65 - 131		
1,2-Dichlorobenzene			0.0500	0.0547		mg/Kg		109	61 - 131		
1,2-Dibromo-3-Chloropropane			0.0500	0.0527		mg/Kg		105	29 - 150		
1,2,4-Trichlorobenzene			0.0500	0.0542		mg/Kg		108	53 - 136		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*80*		*61 - 130*
Dibromofluoromethane	*86*		*68 - 140*
Toluene-d8 (Surr)	*100*		*50 - 130*
4-Bromofluorobenzene	*109*		*57 - 140*

Lab Sample ID: LCSD 600-300952/4 **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300952

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dichlorodifluoromethane			0.0500	0.0674		mg/Kg		135	24 - 147	8	30
Chloromethane			0.0500	0.0604		mg/Kg		121	44 - 141	8	30
Vinyl chloride			0.0500	0.0622		mg/Kg		124	40 - 148	8	30
Bromomethane			0.0500	0.0567		mg/Kg		113	37 - 147	5	30
Chloroethane			0.0500	0.0566		mg/Kg		113	40 - 150	5	30
Trichlorofluoromethane			0.0500	0.0613		mg/Kg		123	53 - 134	8	30
1,1-Dichloroethene			0.0500	0.0508		mg/Kg		102	62 - 142	1	30
trans-1,2-Dichloroethene			0.0500	0.0504		mg/Kg		101	69 - 130	5	30
1,1,2-Trichloro-1,2,2-trifluoroethane			0.0500	0.0500		mg/Kg		100	48 - 150	1	30
Methyl tert-butyl ether			0.0500	0.0555		mg/Kg		111	63 - 132	10	30
Acetone			0.100	0.102		mg/Kg		102	13 - 150	22	30
Carbon disulfide			0.0500	0.0457		mg/Kg		91	51 - 141	7	30
Methyl acetate			0.100	0.114		mg/Kg		114	10 - 150	20	30
Methylene Chloride			0.0500	0.0520		mg/Kg		104	61 - 150	3	30

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: LCSD 600-300952/4 **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300952

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vinyl acetate	0.100	0.126		mg/Kg		126	40 - 150	14	30
cis-1,2-Dichloroethene	0.0500	0.0519		mg/Kg		104	70 - 130	5	30
1,2-Dichloroethene, Total	0.100	0.102		mg/Kg		102	70 - 130	5	30
2-Butanone (MEK)	0.100	0.112		mg/Kg		112	33 - 150	15	30
Chlorobromomethane	0.0500	0.0515		mg/Kg		103	70 - 132	8	30
Cyclohexane	0.0500	0.0504		mg/Kg		101	54 - 130	2	30
Carbon tetrachloride	0.0500	0.0536		mg/Kg		107	58 - 130	6	30
Benzene	0.0500	0.0541		mg/Kg		108	70 - 131	6	30
1,2-Dichloroethane	0.0500	0.0571		mg/Kg		114	58 - 137	11	30
Trichloroethene	0.0500	0.0502		mg/Kg		100	63 - 135	5	30
1,1,1-Trichloroethane	0.0500	0.0566		mg/Kg		113	59 - 130	6	30
1,1-Dichloroethane	0.0500	0.0554		mg/Kg		111	63 - 140	13	30
1,2-Dichloropropane	0.0500	0.0559		mg/Kg		112	70 - 130	9	30
Chloroform	0.0500	0.0538		mg/Kg		108	69 - 130	5	30
Bromodichloromethane	0.0500	0.0534		mg/Kg		107	67 - 138	7	30
Methylcyclohexane	0.0500	0.0496		mg/Kg		99	51 - 137	4	30
cis-1,3-Dichloropropene	0.0500	0.0577		mg/Kg		115	65 - 130	5	30
4-Methyl-2-pentanone (MIBK)	0.100	0.115		mg/Kg		115	21 - 150	18	30
Toluene	0.0500	0.0565		mg/Kg		113	67 - 130	5	30
trans-1,3-Dichloropropene	0.0500	0.0586		mg/Kg		117	70 - 130	6	30
1,1,2-Trichloroethane	0.0500	0.0573		mg/Kg		115	67 - 134	10	30
Tetrachloroethene	0.0500	0.0541		mg/Kg		108	43 - 143	1	30
2-Hexanone	0.100	0.119		mg/Kg		119	35 - 150	19	30
Dibromochloromethane	0.0500	0.0580		mg/Kg		116	65 - 134	8	30
1,2-Dibromoethane	0.0500	0.0559		mg/Kg		112	65 - 136	11	30
Chlorobenzene	0.0500	0.0561		mg/Kg		112	63 - 131	5	30
Ethylbenzene	0.0500	0.0531		mg/Kg		106	66 - 130	1	30
m-Xylene & p-Xylene	0.0500	0.0547		mg/Kg		109	64 - 130	3	30
Xylenes, Total	0.100	0.107		mg/Kg		107	63 - 130	3	30
o-Xylene	0.0500	0.0527		mg/Kg		105	62 - 130	3	30
Styrene	0.0500	0.0535		mg/Kg		107	65 - 133	4	30
Bromoform	0.0500	0.0607		mg/Kg		121	43 - 150	11	30
Isopropylbenzene	0.0500	0.0583		mg/Kg		117	64 - 131	1	30
1,1,2,2-Tetrachloroethane	0.0500	0.0608		mg/Kg		122	61 - 138	12	30
1,3-Dichlorobenzene	0.0500	0.0563		mg/Kg		113	63 - 132	2	30
1,4-Dichlorobenzene	0.0500	0.0558		mg/Kg		112	65 - 131	3	30
1,2-Dichlorobenzene	0.0500	0.0570		mg/Kg		114	61 - 131	4	30
1,2-Dibromo-3-Chloropropane	0.0500	0.0629		mg/Kg		126	29 - 150	18	30
1,2,4-Trichlorobenzene	0.0500	0.0547		mg/Kg		109	53 - 136	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*77*		*61 - 130*
Dibromofluoromethane	*83*		*68 - 140*
Toluene-d8 (Surr)	*95*		*50 - 130*
4-Bromofluorobenzene	*106*		*57 - 140*

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 600-300708/3-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 300709 — **Prep Batch: 300708**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.0		mg/Kg		08/08/20 07:14	08/08/20 09:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*95*		*70 - 130*	*08/08/20 07:14*	*08/08/20 09:47*	*1*

Lab Sample ID: LCS 600-300708/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 300709 — **Prep Batch: 300708**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics [C6 - C10]	5.04	5.07		mg/Kg		101	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*96*		*70 - 130*

Lab Sample ID: LCSD 600-300708/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 300709 — **Prep Batch: 300708**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	5.04	5.42		mg/Kg		108	70 - 130	7	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*96*		*70 - 130*

Lab Sample ID: MB 600-300717/3-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 300953 — **Prep Batch: 300717**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.0		mg/Kg		08/08/20 15:03	08/12/20 09:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*89*		*70 - 130*	*08/08/20 15:03*	*08/12/20 09:04*	*1*

Lab Sample ID: LCS 600-300717/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 300953 — **Prep Batch: 300717**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics [C6 - C10]	5.04	5.29		mg/Kg		105	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*94*		*70 - 130*

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Lab Sample ID: LCSD 600-300717/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 300953 — **Prep Batch: 300717**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	5.04	5.74		mg/Kg		114	70 - 130	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*93*		*70 - 130*

Lab Sample ID: MB 600-300863/3-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 300851 — **Prep Batch: 300863**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.0		mg/Kg		08/11/20 08:53	08/11/20 10:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*87*		*70 - 130*	*08/11/20 08:53*	*08/11/20 10:41*	*1*

Lab Sample ID: LCS 600-300863/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 300851 — **Prep Batch: 300863**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics [C6 - C10]	5.04	5.10		mg/Kg		101	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*90*		*70 - 130*

Lab Sample ID: LCSD 600-300863/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 300851 — **Prep Batch: 300863**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	5.04	4.86		mg/Kg		96	70 - 130	5	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*89*		*70 - 130*

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

Lab Sample ID: MB 600-300964/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 301085 — **Prep Batch: 300964**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.3		mg/Kg		08/12/20 08:32	08/14/20 20:37	1
C28-C36	ND		8.3		mg/Kg		08/12/20 08:32	08/14/20 20:37	1

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: MB 600-300964/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 301085 **Prep Batch: 300964**

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	103		60 - 140	08/12/20 08:32	08/14/20 20:37	1

Lab Sample ID: LCS 600-300964/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 301085 **Prep Batch: 300964**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	66.8	49.7		mg/Kg		74	66 - 134

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl	119		60 - 140

Lab Sample ID: 600-209487-13 MS **Client Sample ID: S-11213301-080420-CN-DP-5-5'**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 301085 **Prep Batch: 300964**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	ND	F2 F1	124	110		mg/Kg	☼	88	66 - 134

Surrogate	MS %Recovery	MS Qualifier	Limits
o-Terphenyl	91		60 - 140

Lab Sample ID: 600-209487-13 MSD **Client Sample ID: S-11213301-080420-CN-DP-5-5'**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 301085 **Prep Batch: 300964**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	ND	F2 F1	124	18.5	F2 F1	mg/Kg	☼	15	66 - 134	142	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl	41	X	60 - 140

Lab Sample ID: MB 600-301022/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 301085 **Prep Batch: 301022**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.3		mg/Kg		08/12/20 14:58	08/14/20 03:36	1
C28-C36	ND		8.3		mg/Kg		08/12/20 14:58	08/14/20 03:36	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	127		60 - 140	08/12/20 14:58	08/14/20 03:36	1

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: LCS 600-301022/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 301085 — **Prep Batch: 301022**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	66.8	64.0		mg/Kg		96	66 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*136*		*60 - 140*

Lab Sample ID: 600-209487-31 MS — **Client Sample ID: S-11213301-080520-CN-DP-14-6'**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 301085 — **Prep Batch: 301022**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	ND		120	116		mg/Kg	☼	87	66 - 134

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
o-Terphenyl	*138*		*60 - 140*

Lab Sample ID: 600-209487-31 MSD — **Client Sample ID: S-11213301-080520-CN-DP-14-6'**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 301085 — **Prep Batch: 301022**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	ND		120	114		mg/Kg	☼	86	66 - 134	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
o-Terphenyl	*137*		*60 - 140*

Lab Sample ID: MB 600-301371/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 301452 — **Prep Batch: 301371**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.3		mg/Kg		08/17/20 12:40	08/18/20 14:04	1
C28-C36	ND		8.3		mg/Kg		08/17/20 12:40	08/18/20 14:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*120*		*60 - 140*	*08/17/20 12:40*	*08/18/20 14:04*	*1*

Lab Sample ID: LCS 600-301371/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 301452 — **Prep Batch: 301371**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	66.8	56.9		mg/Kg		85	66 - 134

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: LCS 600-301371/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 301452 — **Prep Batch: 301371**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl	135		60 - 140

Lab Sample ID: LCSD 600-301371/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 301452 — **Prep Batch: 301371**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			66.7	61.0		mg/Kg		91	66 - 134	7	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
o-Terphenyl	139		60 - 140

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-301125/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 301062

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		4.0		mg/Kg			08/13/20 12:30	1

Lab Sample ID: MB 600-301125/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 301062

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		4.0		mg/Kg			08/14/20 10:58	1

Lab Sample ID: LCS 600-301125/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 301062

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride			200	186		mg/Kg		93	90 - 110

Lab Sample ID: LCS 600-301125/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 301062

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride			200	191		mg/Kg		96	90 - 110

Lab Sample ID: 600-209487-1 MS — **Client Sample ID: S-11213301-080320-CN-DP-1-5'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 301062

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	80	F2 F1	120	193		mg/Kg	☼	95	80 - 120

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 600-209487-1 MSD — **Client Sample ID: S-11213301-080320-CN-DP-1-5'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 301062

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	80	F2 F1	120	239	F1 F2	mg/Kg	☼	133	80 - 120	21	20

Lab Sample ID: 600-209487-11 MS — **Client Sample ID: S-11213301-080420-CN-DP-4-10'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 301062

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	84		1390	1250		mg/Kg	☼	84	80 - 120

Lab Sample ID: 600-209487-11 MSD — **Client Sample ID: S-11213301-080420-CN-DP-4-10'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 301062

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	84		1390	1240		mg/Kg	☼	84	80 - 120	1	20

Lab Sample ID: 600-209487-23 MS — **Client Sample ID: S-11213301-080520-CN-DP-10-5'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 301062

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	480		5880	5730		mg/Kg	☼	89	80 - 120

Lab Sample ID: 600-209487-23 MSD — **Client Sample ID: S-11213301-080520-CN-DP-10-5'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 301062

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	480		5880	5670		mg/Kg	☼	88	80 - 120	1	20

Lab Sample ID: MB 600-301125/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 301426

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		4.0		mg/Kg			08/18/20 09:23	1

Lab Sample ID: LCS 600-301125/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 301426

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	200	182		mg/Kg		91	90 - 110

Lab Sample ID: 600-209487-29 MS — **Client Sample ID: S-11213301-080520-CN-DP-13-6'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 301426

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	640		1200	1780		mg/Kg	☼	95	80 - 120

QC Sample Results

Client: GHD Services Inc.
Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 600-209487-29 MSD
Client Sample ID: S-11213301-080520-CN-DP-13-6'
Matrix: Solid
Prep Type: Soluble
Analysis Batch: 301426

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	640		1200	1720		mg/Kg	☼	90	80 - 120	3	20

Lab Sample ID: 600-209487-39 MS
Client Sample ID: S-11213301-080520-CN-DP-17-8'
Matrix: Solid
Prep Type: Soluble
Analysis Batch: 301426

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	43		126	158		mg/Kg	☼	91	80 - 120

Lab Sample ID: 600-209487-39 MSD
Client Sample ID: S-11213301-080520-CN-DP-17-8'
Matrix: Solid
Prep Type: Soluble
Analysis Batch: 301426

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	43		126	158		mg/Kg	☼	91	80 - 120	0	20

Lab Sample ID: MB 600-301125/1-A
Client Sample ID: Method Blank
Matrix: Solid
Prep Type: Soluble
Analysis Batch: 301663

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		4.0		mg/Kg			08/20/20 13:03	1

Lab Sample ID: LCS 600-301125/2-A
Client Sample ID: Lab Control Sample
Matrix: Solid
Prep Type: Soluble
Analysis Batch: 301663

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	200	185		mg/Kg		92	90 - 110

Lab Sample ID: 600-209487-35 MS
Client Sample ID: S-11213301-080520-CN-DP-15-20'
Matrix: Solid
Prep Type: Soluble
Analysis Batch: 301663

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	40	^	139	204		mg/Kg	☼	118	80 - 120

Lab Sample ID: 600-209487-35 MSD
Client Sample ID: S-11213301-080520-CN-DP-15-20'
Matrix: Solid
Prep Type: Soluble
Analysis Batch: 301663

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	40	^	139	193		mg/Kg	☼	110	80 - 120	6	20

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Method: 2540G - SM 2540G

Lab Sample ID: 600-209487-1 DU **Client Sample ID: S-11213301-080320-CN-DP-1-5'**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300861

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	16.4			16.6		%				1	20
Percent Solids	83.6			83.4		%				0.2	20

Lab Sample ID: 600-209487-11 DU **Client Sample ID: S-11213301-080420-CN-DP-4-10'**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300861

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	27.9			30.5		%				9	20
Percent Solids	72.1			69.5		%				4	20

Lab Sample ID: 600-209487-21 DU **Client Sample ID: S-11213301-080420-CN-DP-9-6'**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300861

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	23.8			22.0		%				8	20
Percent Solids	76.2			78.0		%				2	20

Lab Sample ID: 600-209487-31 DU **Client Sample ID: S-11213301-080520-CN-DP-14-6'**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 300861

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	16.7			17.5		%				5	20
Percent Solids	83.3			82.5		%				0.9	20

QC Association Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

GC/MS VOA

Analysis Batch: 300707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-1	S-11213301-080320-CN-DP-1-5'	Total/NA	Solid	8260B	300714
600-209487-2	S-11213301-080320-CN-DP-1-12'	Total/NA	Solid	8260B	300714
600-209487-3	S-11213301-080320-CN-DP-1-15'	Total/NA	Solid	8260B	300714
600-209487-4	S-11213301-080320-CN-DP-2-5'	Total/NA	Solid	8260B	300714
600-209487-5	S-11213301-080320-CN-DP-2-10'	Total/NA	Solid	8260B	300714
MB 600-300707/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-300707/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-300707/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 300714

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-1	S-11213301-080320-CN-DP-1-5'	Total/NA	Solid	5030B	
600-209487-2	S-11213301-080320-CN-DP-1-12'	Total/NA	Solid	5030B	
600-209487-3	S-11213301-080320-CN-DP-1-15'	Total/NA	Solid	5030B	
600-209487-4	S-11213301-080320-CN-DP-2-5'	Total/NA	Solid	5030B	
600-209487-5	S-11213301-080320-CN-DP-2-10'	Total/NA	Solid	5030B	
600-209487-6	S-11213301-080320-CN-DP-2-11'	Total/NA	Solid	5030B	
600-209487-7	S-11213301-080420-CN-DP-3-5'	Total/NA	Solid	5030B	
600-209487-8	S-11213301-080420-CN-DP-3-10'	Total/NA	Solid	5030B	
600-209487-9	S-11213301-080420-CN-DP-3-15'	Total/NA	Solid	5030B	
600-209487-10	S-11213301-080420-CN-DP-4.5'	Total/NA	Solid	5030B	
600-209487-11	S-11213301-080420-CN-DP-4-10'	Total/NA	Solid	5030B	
600-209487-12	S-11213301-080420-CN-DP-4-15'	Total/NA	Solid	5030B	
600-209487-13	S-11213301-080420-CN-DP-5-5'	Total/NA	Solid	5030B	
600-209487-14	S-11213301-080420-CN-DP-5-8'	Total/NA	Solid	5030B	

Prep Batch: 300718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-15	S-11213301-080420-CN-DP-6-5'	Total/NA	Solid	5030B	
600-209487-16	S-11213301-080420-CN-DP-6-8'	Total/NA	Solid	5030B	
600-209487-17	S-11213301-080420-CN-DP-7-6'	Total/NA	Solid	5030B	
600-209487-18	S-11213301-080420-CN-DP-7-9'	Total/NA	Solid	5030B	
600-209487-19	S-11213301-080420-CN-DP-8-6'	Total/NA	Solid	5030B	
600-209487-20	S-11213301-080420-CN-DP-8-9'	Total/NA	Solid	5030B	
600-209487-21	S-11213301-080420-CN-DP-9-6'	Total/NA	Solid	5030B	
600-209487-22	S-11213301-080420-CN-DP-9-9'	Total/NA	Solid	5030B	
600-209487-23	S-11213301-080520-CN-DP-10-5'	Total/NA	Solid	5030B	
600-209487-24	S-11213301-080520-CN-DP-10-8'	Total/NA	Solid	5030B	
600-209487-26	S-11213301-080520-CN-DP-11-8	Total/NA	Solid	5030B	
600-209487-27	S-11213301-080520-CN-DP-12-6'	Total/NA	Solid	5030B	
600-209487-28	S-11213301-080520-CN-DP-12-9'	Total/NA	Solid	5030B	
600-209487-29	S-11213301-080520-CN-DP-13-6'	Total/NA	Solid	5030B	
600-209487-30	S-11213301-080520-CN-DP-13-9'	Total/NA	Solid	5030B	
600-209487-31	S-11213301-080520-CN-DP-14-6'	Total/NA	Solid	5030B	
600-209487-32	S-11213301-080520-CN-DP-14-9'	Total/NA	Solid	5030B	
600-209487-33	S-11213301-080520-CN-DP-15-5'	Total/NA	Solid	5030B	
600-209487-34	S-11213301-080520-CN-DP-15-11'	Total/NA	Solid	5030B	

Prep Batch: 300721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-25	S-11213301-080520-CN-DP-11-5'	Total/NA	Solid	5030B	

QC Association Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

GC/MS VOA (Continued)

Prep Batch: 300721 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-34 - DL	S-11213301-080520-CN-DP-15-11'	Total/NA	Solid	5030B	
600-209487-35	S-11213301-080520-CN-DP-15-20'	Total/NA	Solid	5030B	
600-209487-36	S-11213301-080520-CN-DP-16-5'	Total/NA	Solid	5030B	
600-209487-37	S-11213301-080520-CN-DP-16-8'	Total/NA	Solid	5030B	
600-209487-38	S-11213301-080520-CN-DP-17-5'	Total/NA	Solid	5030B	
600-209487-39	S-11213301-080520-CN-DP-17-8'	Total/NA	Solid	5030B	
600-209487-41	S-11213301-080520-CN-DPW-15-8'	Total/NA	Solid	5030B	

Analysis Batch: 300771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-6	S-11213301-080320-CN-DP-2-11'	Total/NA	Solid	8260B	300714
600-209487-7	S-11213301-080420-CN-DP-3-5'	Total/NA	Solid	8260B	300714
600-209487-8	S-11213301-080420-CN-DP-3-10'	Total/NA	Solid	8260B	300714
600-209487-9	S-11213301-080420-CN-DP-3-15'	Total/NA	Solid	8260B	300714
600-209487-10	S-11213301-080420-CN-DP-4.5'	Total/NA	Solid	8260B	300714
600-209487-11	S-11213301-080420-CN-DP-4-10'	Total/NA	Solid	8260B	300714
600-209487-12	S-11213301-080420-CN-DP-4-15'	Total/NA	Solid	8260B	300714
600-209487-13	S-11213301-080420-CN-DP-5-5'	Total/NA	Solid	8260B	300714
600-209487-14	S-11213301-080420-CN-DP-5-8'	Total/NA	Solid	8260B	300714
600-209487-15	S-11213301-080420-CN-DP-6-5'	Total/NA	Solid	8260B	300718
600-209487-16	S-11213301-080420-CN-DP-6-8'	Total/NA	Solid	8260B	300718
600-209487-17	S-11213301-080420-CN-DP-7-6'	Total/NA	Solid	8260B	300718
600-209487-18	S-11213301-080420-CN-DP-7-9'	Total/NA	Solid	8260B	300718
600-209487-19	S-11213301-080420-CN-DP-8-6'	Total/NA	Solid	8260B	300718
600-209487-20	S-11213301-080420-CN-DP-8-9'	Total/NA	Solid	8260B	300718
600-209487-21	S-11213301-080420-CN-DP-9-6'	Total/NA	Solid	8260B	300718
600-209487-22	S-11213301-080420-CN-DP-9-9'	Total/NA	Solid	8260B	300718
600-209487-23	S-11213301-080520-CN-DP-10-5'	Total/NA	Solid	8260B	300718
600-209487-24	S-11213301-080520-CN-DP-10-8'	Total/NA	Solid	8260B	300718
MB 600-300771/7	Method Blank	Total/NA	Solid	8260B	
LCS 600-300771/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-300771/5	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 300850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-25	S-11213301-080520-CN-DP-11-5'	Total/NA	Solid	8260B	300721
600-209487-26	S-11213301-080520-CN-DP-11-8	Total/NA	Solid	8260B	300718
600-209487-27	S-11213301-080520-CN-DP-12-6'	Total/NA	Solid	8260B	300718
600-209487-28	S-11213301-080520-CN-DP-12-9'	Total/NA	Solid	8260B	300718
600-209487-29	S-11213301-080520-CN-DP-13-6'	Total/NA	Solid	8260B	300718
600-209487-30	S-11213301-080520-CN-DP-13-9'	Total/NA	Solid	8260B	300718
600-209487-31	S-11213301-080520-CN-DP-14-6'	Total/NA	Solid	8260B	300718
600-209487-32	S-11213301-080520-CN-DP-14-9'	Total/NA	Solid	8260B	300718
600-209487-33	S-11213301-080520-CN-DP-15-5'	Total/NA	Solid	8260B	300718
600-209487-34	S-11213301-080520-CN-DP-15-11'	Total/NA	Solid	8260B	300718
600-209487-35	S-11213301-080520-CN-DP-15-20'	Total/NA	Solid	8260B	300721
600-209487-36	S-11213301-080520-CN-DP-16-5'	Total/NA	Solid	8260B	300721
600-209487-37	S-11213301-080520-CN-DP-16-8'	Total/NA	Solid	8260B	300721
600-209487-38	S-11213301-080520-CN-DP-17-5'	Total/NA	Solid	8260B	300721
600-209487-39	S-11213301-080520-CN-DP-17-8'	Total/NA	Solid	8260B	300721
600-209487-41	S-11213301-080520-CN-DPW-15-8'	Total/NA	Solid	8260B	300721

QC Association Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

GC/MS VOA (Continued)

Analysis Batch: 300850 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-300850/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-300850/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-300850/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 300952

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-34 - DL	S-11213301-080520-CN-DP-15-11'	Total/NA	Solid	8260B	300721
MB 600-300952/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-300952/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-300952/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

GC VOA

Prep Batch: 300708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-1	S-11213301-080320-CN-DP-1-5'	Total/NA	Solid	5030B	
600-209487-2	S-11213301-080320-CN-DP-1-12'	Total/NA	Solid	5030B	
600-209487-3	S-11213301-080320-CN-DP-1-15'	Total/NA	Solid	5030B	
600-209487-4	S-11213301-080320-CN-DP-2-5'	Total/NA	Solid	5030B	
600-209487-5	S-11213301-080320-CN-DP-2-10'	Total/NA	Solid	5030B	
600-209487-6	S-11213301-080320-CN-DP-2-11'	Total/NA	Solid	5030B	
600-209487-7	S-11213301-080420-CN-DP-3-5'	Total/NA	Solid	5030B	
600-209487-8	S-11213301-080420-CN-DP-3-10'	Total/NA	Solid	5030B	
600-209487-9	S-11213301-080420-CN-DP-3-15'	Total/NA	Solid	5030B	
600-209487-10	S-11213301-080420-CN-DP-4.5'	Total/NA	Solid	5030B	
600-209487-11	S-11213301-080420-CN-DP-4-10'	Total/NA	Solid	5030B	
MB 600-300708/3-A	Method Blank	Total/NA	Solid	5030B	
LCS 600-300708/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 600-300708/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Analysis Batch: 300709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-1	S-11213301-080320-CN-DP-1-5'	Total/NA	Solid	8015B	300708
600-209487-2	S-11213301-080320-CN-DP-1-12'	Total/NA	Solid	8015B	300708
600-209487-3	S-11213301-080320-CN-DP-1-15'	Total/NA	Solid	8015B	300708
600-209487-4	S-11213301-080320-CN-DP-2-5'	Total/NA	Solid	8015B	300708
600-209487-5	S-11213301-080320-CN-DP-2-10'	Total/NA	Solid	8015B	300708
600-209487-6	S-11213301-080320-CN-DP-2-11'	Total/NA	Solid	8015B	300708
600-209487-7	S-11213301-080420-CN-DP-3-5'	Total/NA	Solid	8015B	300708
600-209487-8	S-11213301-080420-CN-DP-3-10'	Total/NA	Solid	8015B	300708
600-209487-9	S-11213301-080420-CN-DP-3-15'	Total/NA	Solid	8015B	300708
600-209487-10	S-11213301-080420-CN-DP-4.5'	Total/NA	Solid	8015B	300708
600-209487-11	S-11213301-080420-CN-DP-4-10'	Total/NA	Solid	8015B	300708
MB 600-300708/3-A	Method Blank	Total/NA	Solid	8015B	300708
LCS 600-300708/1-A	Lab Control Sample	Total/NA	Solid	8015B	300708
LCSD 600-300708/2-A	Lab Control Sample Dup	Total/NA	Solid	8015B	300708

Prep Batch: 300717

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-32	S-11213301-080520-CN-DP-14-9'	Total/NA	Solid	5030B	
600-209487-33	S-11213301-080520-CN-DP-15-5'	Total/NA	Solid	5030B	

QC Association Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

GC VOA (Continued)

Prep Batch: 300717 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-34	S-11213301-080520-CN-DP-15-11'	Total/NA	Solid	5030B	
600-209487-35	S-11213301-080520-CN-DP-15-20'	Total/NA	Solid	5030B	
600-209487-36	S-11213301-080520-CN-DP-16-5'	Total/NA	Solid	5030B	
600-209487-37	S-11213301-080520-CN-DP-16-8'	Total/NA	Solid	5030B	
600-209487-38	S-11213301-080520-CN-DP-17-5'	Total/NA	Solid	5030B	
600-209487-39	S-11213301-080520-CN-DP-17-8'	Total/NA	Solid	5030B	
600-209487-41	S-11213301-080520-CN-DPW-15-8'	Total/NA	Solid	5030B	
MB 600-300717/3-A	Method Blank	Total/NA	Solid	5030B	
LCS 600-300717/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 600-300717/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Analysis Batch: 300851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-12	S-11213301-080420-CN-DP-4-15'	Total/NA	Solid	8015B	300863
600-209487-13	S-11213301-080420-CN-DP-5-5'	Total/NA	Solid	8015B	300863
600-209487-14	S-11213301-080420-CN-DP-5-8'	Total/NA	Solid	8015B	300863
600-209487-15	S-11213301-080420-CN-DP-6-5'	Total/NA	Solid	8015B	300863
600-209487-16	S-11213301-080420-CN-DP-6-8'	Total/NA	Solid	8015B	300863
600-209487-17	S-11213301-080420-CN-DP-7-6'	Total/NA	Solid	8015B	300863
600-209487-18	S-11213301-080420-CN-DP-7-9'	Total/NA	Solid	8015B	300863
600-209487-19	S-11213301-080420-CN-DP-8-6'	Total/NA	Solid	8015B	300863
MB 600-300863/3-A	Method Blank	Total/NA	Solid	8015B	300863
LCS 600-300863/1-A	Lab Control Sample	Total/NA	Solid	8015B	300863
LCSD 600-300863/2-A	Lab Control Sample Dup	Total/NA	Solid	8015B	300863

Prep Batch: 300863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-12	S-11213301-080420-CN-DP-4-15'	Total/NA	Solid	5030B	
600-209487-13	S-11213301-080420-CN-DP-5-5'	Total/NA	Solid	5030B	
600-209487-14	S-11213301-080420-CN-DP-5-8'	Total/NA	Solid	5030B	
600-209487-15	S-11213301-080420-CN-DP-6-5'	Total/NA	Solid	5030B	
600-209487-16	S-11213301-080420-CN-DP-6-8'	Total/NA	Solid	5030B	
600-209487-17	S-11213301-080420-CN-DP-7-6'	Total/NA	Solid	5030B	
600-209487-18	S-11213301-080420-CN-DP-7-9'	Total/NA	Solid	5030B	
600-209487-19	S-11213301-080420-CN-DP-8-6'	Total/NA	Solid	5030B	
600-209487-20	S-11213301-080420-CN-DP-8-9'	Total/NA	Solid	5030B	
600-209487-21	S-11213301-080420-CN-DP-9-6'	Total/NA	Solid	5030B	
600-209487-22	S-11213301-080420-CN-DP-9-9'	Total/NA	Solid	5030B	
600-209487-23	S-11213301-080520-CN-DP-10-5'	Total/NA	Solid	5030B	
600-209487-24	S-11213301-080520-CN-DP-10-8'	Total/NA	Solid	5030B	
600-209487-25	S-11213301-080520-CN-DP-11-5'	Total/NA	Solid	5030B	
600-209487-26	S-11213301-080520-CN-DP-11-8	Total/NA	Solid	5030B	
600-209487-27	S-11213301-080520-CN-DP-12-6'	Total/NA	Solid	5030B	
600-209487-28	S-11213301-080520-CN-DP-12-9'	Total/NA	Solid	5030B	
600-209487-29	S-11213301-080520-CN-DP-13-6'	Total/NA	Solid	5030B	
600-209487-30	S-11213301-080520-CN-DP-13-9'	Total/NA	Solid	5030B	
600-209487-31	S-11213301-080520-CN-DP-14-6'	Total/NA	Solid	5030B	
MB 600-300863/3-A	Method Blank	Total/NA	Solid	5030B	
LCS 600-300863/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 600-300863/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

QC Association Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

GC VOA

Analysis Batch: 300953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-22	S-11213301-080420-CN-DP-9-9'	Total/NA	Solid	8015B	300863
600-209487-23	S-11213301-080520-CN-DP-10-5'	Total/NA	Solid	8015B	300863
600-209487-24	S-11213301-080520-CN-DP-10-8'	Total/NA	Solid	8015B	300863
600-209487-25	S-11213301-080520-CN-DP-11-5'	Total/NA	Solid	8015B	300863
600-209487-31	S-11213301-080520-CN-DP-14-6'	Total/NA	Solid	8015B	300863
600-209487-32	S-11213301-080520-CN-DP-14-9'	Total/NA	Solid	8015B	300717
600-209487-33	S-11213301-080520-CN-DP-15-5'	Total/NA	Solid	8015B	300717
600-209487-35	S-11213301-080520-CN-DP-15-20'	Total/NA	Solid	8015B	300717
600-209487-36	S-11213301-080520-CN-DP-16-5'	Total/NA	Solid	8015B	300717
600-209487-37	S-11213301-080520-CN-DP-16-8'	Total/NA	Solid	8015B	300717
600-209487-38	S-11213301-080520-CN-DP-17-5'	Total/NA	Solid	8015B	300717
600-209487-39	S-11213301-080520-CN-DP-17-8'	Total/NA	Solid	8015B	300717
MB 600-300717/3-A	Method Blank	Total/NA	Solid	8015B	300717
LCS 600-300717/1-A	Lab Control Sample	Total/NA	Solid	8015B	300717
LCSD 600-300717/2-A	Lab Control Sample Dup	Total/NA	Solid	8015B	300717

Analysis Batch: 301053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-20	S-11213301-080420-CN-DP-8-9'	Total/NA	Solid	8015B	300863
600-209487-21	S-11213301-080420-CN-DP-9-6'	Total/NA	Solid	8015B	300863
600-209487-26	S-11213301-080520-CN-DP-11-8	Total/NA	Solid	8015B	300863
600-209487-27	S-11213301-080520-CN-DP-12-6'	Total/NA	Solid	8015B	300863
600-209487-28	S-11213301-080520-CN-DP-12-9'	Total/NA	Solid	8015B	300863
600-209487-29	S-11213301-080520-CN-DP-13-6'	Total/NA	Solid	8015B	300863
600-209487-30	S-11213301-080520-CN-DP-13-9'	Total/NA	Solid	8015B	300863
600-209487-34	S-11213301-080520-CN-DP-15-11'	Total/NA	Solid	8015B	300717
600-209487-41	S-11213301-080520-CN-DPW-15-8'	Total/NA	Solid	8015B	300717

GC Semi VOA

Prep Batch: 300964

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-1	S-11213301-080320-CN-DP-1-5'	Total/NA	Solid	3546	
600-209487-3	S-11213301-080320-CN-DP-1-15'	Total/NA	Solid	3546	
600-209487-4	S-11213301-080320-CN-DP-2-5'	Total/NA	Solid	3546	
600-209487-5	S-11213301-080320-CN-DP-2-10'	Total/NA	Solid	3546	
600-209487-7	S-11213301-080420-CN-DP-3-5'	Total/NA	Solid	3546	
600-209487-10	S-11213301-080420-CN-DP-4.5'	Total/NA	Solid	3546	
600-209487-17	S-11213301-080420-CN-DP-7-6'	Total/NA	Solid	3546	
600-209487-18	S-11213301-080420-CN-DP-7-9'	Total/NA	Solid	3546	
MB 600-300964/1-A	Method Blank	Total/NA	Solid	3546	
LCS 600-300964/2-A	Lab Control Sample	Total/NA	Solid	3546	
600-209487-13 MS	S-11213301-080420-CN-DP-5-5'	Total/NA	Solid	3546	
600-209487-13 MSD	S-11213301-080420-CN-DP-5-5'	Total/NA	Solid	3546	

Prep Batch: 301022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-21	S-11213301-080420-CN-DP-9-6'	Total/NA	Solid	3546	
600-209487-22	S-11213301-080420-CN-DP-9-9'	Total/NA	Solid	3546	
600-209487-23	S-11213301-080520-CN-DP-10-5'	Total/NA	Solid	3546	
600-209487-24	S-11213301-080520-CN-DP-10-8'	Total/NA	Solid	3546	

QC Association Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

GC Semi VOA (Continued)

Prep Batch: 301022 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-25	S-11213301-080520-CN-DP-11-5'	Total/NA	Solid	3546	
600-209487-26	S-11213301-080520-CN-DP-11-8	Total/NA	Solid	3546	
600-209487-27	S-11213301-080520-CN-DP-12-6'	Total/NA	Solid	3546	
600-209487-28	S-11213301-080520-CN-DP-12-9'	Total/NA	Solid	3546	
600-209487-29	S-11213301-080520-CN-DP-13-6'	Total/NA	Solid	3546	
600-209487-30	S-11213301-080520-CN-DP-13-9'	Total/NA	Solid	3546	
600-209487-31	S-11213301-080520-CN-DP-14-6'	Total/NA	Solid	3546	
600-209487-32	S-11213301-080520-CN-DP-14-9'	Total/NA	Solid	3546	
600-209487-33	S-11213301-080520-CN-DP-15-5'	Total/NA	Solid	3546	
600-209487-34	S-11213301-080520-CN-DP-15-11'	Total/NA	Solid	3546	
600-209487-35	S-11213301-080520-CN-DP-15-20'	Total/NA	Solid	3546	
600-209487-36	S-11213301-080520-CN-DP-16-5'	Total/NA	Solid	3546	
600-209487-37	S-11213301-080520-CN-DP-16-8'	Total/NA	Solid	3546	
600-209487-38	S-11213301-080520-CN-DP-17-5'	Total/NA	Solid	3546	
600-209487-39	S-11213301-080520-CN-DP-17-8'	Total/NA	Solid	3546	
600-209487-41	S-11213301-080520-CN-DPW-15-8'	Total/NA	Solid	3546	
MB 600-301022/1-A	Method Blank	Total/NA	Solid	3546	
LCS 600-301022/2-A	Lab Control Sample	Total/NA	Solid	3546	
600-209487-31 MS	S-11213301-080520-CN-DP-14-6'	Total/NA	Solid	3546	
600-209487-31 MSD	S-11213301-080520-CN-DP-14-6'	Total/NA	Solid	3546	

Analysis Batch: 301085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-1	S-11213301-080320-CN-DP-1-5'	Total/NA	Solid	8015D	300964
600-209487-3	S-11213301-080320-CN-DP-1-15'	Total/NA	Solid	8015D	300964
600-209487-4	S-11213301-080320-CN-DP-2-5'	Total/NA	Solid	8015D	300964
600-209487-5	S-11213301-080320-CN-DP-2-10'	Total/NA	Solid	8015D	300964
600-209487-7	S-11213301-080420-CN-DP-3-5'	Total/NA	Solid	8015D	300964
600-209487-10	S-11213301-080420-CN-DP-4.5'	Total/NA	Solid	8015D	300964
600-209487-17	S-11213301-080420-CN-DP-7-6'	Total/NA	Solid	8015D	300964
600-209487-18	S-11213301-080420-CN-DP-7-9'	Total/NA	Solid	8015D	300964
600-209487-21	S-11213301-080420-CN-DP-9-6'	Total/NA	Solid	8015D	301022
600-209487-22	S-11213301-080420-CN-DP-9-9'	Total/NA	Solid	8015D	301022
600-209487-23	S-11213301-080520-CN-DP-10-5'	Total/NA	Solid	8015D	301022
600-209487-24	S-11213301-080520-CN-DP-10-8'	Total/NA	Solid	8015D	301022
600-209487-25	S-11213301-080520-CN-DP-11-5'	Total/NA	Solid	8015D	301022
600-209487-26	S-11213301-080520-CN-DP-11-8	Total/NA	Solid	8015D	301022
600-209487-27	S-11213301-080520-CN-DP-12-6'	Total/NA	Solid	8015D	301022
600-209487-28	S-11213301-080520-CN-DP-12-9'	Total/NA	Solid	8015D	301022
600-209487-29	S-11213301-080520-CN-DP-13-6'	Total/NA	Solid	8015D	301022
600-209487-30	S-11213301-080520-CN-DP-13-9'	Total/NA	Solid	8015D	301022
600-209487-31	S-11213301-080520-CN-DP-14-6'	Total/NA	Solid	8015D	301022
600-209487-32	S-11213301-080520-CN-DP-14-9'	Total/NA	Solid	8015D	301022
600-209487-33	S-11213301-080520-CN-DP-15-5'	Total/NA	Solid	8015D	301022
600-209487-34	S-11213301-080520-CN-DP-15-11'	Total/NA	Solid	8015D	301022
600-209487-35	S-11213301-080520-CN-DP-15-20'	Total/NA	Solid	8015D	301022
600-209487-36	S-11213301-080520-CN-DP-16-5'	Total/NA	Solid	8015D	301022
600-209487-37	S-11213301-080520-CN-DP-16-8'	Total/NA	Solid	8015D	301022
600-209487-38	S-11213301-080520-CN-DP-17-5'	Total/NA	Solid	8015D	301022
600-209487-39	S-11213301-080520-CN-DP-17-8'	Total/NA	Solid	8015D	301022
600-209487-41	S-11213301-080520-CN-DPW-15-8'	Total/NA	Solid	8015D	301022

QC Association Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

GC Semi VOA (Continued)

Analysis Batch: 301085 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-300964/1-A	Method Blank	Total/NA	Solid	8015D	300964
MB 600-301022/1-A	Method Blank	Total/NA	Solid	8015D	301022
LCS 600-300964/2-A	Lab Control Sample	Total/NA	Solid	8015D	300964
LCS 600-301022/2-A	Lab Control Sample	Total/NA	Solid	8015D	301022
600-209487-13 MS	S-11213301-080420-CN-DP-5-5'	Total/NA	Solid	8015D	300964
600-209487-13 MSD	S-11213301-080420-CN-DP-5-5'	Total/NA	Solid	8015D	300964
600-209487-31 MS	S-11213301-080520-CN-DP-14-6'	Total/NA	Solid	8015D	301022
600-209487-31 MSD	S-11213301-080520-CN-DP-14-6'	Total/NA	Solid	8015D	301022

Prep Batch: 301371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-2	S-11213301-080320-CN-DP-1-12'	Total/NA	Solid	3546	
600-209487-6	S-11213301-080320-CN-DP-2-11'	Total/NA	Solid	3546	
600-209487-8	S-11213301-080420-CN-DP-3-10'	Total/NA	Solid	3546	
600-209487-9	S-11213301-080420-CN-DP-3-15'	Total/NA	Solid	3546	
600-209487-11	S-11213301-080420-CN-DP-4-10'	Total/NA	Solid	3546	
600-209487-12	S-11213301-080420-CN-DP-4-15'	Total/NA	Solid	3546	
600-209487-13	S-11213301-080420-CN-DP-5-5'	Total/NA	Solid	3546	
600-209487-14	S-11213301-080420-CN-DP-5-8'	Total/NA	Solid	3546	
600-209487-15	S-11213301-080420-CN-DP-6-5'	Total/NA	Solid	3546	
600-209487-16	S-11213301-080420-CN-DP-6-8'	Total/NA	Solid	3546	
600-209487-19	S-11213301-080420-CN-DP-8-6'	Total/NA	Solid	3546	
600-209487-20	S-11213301-080420-CN-DP-8-9'	Total/NA	Solid	3546	
MB 600-301371/1-A	Method Blank	Total/NA	Solid	3546	
LCS 600-301371/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 600-301371/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Analysis Batch: 301452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-2	S-11213301-080320-CN-DP-1-12'	Total/NA	Solid	8015D	301371
600-209487-6	S-11213301-080320-CN-DP-2-11'	Total/NA	Solid	8015D	301371
600-209487-8	S-11213301-080420-CN-DP-3-10'	Total/NA	Solid	8015D	301371
600-209487-9	S-11213301-080420-CN-DP-3-15'	Total/NA	Solid	8015D	301371
600-209487-11	S-11213301-080420-CN-DP-4-10'	Total/NA	Solid	8015D	301371
600-209487-12	S-11213301-080420-CN-DP-4-15'	Total/NA	Solid	8015D	301371
600-209487-13	S-11213301-080420-CN-DP-5-5'	Total/NA	Solid	8015D	301371
600-209487-14	S-11213301-080420-CN-DP-5-8'	Total/NA	Solid	8015D	301371
600-209487-15	S-11213301-080420-CN-DP-6-5'	Total/NA	Solid	8015D	301371
600-209487-16	S-11213301-080420-CN-DP-6-8'	Total/NA	Solid	8015D	301371
600-209487-19	S-11213301-080420-CN-DP-8-6'	Total/NA	Solid	8015D	301371
600-209487-20	S-11213301-080420-CN-DP-8-9'	Total/NA	Solid	8015D	301371
MB 600-301371/1-A	Method Blank	Total/NA	Solid	8015D	301371
LCS 600-301371/2-A	Lab Control Sample	Total/NA	Solid	8015D	301371
LCSD 600-301371/3-A	Lab Control Sample Dup	Total/NA	Solid	8015D	301371

HPLC/IC

Analysis Batch: 301062

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-1	S-11213301-080320-CN-DP-1-5'	Soluble	Solid	300.0	301125
600-209487-2	S-11213301-080320-CN-DP-1-12'	Soluble	Solid	300.0	301125

QC Association Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

HPLC/IC (Continued)

Analysis Batch: 301062 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-3	S-11213301-080320-CN-DP-1-15'	Soluble	Solid	300.0	301125
600-209487-4	S-11213301-080320-CN-DP-2-5'	Soluble	Solid	300.0	301125
600-209487-5	S-11213301-080320-CN-DP-2-10'	Soluble	Solid	300.0	301125
600-209487-6	S-11213301-080320-CN-DP-2-11'	Soluble	Solid	300.0	301125
600-209487-7	S-11213301-080420-CN-DP-3-5'	Soluble	Solid	300.0	301125
600-209487-8	S-11213301-080420-CN-DP-3-10'	Soluble	Solid	300.0	301125
600-209487-9	S-11213301-080420-CN-DP-3-15'	Soluble	Solid	300.0	301125
600-209487-10	S-11213301-080420-CN-DP-4.5'	Soluble	Solid	300.0	301125
600-209487-11	S-11213301-080420-CN-DP-4-10'	Soluble	Solid	300.0	301125
600-209487-12	S-11213301-080420-CN-DP-4-15'	Soluble	Solid	300.0	301125
600-209487-13	S-11213301-080420-CN-DP-5-5'	Soluble	Solid	300.0	301125
600-209487-14	S-11213301-080420-CN-DP-5-8'	Soluble	Solid	300.0	301125
600-209487-15	S-11213301-080420-CN-DP-6-5'	Soluble	Solid	300.0	301125
600-209487-16	S-11213301-080420-CN-DP-6-8'	Soluble	Solid	300.0	301125
600-209487-17	S-11213301-080420-CN-DP-7-6'	Soluble	Solid	300.0	301125
600-209487-18	S-11213301-080420-CN-DP-7-9'	Soluble	Solid	300.0	301125
600-209487-19	S-11213301-080420-CN-DP-8-6'	Soluble	Solid	300.0	301125
600-209487-20	S-11213301-080420-CN-DP-8-9'	Soluble	Solid	300.0	301125
600-209487-21	S-11213301-080420-CN-DP-9-6'	Soluble	Solid	300.0	301125
600-209487-22	S-11213301-080420-CN-DP-9-9'	Soluble	Solid	300.0	301125
600-209487-23	S-11213301-080520-CN-DP-10-5'	Soluble	Solid	300.0	301125
600-209487-24	S-11213301-080520-CN-DP-10-8'	Soluble	Solid	300.0	301125
600-209487-25	S-11213301-080520-CN-DP-11-5'	Soluble	Solid	300.0	301125
600-209487-26	S-11213301-080520-CN-DP-11-8	Soluble	Solid	300.0	301125
600-209487-27	S-11213301-080520-CN-DP-12-6'	Soluble	Solid	300.0	301125
600-209487-28	S-11213301-080520-CN-DP-12-9'	Soluble	Solid	300.0	301125
MB 600-301125/1-A	Method Blank	Soluble	Solid	300.0	301125
MB 600-301125/1-A	Method Blank	Soluble	Solid	300.0	301125
LCS 600-301125/2-A	Lab Control Sample	Soluble	Solid	300.0	301125
LCS 600-301125/2-A	Lab Control Sample	Soluble	Solid	300.0	301125
600-209487-1 MS	S-11213301-080320-CN-DP-1-5'	Soluble	Solid	300.0	301125
600-209487-1 MSD	S-11213301-080320-CN-DP-1-5'	Soluble	Solid	300.0	301125
600-209487-11 MS	S-11213301-080420-CN-DP-4-10'	Soluble	Solid	300.0	301125
600-209487-11 MSD	S-11213301-080420-CN-DP-4-10'	Soluble	Solid	300.0	301125
600-209487-23 MS	S-11213301-080520-CN-DP-10-5'	Soluble	Solid	300.0	301125
600-209487-23 MSD	S-11213301-080520-CN-DP-10-5'	Soluble	Solid	300.0	301125

Leach Batch: 301125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-1	S-11213301-080320-CN-DP-1-5'	Soluble	Solid	DI Leach	
600-209487-2	S-11213301-080320-CN-DP-1-12'	Soluble	Solid	DI Leach	
600-209487-3	S-11213301-080320-CN-DP-1-15'	Soluble	Solid	DI Leach	
600-209487-4	S-11213301-080320-CN-DP-2-5'	Soluble	Solid	DI Leach	
600-209487-5	S-11213301-080320-CN-DP-2-10'	Soluble	Solid	DI Leach	
600-209487-6	S-11213301-080320-CN-DP-2-11'	Soluble	Solid	DI Leach	
600-209487-7	S-11213301-080420-CN-DP-3-5'	Soluble	Solid	DI Leach	
600-209487-8	S-11213301-080420-CN-DP-3-10'	Soluble	Solid	DI Leach	
600-209487-9	S-11213301-080420-CN-DP-3-15'	Soluble	Solid	DI Leach	
600-209487-10	S-11213301-080420-CN-DP-4.5'	Soluble	Solid	DI Leach	
600-209487-11	S-11213301-080420-CN-DP-4-10'	Soluble	Solid	DI Leach	
600-209487-12	S-11213301-080420-CN-DP-4-15'	Soluble	Solid	DI Leach	

QC Association Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

HPLC/IC (Continued)

Leach Batch: 301125 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-13	S-11213301-080420-CN-DP-5-5'	Soluble	Solid	DI Leach	
600-209487-14	S-11213301-080420-CN-DP-5-8'	Soluble	Solid	DI Leach	
600-209487-15	S-11213301-080420-CN-DP-6-5'	Soluble	Solid	DI Leach	
600-209487-16	S-11213301-080420-CN-DP-6-8'	Soluble	Solid	DI Leach	
600-209487-17	S-11213301-080420-CN-DP-7-6'	Soluble	Solid	DI Leach	
600-209487-18	S-11213301-080420-CN-DP-7-9'	Soluble	Solid	DI Leach	
600-209487-19	S-11213301-080420-CN-DP-8-6'	Soluble	Solid	DI Leach	
600-209487-20	S-11213301-080420-CN-DP-8-9'	Soluble	Solid	DI Leach	
600-209487-21	S-11213301-080420-CN-DP-9-6'	Soluble	Solid	DI Leach	
600-209487-22	S-11213301-080420-CN-DP-9-9'	Soluble	Solid	DI Leach	
600-209487-23	S-11213301-080520-CN-DP-10-5'	Soluble	Solid	DI Leach	
600-209487-24	S-11213301-080520-CN-DP-10-8'	Soluble	Solid	DI Leach	
600-209487-25	S-11213301-080520-CN-DP-11-5'	Soluble	Solid	DI Leach	
600-209487-26	S-11213301-080520-CN-DP-11-8	Soluble	Solid	DI Leach	
600-209487-27	S-11213301-080520-CN-DP-12-6'	Soluble	Solid	DI Leach	
600-209487-28	S-11213301-080520-CN-DP-12-9'	Soluble	Solid	DI Leach	
600-209487-29	S-11213301-080520-CN-DP-13-6'	Soluble	Solid	DI Leach	
600-209487-30	S-11213301-080520-CN-DP-13-9'	Soluble	Solid	DI Leach	
600-209487-31	S-11213301-080520-CN-DP-14-6'	Soluble	Solid	DI Leach	
600-209487-32	S-11213301-080520-CN-DP-14-9'	Soluble	Solid	DI Leach	
600-209487-33	S-11213301-080520-CN-DP-15-5'	Soluble	Solid	DI Leach	
600-209487-34	S-11213301-080520-CN-DP-15-11'	Soluble	Solid	DI Leach	
600-209487-35	S-11213301-080520-CN-DP-15-20'	Soluble	Solid	DI Leach	
600-209487-36	S-11213301-080520-CN-DP-16-5'	Soluble	Solid	DI Leach	
600-209487-37	S-11213301-080520-CN-DP-16-8'	Soluble	Solid	DI Leach	
600-209487-38	S-11213301-080520-CN-DP-17-5'	Soluble	Solid	DI Leach	
600-209487-39	S-11213301-080520-CN-DP-17-8'	Soluble	Solid	DI Leach	
600-209487-41	S-11213301-080520-CN-DPW-15-8'	Soluble	Solid	DI Leach	
MB 600-301125/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 600-301125/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
600-209487-1 MS	S-11213301-080320-CN-DP-1-5'	Soluble	Solid	DI Leach	
600-209487-1 MSD	S-11213301-080320-CN-DP-1-5'	Soluble	Solid	DI Leach	
600-209487-11 MS	S-11213301-080420-CN-DP-4-10'	Soluble	Solid	DI Leach	
600-209487-11 MSD	S-11213301-080420-CN-DP-4-10'	Soluble	Solid	DI Leach	
600-209487-23 MS	S-11213301-080520-CN-DP-10-5'	Soluble	Solid	DI Leach	
600-209487-23 MSD	S-11213301-080520-CN-DP-10-5'	Soluble	Solid	DI Leach	
600-209487-29 MS	S-11213301-080520-CN-DP-13-6'	Soluble	Solid	DI Leach	
600-209487-29 MSD	S-11213301-080520-CN-DP-13-6'	Soluble	Solid	DI Leach	
600-209487-35 MS	S-11213301-080520-CN-DP-15-20'	Soluble	Solid	DI Leach	
600-209487-35 MSD	S-11213301-080520-CN-DP-15-20'	Soluble	Solid	DI Leach	
600-209487-39 MS	S-11213301-080520-CN-DP-17-8'	Soluble	Solid	DI Leach	
600-209487-39 MSD	S-11213301-080520-CN-DP-17-8'	Soluble	Solid	DI Leach	

Analysis Batch: 301426

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-29	S-11213301-080520-CN-DP-13-6'	Soluble	Solid	300.0	301125
600-209487-30	S-11213301-080520-CN-DP-13-9'	Soluble	Solid	300.0	301125
600-209487-31	S-11213301-080520-CN-DP-14-6'	Soluble	Solid	300.0	301125
600-209487-32	S-11213301-080520-CN-DP-14-9'	Soluble	Solid	300.0	301125
600-209487-33	S-11213301-080520-CN-DP-15-5'	Soluble	Solid	300.0	301125
600-209487-34	S-11213301-080520-CN-DP-15-11'	Soluble	Solid	300.0	301125

QC Association Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

HPLC/IC (Continued)

Analysis Batch: 301426 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-301125/1-A	Method Blank	Soluble	Solid	300.0	301125
LCS 600-301125/2-A	Lab Control Sample	Soluble	Solid	300.0	301125
600-209487-29 MS	S-11213301-080520-CN-DP-13-6'	Soluble	Solid	300.0	301125
600-209487-29 MSD	S-11213301-080520-CN-DP-13-6'	Soluble	Solid	300.0	301125
600-209487-39 MS	S-11213301-080520-CN-DP-17-8'	Soluble	Solid	300.0	301125
600-209487-39 MSD	S-11213301-080520-CN-DP-17-8'	Soluble	Solid	300.0	301125

Analysis Batch: 301663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-35	S-11213301-080520-CN-DP-15-20'	Soluble	Solid	300.0	301125
600-209487-36	S-11213301-080520-CN-DP-16-5'	Soluble	Solid	300.0	301125
600-209487-37	S-11213301-080520-CN-DP-16-8'	Soluble	Solid	300.0	301125
600-209487-38	S-11213301-080520-CN-DP-17-5'	Soluble	Solid	300.0	301125
600-209487-39	S-11213301-080520-CN-DP-17-8'	Soluble	Solid	300.0	301125
600-209487-41	S-11213301-080520-CN-DPW-15-8'	Soluble	Solid	300.0	301125
MB 600-301125/1-A	Method Blank	Soluble	Solid	300.0	301125
LCS 600-301125/2-A	Lab Control Sample	Soluble	Solid	300.0	301125
600-209487-35 MS	S-11213301-080520-CN-DP-15-20'	Soluble	Solid	300.0	301125
600-209487-35 MSD	S-11213301-080520-CN-DP-15-20'	Soluble	Solid	300.0	301125

General Chemistry

Analysis Batch: 300861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-1	S-11213301-080320-CN-DP-1-5'	Total/NA	Solid	2540G	
600-209487-2	S-11213301-080320-CN-DP-1-12'	Total/NA	Solid	2540G	
600-209487-3	S-11213301-080320-CN-DP-1-15'	Total/NA	Solid	2540G	
600-209487-4	S-11213301-080320-CN-DP-2-5'	Total/NA	Solid	2540G	
600-209487-5	S-11213301-080320-CN-DP-2-10'	Total/NA	Solid	2540G	
600-209487-6	S-11213301-080320-CN-DP-2-11'	Total/NA	Solid	2540G	
600-209487-7	S-11213301-080420-CN-DP-3-5'	Total/NA	Solid	2540G	
600-209487-8	S-11213301-080420-CN-DP-3-10'	Total/NA	Solid	2540G	
600-209487-9	S-11213301-080420-CN-DP-3-15'	Total/NA	Solid	2540G	
600-209487-10	S-11213301-080420-CN-DP-4.5'	Total/NA	Solid	2540G	
600-209487-11	S-11213301-080420-CN-DP-4-10'	Total/NA	Solid	2540G	
600-209487-12	S-11213301-080420-CN-DP-4-15'	Total/NA	Solid	2540G	
600-209487-13	S-11213301-080420-CN-DP-5-5'	Total/NA	Solid	2540G	
600-209487-14	S-11213301-080420-CN-DP-5-8'	Total/NA	Solid	2540G	
600-209487-15	S-11213301-080420-CN-DP-6-5'	Total/NA	Solid	2540G	
600-209487-16	S-11213301-080420-CN-DP-6-8'	Total/NA	Solid	2540G	
600-209487-17	S-11213301-080420-CN-DP-7-6'	Total/NA	Solid	2540G	
600-209487-18	S-11213301-080420-CN-DP-7-9'	Total/NA	Solid	2540G	
600-209487-19	S-11213301-080420-CN-DP-8-6'	Total/NA	Solid	2540G	
600-209487-20	S-11213301-080420-CN-DP-8-9'	Total/NA	Solid	2540G	
600-209487-21	S-11213301-080420-CN-DP-9-6'	Total/NA	Solid	2540G	
600-209487-22	S-11213301-080420-CN-DP-9-9'	Total/NA	Solid	2540G	
600-209487-23	S-11213301-080520-CN-DP-10-5'	Total/NA	Solid	2540G	
600-209487-24	S-11213301-080520-CN-DP-10-8'	Total/NA	Solid	2540G	
600-209487-25	S-11213301-080520-CN-DP-11-5'	Total/NA	Solid	2540G	
600-209487-26	S-11213301-080520-CN-DP-11-8	Total/NA	Solid	2540G	
600-209487-27	S-11213301-080520-CN-DP-12-6'	Total/NA	Solid	2540G	

QC Association Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

General Chemistry (Continued)

Analysis Batch: 300861 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-28	S-11213301-080520-CN-DP-12-9'	Total/NA	Solid	2540G	
600-209487-29	S-11213301-080520-CN-DP-13-6'	Total/NA	Solid	2540G	
600-209487-30	S-11213301-080520-CN-DP-13-9'	Total/NA	Solid	2540G	
600-209487-31	S-11213301-080520-CN-DP-14-6'	Total/NA	Solid	2540G	
600-209487-32	S-11213301-080520-CN-DP-14-9'	Total/NA	Solid	2540G	
600-209487-33	S-11213301-080520-CN-DP-15-5'	Total/NA	Solid	2540G	
600-209487-34	S-11213301-080520-CN-DP-15-11'	Total/NA	Solid	2540G	
600-209487-35	S-11213301-080520-CN-DP-15-20'	Total/NA	Solid	2540G	
600-209487-36	S-11213301-080520-CN-DP-16-5'	Total/NA	Solid	2540G	
600-209487-37	S-11213301-080520-CN-DP-16-8'	Total/NA	Solid	2540G	
600-209487-38	S-11213301-080520-CN-DP-17-5'	Total/NA	Solid	2540G	
600-209487-39	S-11213301-080520-CN-DP-17-8'	Total/NA	Solid	2540G	
600-209487-41	S-11213301-080520-CN-DPW-15-8'	Total/NA	Solid	2540G	
600-209487-1 DU	S-11213301-080320-CN-DP-1-5'	Total/NA	Solid	2540G	
600-209487-11 DU	S-11213301-080420-CN-DP-4-10'	Total/NA	Solid	2540G	
600-209487-21 DU	S-11213301-080420-CN-DP-9-6'	Total/NA	Solid	2540G	
600-209487-31 DU	S-11213301-080520-CN-DP-14-6'	Total/NA	Solid	2540G	

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080320-CN-DP-1-5' Lab Sample ID: 600-209487-1
Date Collected: 08/03/20 13:20 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080320-CN-DP-1-5' Lab Sample ID: 600-209487-1
Date Collected: 08/03/20 13:20 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.6**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.86 g	5 mL	300714	08/08/20 10:45	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300707	08/08/20 15:13	WS1	TAL HOU
Total/NA	Prep	5030B			10.30 g	10 mL	300708	08/08/20 07:14	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300709	08/08/20 14:00	WS1	TAL HOU
Total/NA	Prep	3546			10.00 g	1.0 mL	300964	08/12/20 08:32	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 21:49	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301062	08/13/20 14:03	W1N	TAL HOU

Client Sample ID: S-11213301-080320-CN-DP-1-12' Lab Sample ID: 600-209487-2
Date Collected: 08/03/20 13:30 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080320-CN-DP-1-12' Lab Sample ID: 600-209487-2
Date Collected: 08/03/20 13:30 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 80.0**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			0.87 g	5 mL	300714	08/08/20 10:45	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300707	08/08/20 15:37	WS1	TAL HOU
Total/NA	Prep	5030B			9.71 g	10 mL	300708	08/08/20 07:14	WS1	TAL HOU
Total/NA	Analysis	8015B		20	250 uL	5 mL	300709	08/08/20 14:50	WS1	TAL HOU
Total/NA	Prep	3546			5.03 g	1.0 mL	301371	08/17/20 12:40	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301452	08/18/20 15:54	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301062	08/13/20 15:04	W1N	TAL HOU

Client Sample ID: S-11213301-080320-CN-DP-1-15' Lab Sample ID: 600-209487-3
Date Collected: 08/03/20 13:50 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080320-CN-DP-1-15' Lab Sample ID: 600-209487-3

Date Collected: 08/03/20 13:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.2**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.16 g	5 mL	300714	08/08/20 10:45	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300707	08/08/20 16:00	WS1	TAL HOU
Total/NA	Prep	5030B			9.55 g	10 mL	300708	08/08/20 07:14	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300709	08/08/20 15:15	WS1	TAL HOU
Total/NA	Prep	3546			10.06 g	1.0 mL	300964	08/12/20 08:32	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 23:02	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301062	08/13/20 15:24	W1N	TAL HOU

Client Sample ID: S-11213301-080320-CN-DP-2-5' Lab Sample ID: 600-209487-4

Date Collected: 08/03/20 14:40 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080320-CN-DP-2-5' Lab Sample ID: 600-209487-4

Date Collected: 08/03/20 14:40 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.3**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.75 g	5 mL	300714	08/08/20 10:45	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300707	08/08/20 16:24	WS1	TAL HOU
Total/NA	Prep	5030B			10.03 g	10 mL	300708	08/08/20 07:14	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300709	08/08/20 15:41	WS1	TAL HOU
Total/NA	Prep	3546			10.00 g	1.0 mL	300964	08/12/20 08:32	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 23:38	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301062	08/13/20 15:45	W1N	TAL HOU

Client Sample ID: S-11213301-080320-CN-DP-2-10' Lab Sample ID: 600-209487-5

Date Collected: 08/03/20 15:00 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080320-CN-DP-2-10' Lab Sample ID: 600-209487-5

Date Collected: 08/03/20 15:00 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.0**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.68 g	5 mL	300714	08/08/20 10:45	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300707	08/08/20 16:48	WS1	TAL HOU
Total/NA	Prep	5030B			9.99 g	10 mL	300708	08/08/20 07:14	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300709	08/08/20 16:06	WS1	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080320-CN-DP-2-10' Lab Sample ID: 600-209487-5

Date Collected: 08/03/20 15:00 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.0**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			10.02 g	1.0 mL	300964	08/12/20 08:32	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/15/20 00:14	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301062	08/13/20 16:05	W1N	TAL HOU

Client Sample ID: S-11213301-080320-CN-DP-2-11' Lab Sample ID: 600-209487-6

Date Collected: 08/03/20 15:10 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080320-CN-DP-2-11' Lab Sample ID: 600-209487-6

Date Collected: 08/03/20 15:10 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 91.2**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.36 g	5 mL	300714	08/08/20 10:45	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 15:56	KLV	TAL HOU
Total/NA	Prep	5030B			9.94 g	10 mL	300708	08/08/20 07:14	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300709	08/08/20 16:31	WS1	TAL HOU
Total/NA	Prep	3546			5.06 g	1.0 mL	301371	08/17/20 12:40	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301452	08/18/20 16:31	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301062	08/13/20 16:25	W1N	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-3-5' Lab Sample ID: 600-209487-7

Date Collected: 08/04/20 09:50 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-3-5' Lab Sample ID: 600-209487-7

Date Collected: 08/04/20 09:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.15 g	5 mL	300714	08/08/20 10:45	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 16:22	KLV	TAL HOU
Total/NA	Prep	5030B			.33 g	10 mL	300708	08/08/20 07:14	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300709	08/08/20 16:56	WS1	TAL HOU
Total/NA	Prep	3546			10.00 g	1.0 mL	300964	08/12/20 08:32	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/15/20 01:27	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301062	08/13/20 17:27	W1N	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-3-10' Lab Sample ID: 600-209487-8
Date Collected: 08/04/20 09:55 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-3-10' Lab Sample ID: 600-209487-8
Date Collected: 08/04/20 09:55 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 81.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.73 g	5 mL	300714	08/08/20 10:45	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 16:48	KLV	TAL HOU
Total/NA	Prep	5030B			9.86 g	10 mL	300708	08/08/20 07:14	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300709	08/08/20 17:21	WS1	TAL HOU
Total/NA	Prep	3546			5.10 g	1.0 mL	301371	08/17/20 12:40	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301452	08/18/20 17:08	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301062	08/13/20 17:47	W1N	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-3-15' Lab Sample ID: 600-209487-9
Date Collected: 08/04/20 10:00 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-3-15' Lab Sample ID: 600-209487-9
Date Collected: 08/04/20 10:00 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.0**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.61 g	5 mL	300714	08/08/20 10:45	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 17:14	KLV	TAL HOU
Total/NA	Prep	5030B			9.84 g	10 mL	300708	08/08/20 13:51	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300709	08/08/20 17:46	WS1	TAL HOU
Total/NA	Prep	3546			5.07 g	1.0 mL	301371	08/17/20 12:40	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301452	08/18/20 17:45	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301062	08/13/20 18:07	W1N	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-4.5' Lab Sample ID: 600-209487-10
Date Collected: 08/04/20 10:30 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-4.5' Lab Sample ID: 600-209487-10
Date Collected: 08/04/20 10:30 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.52 g	5 mL	300714	08/08/20 10:45	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 17:40	KLV	TAL HOU
Total/NA	Prep	5030B			10.14 g	10 mL	300708	08/08/20 13:51	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300709	08/08/20 18:11	WS1	TAL HOU
Total/NA	Prep	3546			10.00 g	1.0 mL	300964	08/12/20 08:32	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/15/20 04:27	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301062	08/13/20 18:28	W1N	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-4-10' Lab Sample ID: 600-209487-11
Date Collected: 08/04/20 10:35 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-4-10' Lab Sample ID: 600-209487-11
Date Collected: 08/04/20 10:35 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 72.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.57 g	5 mL	300714	08/08/20 10:45	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 18:06	KLV	TAL HOU
Total/NA	Prep	5030B			9.56 g	10 mL	300708	08/08/20 13:51	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300709	08/08/20 18:36	WS1	TAL HOU
Total/NA	Prep	3546			5.00 g	1.0 mL	301371	08/17/20 12:40	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301452	08/18/20 18:21	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		10			301062	08/13/20 18:48	W1N	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-4-15' Lab Sample ID: 600-209487-12
Date Collected: 08/04/20 10:40 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-4-15' Lab Sample ID: 600-209487-12
Date Collected: 08/04/20 10:40 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.60 g	5 mL	300714	08/08/20 10:45	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 18:32	KLV	TAL HOU
Total/NA	Prep	5030B			9.82 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300851	08/11/20 12:07	WS1	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-4-15' Lab Sample ID: 600-209487-12

Date Collected: 08/04/20 10:40 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			5.03 g	1.0 mL	301371	08/17/20 12:40	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301452	08/18/20 18:58	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		25			301062	08/13/20 19:55	W1N	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-5-5' Lab Sample ID: 600-209487-13

Date Collected: 08/04/20 11:10 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-5-5' Lab Sample ID: 600-209487-13

Date Collected: 08/04/20 11:10 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 80.6**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.73 g	5 mL	300714	08/08/20 10:45	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 18:58	KLV	TAL HOU
Total/NA	Prep	5030B			10.31 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300851	08/11/20 11:39	WS1	TAL HOU
Total/NA	Prep	3546			5.00 g	1.0 mL	301371	08/17/20 12:40	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301452	08/18/20 19:34	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		10			301062	08/13/20 20:18	W1N	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-5-8' Lab Sample ID: 600-209487-14

Date Collected: 08/04/20 11:15 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-5-8' Lab Sample ID: 600-209487-14

Date Collected: 08/04/20 11:15 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 81.4**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.63 g	5 mL	300714	08/08/20 10:45	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 19:24	KLV	TAL HOU
Total/NA	Prep	5030B			9.70 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300851	08/11/20 12:38	WS1	TAL HOU
Total/NA	Prep	3546			5.00 g	1.0 mL	301371	08/17/20 12:40	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301452	08/18/20 20:47	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		5			301062	08/14/20 07:51	W1N	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-6-5' Lab Sample ID: 600-209487-15
Date Collected: 08/04/20 11:50 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-6-5' Lab Sample ID: 600-209487-15
Date Collected: 08/04/20 11:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.2**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.26 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 19:49	KLV	TAL HOU
Total/NA	Prep	5030B			10.12 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300851	08/11/20 13:10	WS1	TAL HOU
Total/NA	Prep	3546			5.00 g	1.0 mL	301371	08/17/20 12:40	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301452	08/18/20 21:23	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		10			301062	08/14/20 08:55	W1N	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-6-8' Lab Sample ID: 600-209487-16
Date Collected: 08/04/20 11:55 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-6-8' Lab Sample ID: 600-209487-16
Date Collected: 08/04/20 11:55 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.91 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 20:15	KLV	TAL HOU
Total/NA	Prep	5030B			9.85 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300851	08/11/20 13:44	WS1	TAL HOU
Total/NA	Prep	3546			5.07 g	1.0 mL	301371	08/17/20 12:40	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301452	08/18/20 21:58	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		5			301062	08/14/20 09:15	W1N	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-7-6' Lab Sample ID: 600-209487-17
Date Collected: 08/04/20 13:55 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-7-6' Lab Sample ID: 600-209487-17

Date Collected: 08/04/20 13:55 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 81.6**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.11 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 20:40	KLV	TAL HOU
Total/NA	Prep	5030B			10.11 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300851	08/11/20 14:20	WS1	TAL HOU
Total/NA	Prep	3546			10.00 g	1.0 mL	300964	08/12/20 08:32	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 01:19	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		10			301062	08/14/20 09:36	W1N	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-7-9' Lab Sample ID: 600-209487-18

Date Collected: 08/04/20 14:00 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-7-9' Lab Sample ID: 600-209487-18

Date Collected: 08/04/20 14:00 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 84.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.04 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 21:06	KLV	TAL HOU
Total/NA	Prep	5030B			9.85 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300851	08/11/20 14:59	WS1	TAL HOU
Total/NA	Prep	3546			10.02 g	1.0 mL	300964	08/12/20 08:32	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 01:52	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		10			301062	08/14/20 09:56	W1N	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-8-6' Lab Sample ID: 600-209487-19

Date Collected: 08/04/20 15:00 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-8-6' Lab Sample ID: 600-209487-19

Date Collected: 08/04/20 15:00 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.25 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 21:31	KLV	TAL HOU
Total/NA	Prep	5030B			10.20 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300851	08/11/20 15:38	WS1	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-8-6' Lab Sample ID: 600-209487-19

Date Collected: 08/04/20 15:00 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			5.01 g	1.0 mL	301371	08/17/20 12:40	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301452	08/18/20 22:34	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301062	08/14/20 10:17	W1N	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-8-9' Lab Sample ID: 600-209487-20

Date Collected: 08/04/20 15:05 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-8-9' Lab Sample ID: 600-209487-20

Date Collected: 08/04/20 15:05 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 72.3**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.96 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 21:56	KLV	TAL HOU
Total/NA	Prep	5030B			9.87 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	301053	08/13/20 07:54	WS1	TAL HOU
Total/NA	Prep	3546			3.00 g	1.0 mL	301371	08/17/20 12:40	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301452	08/18/20 23:10	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301062	08/14/20 10:37	W1N	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-9-6' Lab Sample ID: 600-209487-21

Date Collected: 08/04/20 15:50 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-9-6' Lab Sample ID: 600-209487-21

Date Collected: 08/04/20 15:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 76.2**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.70 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 22:22	KLV	TAL HOU
Total/NA	Prep	5030B			10.15 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	301053	08/13/20 08:19	WS1	TAL HOU
Total/NA	Prep	3546			5.02 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 04:47	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301062	08/14/20 11:38	W1N	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080420-CN-DP-9-9' Lab Sample ID: 600-209487-22
Date Collected: 08/04/20 15:55 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080420-CN-DP-9-9' Lab Sample ID: 600-209487-22
Date Collected: 08/04/20 15:55 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.6**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.77 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 22:47	KLV	TAL HOU
Total/NA	Prep	5030B			10.79 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300953	08/12/20 16:27	WS1	TAL HOU
Total/NA	Prep	3546			5.01 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 05:22	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		10			301062	08/14/20 11:59	W1N	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-10-5' Lab Sample ID: 600-209487-23
Date Collected: 08/05/20 08:15 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-10-5' Lab Sample ID: 600-209487-23
Date Collected: 08/05/20 08:15 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 85.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.82 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 23:12	KLV	TAL HOU
Total/NA	Prep	5030B			10.23 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300953	08/12/20 16:53	WS1	TAL HOU
Total/NA	Prep	3546			5.02 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 06:33	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		50			301062	08/14/20 13:00	W1N	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-10-8' Lab Sample ID: 600-209487-24
Date Collected: 08/05/20 08:20 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-10-8' Lab Sample ID: 600-209487-24

Date Collected: 08/05/20 08:20 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 100.0**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.32 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300771	08/10/20 23:37	KLV	TAL HOU
Total/NA	Prep	5030B			9.80 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300953	08/12/20 17:18	WS1	TAL HOU
Total/NA	Prep	3546			5.00 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 07:28	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		10			301062	08/14/20 14:01	W1N	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-11-5' Lab Sample ID: 600-209487-25

Date Collected: 08/05/20 09:00 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-11-5' Lab Sample ID: 600-209487-25

Date Collected: 08/05/20 09:00 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 80.6**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.44 g	5 mL	300721	08/09/20 12:02	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300850	08/11/20 18:31	WS1	TAL HOU
Total/NA	Prep	5030B			9.81 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300953	08/12/20 17:44	WS1	TAL HOU
Total/NA	Prep	3546			5.04 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 10:23	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		10			301062	08/14/20 14:22	W1N	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-11-8 Lab Sample ID: 600-209487-26

Date Collected: 08/05/20 09:05 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-11-8 Lab Sample ID: 600-209487-26

Date Collected: 08/05/20 09:05 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 91.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.08 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300850	08/11/20 11:22	WS1	TAL HOU
Total/NA	Prep	5030B			10.53 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	301053	08/13/20 08:44	WS1	TAL HOU

Eurofins TestAmerica, Houston

Released to Imaging: 6/7/2023 10:53:13 AM

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-11-8 Lab Sample ID: 600-209487-26

Date Collected: 08/05/20 09:05 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 91.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			5.00 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 08:02	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		10			301062	08/14/20 14:42	W1N	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-12-6' Lab Sample ID: 600-209487-27

Date Collected: 08/05/20 09:45 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-12-6' Lab Sample ID: 600-209487-27

Date Collected: 08/05/20 09:45 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 81.2**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.03 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300850	08/11/20 11:45	WS1	TAL HOU
Total/NA	Prep	5030B			10.12 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	301053	08/13/20 09:08	WS1	TAL HOU
Total/NA	Prep	3546			5.00 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 11:12	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		20			301062	08/14/20 15:02	W1N	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-12-9' Lab Sample ID: 600-209487-28

Date Collected: 08/05/20 09:50 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-12-9' Lab Sample ID: 600-209487-28

Date Collected: 08/05/20 09:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 84.0**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.93 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300850	08/11/20 12:08	WS1	TAL HOU
Total/NA	Prep	5030B			10.07 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	301053	08/13/20 09:33	WS1	TAL HOU
Total/NA	Prep	3546			5.02 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 08:37	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		10			301062	08/14/20 15:23	W1N	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-13-6' Lab Sample ID: 600-209487-29
Date Collected: 08/05/20 10:50 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-13-6' Lab Sample ID: 600-209487-29
Date Collected: 08/05/20 10:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.4**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.98 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300850	08/11/20 13:43	WS1	TAL HOU
Total/NA	Prep	5030B			10.04 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	301053	08/13/20 09:58	WS1	TAL HOU
Total/NA	Prep	3546			5.00 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 11:48	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		10			301426	08/18/20 11:12	W1N	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-13-9' Lab Sample ID: 600-209487-30
Date Collected: 08/05/20 10:55 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-13-9' Lab Sample ID: 600-209487-30
Date Collected: 08/05/20 10:55 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 76.5**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.55 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300850	08/11/20 14:07	WS1	TAL HOU
Total/NA	Prep	5030B			10.03 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	301053	08/13/20 10:23	WS1	TAL HOU
Total/NA	Prep	3546			5.01 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 09:12	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301426	08/18/20 12:13	W1N	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-14-6' Lab Sample ID: 600-209487-31
Date Collected: 08/05/20 11:25 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-14-6' Lab Sample ID: 600-209487-31

Date Collected: 08/05/20 11:25 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.3**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.74 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300850	08/11/20 14:31	WS1	TAL HOU
Total/NA	Prep	5030B			9.69 g	10 mL	300863	08/11/20 08:53	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300953	08/12/20 16:01	WS1	TAL HOU
Total/NA	Prep	3546			10.07 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 12:24	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301426	08/18/20 12:34	W1N	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-14-9' Lab Sample ID: 600-209487-32

Date Collected: 08/05/20 11:30 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-14-9' Lab Sample ID: 600-209487-32

Date Collected: 08/05/20 11:30 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 79.4**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.92 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300850	08/11/20 14:55	WS1	TAL HOU
Total/NA	Prep	5030B			9.52 g	10 mL	300717	08/08/20 15:03	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300953	08/12/20 09:32	WS1	TAL HOU
Total/NA	Prep	3546			5.02 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 14:20	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		5			301426	08/18/20 12:54	W1N	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-15-5' Lab Sample ID: 600-209487-33

Date Collected: 08/05/20 12:10 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-15-5' Lab Sample ID: 600-209487-33

Date Collected: 08/05/20 12:10 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.74 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300850	08/11/20 15:19	WS1	TAL HOU
Total/NA	Prep	5030B			10.10 g	10 mL	300717	08/08/20 15:03	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300953	08/12/20 10:00	WS1	TAL HOU

Eurofins TestAmerica, Houston

Released to Imaging: 6/7/2023 10:53:13 AM

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-15-5' Lab Sample ID: 600-209487-33
Date Collected: 08/05/20 12:10 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 82.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			5.00 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 14:58	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301426	08/18/20 13:15	W1N	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-15-11' Lab Sample ID: 600-209487-34
Date Collected: 08/05/20 17:15 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-15-11' Lab Sample ID: 600-209487-34
Date Collected: 08/05/20 17:15 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 79.4**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.89 g	5 mL	300718	08/08/20 15:31	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300850	08/11/20 15:43	WS1	TAL HOU
Total/NA	Prep	5030B	DL		0.84 g	5 mL	300721	08/09/20 12:02	WS1	TAL HOU
Total/NA	Analysis	8260B	DL	1	5 g	5 g	300952	08/12/20 11:17	WS1	TAL HOU
Total/NA	Prep	5030B			10.64 g	10 mL	300717	08/08/20 15:03	WS1	TAL HOU
Total/NA	Analysis	8015B		500	250 uL	5 mL	301053	08/13/20 10:47	WS1	TAL HOU
Total/NA	Prep	3546			5.01 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 15:36	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301426	08/18/20 13:35	W1N	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-15-20' Lab Sample ID: 600-209487-35
Date Collected: 08/05/20 17:20 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-15-20' Lab Sample ID: 600-209487-35
Date Collected: 08/05/20 17:20 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 71.7**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.58 g	5 mL	300721	08/09/20 12:02	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300850	08/11/20 16:07	WS1	TAL HOU
Total/NA	Prep	5030B			9.89 g	10 mL	300717	08/08/20 15:03	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300953	08/12/20 14:16	WS1	TAL HOU
Total/NA	Prep	3546			5.00 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 16:14	RJV	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-15-20' Lab Sample ID: 600-209487-35

Date Collected: 08/05/20 17:20 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 71.7**

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	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301663	08/20/20 13:44	DAW	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-16-5' Lab Sample ID: 600-209487-36

Date Collected: 08/05/20 14:45 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-16-5' Lab Sample ID: 600-209487-36

Date Collected: 08/05/20 14:45 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 83.0**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.86 g	5 mL	300721	08/09/20 12:02	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300850	08/11/20 16:31	WS1	TAL HOU
Total/NA	Prep	5030B			10.10 g	10 mL	300717	08/08/20 15:03	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300953	08/12/20 14:44	WS1	TAL HOU
Total/NA	Prep	3546			5.03 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 16:52	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301663	08/20/20 14:45	DAW	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-16-8' Lab Sample ID: 600-209487-37

Date Collected: 08/05/20 14:50 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-16-8' Lab Sample ID: 600-209487-37

Date Collected: 08/05/20 14:50 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 78.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.87 g	5 mL	300721	08/09/20 12:02	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300850	08/11/20 16:55	WS1	TAL HOU
Total/NA	Prep	5030B			9.90 g	10 mL	300717	08/08/20 15:03	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300953	08/12/20 15:35	WS1	TAL HOU
Total/NA	Prep	3546			5.00 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 17:30	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301663	08/20/20 15:05	DAW	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DP-17-5' Lab Sample ID: 600-209487-38
Date Collected: 08/05/20 15:35 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-17-5' Lab Sample ID: 600-209487-38
Date Collected: 08/05/20 15:35 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 93.6**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.02 g	5 mL	300721	08/09/20 12:02	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300850	08/11/20 17:19	WS1	TAL HOU
Total/NA	Prep	5030B			10.15 g	10 mL	300717	08/08/20 15:03	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300953	08/12/20 12:24	WS1	TAL HOU
Total/NA	Prep	3546			5.00 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 18:08	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301663	08/20/20 15:26	DAW	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-17-8' Lab Sample ID: 600-209487-39
Date Collected: 08/05/20 15:40 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Client Sample ID: S-11213301-080520-CN-DP-17-8' Lab Sample ID: 600-209487-39
Date Collected: 08/05/20 15:40 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 79.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.50 g	5 mL	300721	08/09/20 12:02	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300850	08/11/20 17:43	WS1	TAL HOU
Total/NA	Prep	5030B			10.20 g	10 mL	300717	08/08/20 15:03	WS1	TAL HOU
Total/NA	Analysis	8015B		1	250 uL	5 mL	300953	08/12/20 12:52	WS1	TAL HOU
Total/NA	Prep	3546			3.00 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 18:45	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301663	08/20/20 15:46	DAW	TAL HOU

Client Sample ID: S-11213301-080520-CN-DPW-15-8' Lab Sample ID: 600-209487-41
Date Collected: 08/05/20 12:15 **Matrix: Solid**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			300861	08/11/20 08:50	ANP	TAL HOU

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: S-11213301-080520-CN-DPW-15-8' **Lab Sample ID: 600-209487-41**
Date Collected: 08/05/20 12:15 **Matrix: Solid**
Date Received: 08/07/20 09:20 **Percent Solids: 79.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.99 g	5 mL	300721	08/09/20 12:02	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	300850	08/11/20 18:07	WS1	TAL HOU
Total/NA	Prep	5030B			10.19 g	10 mL	300717	08/08/20 15:03	WS1	TAL HOU
Total/NA	Analysis	8015B		25	250 uL	5 mL	301053	08/13/20 11:12	WS1	TAL HOU
Total/NA	Prep	3546			5.00 g	1.0 mL	301022	08/12/20 14:58	EAT	TAL HOU
Total/NA	Analysis	8015D		1			301085	08/14/20 19:23	RJV	TAL HOU
Soluble	Leach	DI Leach			5 g	50 mL	301125	08/13/20 12:04	DTN	TAL HOU
Soluble	Analysis	300.0		1			301663	08/20/20 16:06	DAW	TAL HOU

Laboratory References:
TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Accreditation/Certification Summary

Client: GHD Services Inc. Job ID: 600-209487-1
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Laboratory: Eurofins TestAmerica, Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	20-052-0	08-04-21
Louisiana	NELAP	01967	06-30-21
Oklahoma	State	2019-180	08-31-20
Texas	NELAP	T104704223-20-26	10-31-20
USDA	US Federal Programs	P330-18-00130	04-30-21

Released to Imaging: 6/7/2023 10:53:13 AM
Received by OCD: 6/2/2023 1:09:40 PM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: CN	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-78251-21066.1
Client Contact: Daniel Wascom	Phone: 716 818 0224	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page
Company: GHD Services Inc.				Job #:
Address: 5551 Corporate Boulevard Suite 200	Due Date Requested:			
City: Baton Rouge	TAT Requested (days):			
State, Zip: LA, 70808				
Phone:	PO #:			
Email: Daniel.Wascom@ghd.com	WO #:			
Project Name: 11213301-08 / Halliburton 2311 S 1st St	Project #: 60012556			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) TCL Volatiles	300_ORGFM_28D - 300 Chloride	Moisture	8015D_DRO/ ORO	8015B_GRO	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
S-11213301-080320-CN-DP-1-5'	8-3-20	1320	G	S			X	X	X	X	X		5 Day Turn around! Rush!
S-11213301-080320-CN-DP-1-12'	8-3-20	1330					X	X	X	X	X		5 Day Turn around Rush!
S-11213301-080320-CN-DP-1-15'	8-3-20	1350					X	X	X	X	X		
S-11213301-080320-CN-DP-2-5'	8-3-20	1440					X	X	X	X	X		
S-11213301-080320-CN-DP-2-10'	8-3-20	1500					X	X	X	X	X		
S-11213301-080320-CN-DP-2-11'	8-3-20	1510					X	X	X	X	X		
S-11213301-080420-CN-DP-3-5'	8-4-20	0950					X	X	X	X	X		1/4
S-11213301-080420-CN-DP-3-10'	8-4-20	0955					X	X	X	X	X		
S-11213301-080420-CN-DP-3-15'	8-4-20	1000					X	X	X	X	X		
S-11213301-080420-CN-DP-4-5'	8-4-20	1030					X	X	X	X	X		
S-11213301-080420-CN-DP-4-10'	8-4-20	1035	V	V			X	X	X	X	X		

600-209487 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	8-6-20 1500	GHD		8/7/20 920	ETA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Released to Imaging: 6/7/2023 10:53:13 AM
Received by OCD: 6/2/2023 1:09:40 PM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Charles Neligh	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-78251-21066.1
Client Contact: Daniel Wascom	Phone: 716 818 0224	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page
Company: GHD Services Inc.				Job #:
Address: 5551 Corporate Boulevard Suite 200	Due Date Requested:			
City: Baton Rouge	TAT Requested (days):			
State, Zip: LA, 70808				
Phone:	PO #:			
Email: Daniel.Wascom@ghd.com	WO #:			
Project Name: 11213301-08 / Halliburton 2311 S 1st St	Project #: 60012556			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) TCL Volatiles	300_ORGFM_28D - 300 Chloride	Moisture	8015D_DRO/ ORO	8015B_GRO	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
S-11213301-080420-CN-DP-4-15'	8-4-20	1040	G	S			X	X	X	X	X		
S-11213301-080420-CN-DP-5-5'		1110					X	X	X	X	X		
S-11213301-080420-CN-DP-5-8'		1115					X	X	X	X	X		
S-11213301-080420-CN-DP-6-5'		1150					X	X	X	X	X		
S-11213301-080420-CN-DP-6-8'		1155					X	X	X	X	X		
S-11213301-080420-CN-DP-7-6'		1355					X	X	X	X	X		2/4
S-11213301-080420-CN-DP-7-9'		1400					X	X	X	X	X		
S-11213301-080420-CN-DP-8-6'		1500					X	X	X	X	X		
S-11213301-080420-CN-DP-8-9'		1505					X	X	X	X	X		
S-11213301-080420-CN-DP-9-6'		1550					X	X	X	X	X		
S-11213301-080420-CN-DP-9-9'		1555					X	X	X	X	X		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Charles Neligh	8-6-20 1500	GHD		8/7/20 920	EHA
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:

Ver: 01/16/2019

Released to Imaging: 6/7/2023 10:53:13 AM
Received by OCD: 6/2/2023 1:09:40 PM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: CN	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-78251-21066.1
Client Contact: Daniel Wascom	Phone: 716 818 0224	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page
Company: GHD Services Inc.				Job #:
Address: 5551 Corporate Boulevard Suite 200	Due Date Requested:			
City: Baton Rouge	TAT Requested (days):			
State, Zip: LA, 70808				
Phone:	PO #:			
Email: Daniel.Wascom@ghd.com	WO #:			
Project Name: 11213301-08 / Halliburton 2311 S 1st St	Project #: 60012556			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) TCL Volatiles	300_ORGFM_28D - 300 Chloride	Moisture	8015D_DRO/ ORO	8015B_GRO	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
S-11213301-080520-CN-DP-10-5'	8-5-20	0815	G	S									
S-11213301-080520-CN-DP-10-8'		0820											
S-11213301-080520-CN-DP-11-5'		0900											
S-11213301-080520-CN-DP-11-8'		0905											
S-11213301-080520-CN-DP-12-6'		0945											
S-11213301-080520-CN-DP-12-9'		0950											
S-11213301-080520-CN-DP-13-6'		1050											
S-11213301-080520-CN-DP-13-9'		1055											
S-11213301-080520-CN-DP-14-6'		1125											
S-11213301-080520-CN-DP-14-9'		1130											
S-11213301-080520-CN-DP-15-5'		1210											

5/4

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	8-6-20 - 1515	GHD		8/7/20 920	ETA
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:

Ver: 01/16/2019

Released to Imaging: 6/7/2023 10:53:13 AM
Received by OCD: 6/2/2023 1:09:40 PM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: CN	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-78251-21066.1
Client Contact: Daniel Wascom	Phone: 716 818 0224	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page
Company: GHD Services Inc.				Job #:
Address: 5551 Corporate Boulevard Suite 200	Due Date Requested:			
City: Baton Rouge	TAT Requested (days):			
State, Zip: LA, 70808				
Phone:	PO #:			
Email: Daniel.Wascom@ghd.com	WO #:			
Project Name: 11213301-08 / Halliburton 2311 S 1st St	Project #: 60012556			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) TCL Volatiles [redacted]	300_ORGFM_28D - 300 Chloride	Moisture	8015D_DRO/ ORO	8015B_GRO	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
S-11213301-080520-CN-DP-15-11'	8-5-20	1715	G	S			X	X	X	X	X		
S-11213301-080520-CN-DP-15-20'		1720					X	X	X	X	X		
S-11213301-080520-CN-DP-16-5'		1445					X	X	X	X	X		
S-11213301-080520-CN-DP-16-8'		1450					X	X	X	X	X		4/4
S-11213301-080520-CN-DP-17-5'		1535					X	X	X	X	X		
S-11213301-080520-CN-DP-17-8'		1540					X	X	X	X	X		
GW-11213301-080520-CN-DPW-1		1745	G	W			X	X					HOLD DPW-1 untill results from DP-1-5' and DP-1-12'

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		8-16-20 1500	GHD		8/7/20 920	EHA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	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:

Ver: 01/16/2019

Loc: 600
209487

eurofins | Environment Testing TestAmerica

Eurofins TestAmerica Houston

Sample Receipt Checklist

'20 AUG 7 9:20

Date/Time Received: _____

JOB NUMBER: _____ CLIENT: GHD

UNPACKED BY: JR CARRIER/DRIVER: Fedex

Custody Seal Present: ☑YES ☐NO Number of Coolers Received: 4

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
0333	Y / N	Y / N	4.2	680	+0.1	4.3
0300	Y / N	Y / N	3.1			3.2
0311	Y / N	Y / N	1.9			2.0
0322	Y / N	Y / N	2.9			3.0
	Y / N	Y / N				
	Y / N	Y / N				

8/7/20

CF = correction factor

Samples received on ice? ☑YES ☐NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☑NO ☐YES

Base samples are>pH 12: ☐YES ☐NO Acid preserved are<pH 2: ☐YES ☐NO

TX1005 samples frozen upon receipt: ☐ YES DATE & TIME PUT IN FREEZER: _____

pH paper Lot #_____ VOA headspace acceptable (5-6mm): ☑YES ☐NO ☐NA

Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	☑YES	☐ NO

COMMENTS:

8/7/20

HS-SA-WI-013 Rev. 4A; 08/26/2019

Login Sample Receipt Checklist

Client: GHD Services Inc. Job Number: 600-209487-1

Login Number: 209487 **List Source: Eurofins TestAmerica, Houston**
List Number: 1
Creator: Rubio, Yuri

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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	4.3,3.2,2.0,3.0
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	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Appendix D
Groundwater Laboratory Analytical Data

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-209487-2
Client Project/Site: 11213301-08 / Halliburton 2311 S 1st St

For:
GHD Services Inc.
5551 Corporate Boulevard
Suite 200
Baton Rouge, Louisiana 70808

Attn: Daniel Wascom

Authorized for release by:
8/14/2020 11:11:17 AM
Tiffany Fleming, Project Management Assistant I
(361)289-2673
Tiffany.Fleming@Eurofinset.com

Designee for

Sachin Kudchadkar, Senior Project Manager
(713)690-4444
Sachin.Kudchadkar@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

Client: GHD Services Inc.
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Laboratory Job ID: 600-209487-2

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Case Narrative

Client: GHD Services Inc. Job ID: 600-209487-2
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Job ID: 600-209487-2

Laboratory: Eurofins TestAmerica, Houston

Narrative

Job Narrative
600-209487-2

Comments
No additional comments.

Receipt
The samples were received on 8/7/2020 9:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 2.0º C, 3.0º C, 3.2º C and 4.3º C.

Receipt Exceptions
1 Sample was not listed on the Chain-of-Custody (COC).

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) associated with batch 600-300773 recovered above the upper control limit for Chloromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCVIS 600-300773/2).

Method 8260B: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 600-300773 recovered outside control limits for the following analytes: MIBK and 2-Hexanone. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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.

Released to Imaging: 6/7/2023 10:53:13 AM

Method Summary

Client: GHD Services Inc. Job ID: 600-209487-2
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU
5030B	Purge and Trap	SW846	TAL HOU

Protocol References:

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.

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: GHD Services Inc.
Job ID: 600-209487-2
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
600-209487-40	GW-11213301-080520-CN-DPW-1	Water	08/05/20 17:45	08/07/20 09:20	

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-2
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: GW-11213301-080520-CN-DPW-1 **Lab Sample ID: 600-209487-40**
Date Collected: 08/05/20 17:45 **Matrix: Water**
Date Received: 08/07/20 09:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.098**		0.0050		mg/L			08/10/20 15:40	1
Benzene	ND		0.0010		mg/L			08/10/20 15:40	1
Chlorobromomethane	ND		0.0010		mg/L			08/10/20 15:40	1
Bromoform	**0.0058**		0.0010		mg/L			08/10/20 15:40	1
Bromomethane	ND		0.0020		mg/L			08/10/20 15:40	1
2-Butanone (MEK)	**0.059**		0.0020		mg/L			08/10/20 15:40	1
Carbon disulfide	ND		0.0020		mg/L			08/10/20 15:40	1
Carbon tetrachloride	ND		0.0010		mg/L			08/10/20 15:40	1
Dibromochloromethane	**0.0022**		0.0010		mg/L			08/10/20 15:40	1
Chlorobenzene	ND		0.0010		mg/L			08/10/20 15:40	1
Chloroethane	ND		0.0020		mg/L			08/10/20 15:40	1
Chloroform	ND		0.0010		mg/L			08/10/20 15:40	1
Chloromethane	ND		0.0020		mg/L			08/10/20 15:40	1
1,1-Dichloroethane	ND		0.0010		mg/L			08/10/20 15:40	1
1,2-Dichloroethane	ND		0.0010		mg/L			08/10/20 15:40	1
1,1-Dichloroethene	ND		0.0010		mg/L			08/10/20 15:40	1
trans-1,2-Dichloroethene	ND		0.0010		mg/L			08/10/20 15:40	1
1,2-Dichloropropane	ND		0.0010		mg/L			08/10/20 15:40	1
cis-1,3-Dichloropropene	ND		0.0010		mg/L			08/10/20 15:40	1
trans-1,3-Dichloropropene	ND		0.0010		mg/L			08/10/20 15:40	1
Trichlorofluoromethane	ND		1.0		ug/L			08/10/20 15:40	1
Ethylbenzene	**0.0054**		0.0010		mg/L			08/10/20 15:40	1
2-Hexanone	ND	*	0.0020		mg/L			08/10/20 15:40	1
Methylene Chloride	ND		0.0050		mg/L			08/10/20 15:40	1
4-Methyl-2-pentanone (MIBK)	ND	*	0.0020		mg/L			08/10/20 15:40	1
Styrene	**0.0062**		0.0010		mg/L			08/10/20 15:40	1
1,1,2,2-Tetrachloroethane	ND		0.0010		mg/L			08/10/20 15:40	1
Tetrachloroethene	ND		0.0010		mg/L			08/10/20 15:40	1
Toluene	**0.017**		0.0010		mg/L			08/10/20 15:40	1
1,1,1-Trichloroethane	ND		0.0010		mg/L			08/10/20 15:40	1
1,1,2-Trichloroethane	ND		0.0010		mg/L			08/10/20 15:40	1
Trichloroethene	ND		0.0010		mg/L			08/10/20 15:40	1
Vinyl acetate	ND		0.0020		mg/L			08/10/20 15:40	1
Vinyl chloride	ND		0.0020		mg/L			08/10/20 15:40	1
o-Xylene	**0.019**		0.0010		mg/L			08/10/20 15:40	1
m-Xylene & p-Xylene	**0.0037**		0.0010		mg/L			08/10/20 15:40	1
Xylenes, Total	**0.023**		0.0020		mg/L			08/10/20 15:40	1
Methyl acetate	ND		5.0		ug/L			08/10/20 15:40	1
cis-1,2-Dichloroethene	ND		0.0010		mg/L			08/10/20 15:40	1
Bromodichloromethane	ND		0.0010		mg/L			08/10/20 15:40	1
1,2-Dichloroethene, Total	ND		0.0020		mg/L			08/10/20 15:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0010		mg/L			08/10/20 15:40	1
1,2,4-Trichlorobenzene	ND		0.0010		mg/L			08/10/20 15:40	1
1,2-Dibromo-3-Chloropropane	ND		0.0010		mg/L			08/10/20 15:40	1
1,2-Dichlorobenzene	ND		0.0010		mg/L			08/10/20 15:40	1
1,3-Dichlorobenzene	ND		0.0010		mg/L			08/10/20 15:40	1
1,4-Dichlorobenzene	ND		0.0010		mg/L			08/10/20 15:40	1
Cyclohexane	ND		0.0010		mg/L			08/10/20 15:40	1
Dichlorodifluoromethane	ND		0.0010		mg/L			08/10/20 15:40	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-2
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: GW-11213301-080520-CN-DPW-1 **Lab Sample ID: 600-209487-40**
Date Collected: 08/05/20 17:45 **Matrix: Water**
Date Received: 08/07/20 09:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.0010		mg/L			08/10/20 15:40	1
Isopropylbenzene	ND		0.0010		mg/L			08/10/20 15:40	1
Methyl tert-butyl ether	ND		0.0010		mg/L			08/10/20 15:40	1
Methylcyclohexane	ND		1.0		ug/L			08/10/20 15:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/10/20 15:40*	*1*
Dibromofluoromethane	*122*		*62 - 130*		*08/10/20 15:40*	*1*
4-Bromofluorobenzene	*88*		*67 - 139*		*08/10/20 15:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*123*		*50 - 134*		*08/10/20 15:40*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**650**		40		mg/L			08/13/20 16:07	100

Definitions/Glossary

Client: GHD Services Inc. Job ID: 600-209487-2
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

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

Surrogate Summary

Client: GHD Services Inc. Job ID: 600-209487-2
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DBFM	BFB	DCA
Lab Sample ID	Client Sample ID	(70-130)	(62-130)	(67-139)	(50-134)
600-209487-40	GW-11213301-080520-CN-DPW-1	97	122	88	123
LCS 600-300773/3	Lab Control Sample	103	123	90	122
LCSD 600-300773/4	Lab Control Sample Dup	100	127	90	126
MB 600-300773/6	Method Blank	95	118	91	119

Surrogate Legend

TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane
BFB = 4-Bromofluorobenzene
DCA = 1,2-Dichloroethane-d4 (Surr)

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-2
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: MB 600-300773/6 **Client Sample ID: Method Blank**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 300773

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0050		mg/L			08/10/20 14:27	1
Benzene	ND		0.0010		mg/L			08/10/20 14:27	1
Chlorobromomethane	ND		0.0010		mg/L			08/10/20 14:27	1
Bromoform	ND		0.0010		mg/L			08/10/20 14:27	1
Bromomethane	ND		0.0020		mg/L			08/10/20 14:27	1
2-Butanone (MEK)	ND		0.0020		mg/L			08/10/20 14:27	1
Carbon disulfide	ND		0.0020		mg/L			08/10/20 14:27	1
Carbon tetrachloride	ND		0.0010		mg/L			08/10/20 14:27	1
Dibromochloromethane	ND		0.0010		mg/L			08/10/20 14:27	1
Chlorobenzene	ND		0.0010		mg/L			08/10/20 14:27	1
Chloroethane	ND		0.0020		mg/L			08/10/20 14:27	1
Chloroform	ND		0.0010		mg/L			08/10/20 14:27	1
Chloromethane	ND		0.0020		mg/L			08/10/20 14:27	1
1,1-Dichloroethane	ND		0.0010		mg/L			08/10/20 14:27	1
1,2-Dichloroethane	ND		0.0010		mg/L			08/10/20 14:27	1
1,1-Dichloroethene	ND		0.0010		mg/L			08/10/20 14:27	1
trans-1,2-Dichloroethene	ND		0.0010		mg/L			08/10/20 14:27	1
1,2-Dichloropropane	ND		0.0010		mg/L			08/10/20 14:27	1
cis-1,3-Dichloropropene	ND		0.0010		mg/L			08/10/20 14:27	1
trans-1,3-Dichloropropene	ND		0.0010		mg/L			08/10/20 14:27	1
Trichlorofluoromethane	ND		1.0		ug/L			08/10/20 14:27	1
Ethylbenzene	ND		0.0010		mg/L			08/10/20 14:27	1
2-Hexanone	ND		0.0020		mg/L			08/10/20 14:27	1
Methylene Chloride	ND		0.0050		mg/L			08/10/20 14:27	1
4-Methyl-2-pentanone (MIBK)	ND		0.0020		mg/L			08/10/20 14:27	1
Styrene	ND		0.0010		mg/L			08/10/20 14:27	1
1,1,2,2-Tetrachloroethane	ND		0.0010		mg/L			08/10/20 14:27	1
Tetrachloroethene	ND		0.0010		mg/L			08/10/20 14:27	1
Toluene	ND		0.0010		mg/L			08/10/20 14:27	1
1,1,1-Trichloroethane	ND		0.0010		mg/L			08/10/20 14:27	1
1,1,2-Trichloroethane	ND		0.0010		mg/L			08/10/20 14:27	1
Trichloroethene	ND		0.0010		mg/L			08/10/20 14:27	1
Vinyl acetate	ND		0.0020		mg/L			08/10/20 14:27	1
Vinyl chloride	ND		0.0020		mg/L			08/10/20 14:27	1
o-Xylene	ND		0.0010		mg/L			08/10/20 14:27	1
m-Xylene & p-Xylene	ND		0.0010		mg/L			08/10/20 14:27	1
Xylenes, Total	ND		0.0020		mg/L			08/10/20 14:27	1
Methyl acetate	ND		5.0		ug/L			08/10/20 14:27	1
cis-1,2-Dichloroethene	ND		0.0010		mg/L			08/10/20 14:27	1
Bromodichloromethane	ND		0.0010		mg/L			08/10/20 14:27	1
1,2-Dichloroethene, Total	ND		0.0020		mg/L			08/10/20 14:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0010		mg/L			08/10/20 14:27	1
1,2,4-Trichlorobenzene	ND		0.0010		mg/L			08/10/20 14:27	1
1,2-Dibromo-3-Chloropropane	ND		0.0010		mg/L			08/10/20 14:27	1
1,2-Dichlorobenzene	ND		0.0010		mg/L			08/10/20 14:27	1
1,3-Dichlorobenzene	ND		0.0010		mg/L			08/10/20 14:27	1
1,4-Dichlorobenzene	ND		0.0010		mg/L			08/10/20 14:27	1
Cyclohexane	ND		0.0010		mg/L			08/10/20 14:27	1

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-2
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: MB 600-300773/6 **Client Sample ID: Method Blank**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 300773

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0010		mg/L			08/10/20 14:27	1
1,2-Dibromoethane	ND		0.0010		mg/L			08/10/20 14:27	1
Isopropylbenzene	ND		0.0010		mg/L			08/10/20 14:27	1
Methyl tert-butyl ether	ND		0.0010		mg/L			08/10/20 14:27	1
Methylcyclohexane	ND		1.0		ug/L			08/10/20 14:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/10/20 14:27*	*1*
Dibromofluoromethane	*118*		*62 - 130*		*08/10/20 14:27*	*1*
4-Bromofluorobenzene	*91*		*67 - 139*		*08/10/20 14:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*119*		*50 - 134*		*08/10/20 14:27*	*1*

Lab Sample ID: LCS 600-300773/3 **Client Sample ID: Lab Control Sample**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 300773

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0200	0.0261		mg/L		130	18 - 144
Benzene	0.0100	0.00999		mg/L		100	70 - 130
Chlorobromomethane	0.0100	0.00980		mg/L		98	58 - 130
Bromoform	0.0100	0.00999		mg/L		100	54 - 133
Bromomethane	0.0100	0.00762		mg/L		76	25 - 150
2-Butanone (MEK)	0.0200	0.0260		mg/L		130	41 - 141
Carbon disulfide	0.0100	0.00978		mg/L		98	55 - 150
Carbon tetrachloride	0.0100	0.0104		mg/L		104	70 - 144
Dibromochloromethane	0.0100	0.0109		mg/L		109	62 - 130
Chlorobenzene	0.0100	0.0101		mg/L		101	69 - 130
Chloroethane	0.0100	0.00943		mg/L		94	47 - 150
Chloroform	0.0100	0.0102		mg/L		102	70 - 130
Chloromethane	0.0100	0.0139		mg/L		139	10 - 150
1,1-Dichloroethane	0.0100	0.0104		mg/L		104	70 - 140
1,2-Dichloroethane	0.0100	0.0108		mg/L		108	67 - 134
1,1-Dichloroethene	0.0100	0.00998		mg/L		100	58 - 148
trans-1,2-Dichloroethene	0.0100	0.00973		mg/L		97	68 - 131
1,2-Dichloropropane	0.0100	0.0109		mg/L		109	70 - 130
cis-1,3-Dichloropropene	0.0100	0.0104		mg/L		104	57 - 130
trans-1,3-Dichloropropene	0.0100	0.0106		mg/L		106	60 - 130
Trichlorofluoromethane	10.0	9.91		ug/L		99	43 - 150
Ethylbenzene	0.0100	0.0102		mg/L		102	70 - 130
2-Hexanone	0.0200	0.0270	*	mg/L		135	56 - 130
Methylene Chloride	0.0100	0.0105		mg/L		105	55 - 147
4-Methyl-2-pentanone (MIBK)	0.0200	0.0283	*	mg/L		142	62 - 136
Styrene	0.0100	0.0100		mg/L		100	70 - 130
1,1,2,2-Tetrachloroethane	0.0100	0.0118		mg/L		118	58 - 133
Tetrachloroethene	0.0100	0.0103		mg/L		103	47 - 150
Toluene	0.0100	0.00998		mg/L		100	70 - 130
1,1,1-Trichloroethane	0.0100	0.0101		mg/L		101	70 - 136
1,1,2-Trichloroethane	0.0100	0.0105		mg/L		105	70 - 130

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-2
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: LCS 600-300773/3 **Client Sample ID: Lab Control Sample**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 300773

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichloroethene	0.0100	0.0102		mg/L		102	70 - 130
Vinyl acetate	0.0200	0.0283		mg/L		142	10 - 150
Vinyl chloride	0.0100	0.0124		mg/L		124	33 - 150
o-Xylene	0.0100	0.0101		mg/L		101	70 - 130
m-Xylene & p-Xylene	0.0100	0.00992		mg/L		99	70 - 130
Xylenes, Total	0.0200	0.0200		mg/L		100	70 - 130
Methyl acetate	20.0	27.0		ug/L		135	46 - 142
cis-1,2-Dichloroethene	0.0100	0.00991		mg/L		99	68 - 130
Bromodichloromethane	0.0100	0.0107		mg/L		107	70 - 131
1,2-Dichloroethene, Total	0.0200	0.0196		mg/L		98	69 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0100	0.0101		mg/L		101	60 - 150
1,2,4-Trichlorobenzene	0.0100	0.0116		mg/L		116	46 - 150
1,2-Dibromo-3-Chloropropane	0.0100	0.0105		mg/L		105	41 - 142
1,2-Dichlorobenzene	0.0100	0.0102		mg/L		102	70 - 130
1,3-Dichlorobenzene	0.0100	0.00975		mg/L		97	70 - 130
1,4-Dichlorobenzene	0.0100	0.0100		mg/L		100	70 - 130
Cyclohexane	0.0100	0.0104		mg/L		104	10 - 150
Dichlorodifluoromethane	0.0100	0.0104		mg/L		104	10 - 150
1,2-Dibromoethane	0.0100	0.00987		mg/L		99	67 - 130
Isopropylbenzene	0.0100	0.00949		mg/L		95	65 - 132
Methyl tert-butyl ether	0.0100	0.0103		mg/L		103	56 - 132
Methylcyclohexane	10.0	10.8		ug/L		108	68 - 147

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*103*		*70 - 130*
Dibromofluoromethane	*123*		*62 - 130*
4-Bromofluorobenzene	*90*		*67 - 139*
1,2-Dichloroethane-d4 (Surr)	*122*		*50 - 134*

Lab Sample ID: LCSD 600-300773/4 **Client Sample ID: Lab Control Sample Dup**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 300773

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.0200	0.0285		mg/L		143	18 - 144	9	20
Benzene	0.0100	0.00998		mg/L		100	70 - 130	0	20
Chlorobromomethane	0.0100	0.00995		mg/L		100	58 - 130	2	20
Bromoform	0.0100	0.00995		mg/L		99	54 - 133	0	20
Bromomethane	0.0100	0.00797		mg/L		80	25 - 150	4	20
2-Butanone (MEK)	0.0200	0.0277		mg/L		139	41 - 141	7	20
Carbon disulfide	0.0100	0.00961		mg/L		96	55 - 150	2	20
Carbon tetrachloride	0.0100	0.0103		mg/L		103	70 - 144	1	20
Dibromochloromethane	0.0100	0.0109		mg/L		109	62 - 130	0	20
Chlorobenzene	0.0100	0.00987		mg/L		99	69 - 130	2	20
Chloroethane	0.0100	0.0101		mg/L		101	47 - 150	7	20
Chloroform	0.0100	0.0101		mg/L		101	70 - 130	1	20
Chloromethane	0.0100	0.0149		mg/L		149	10 - 150	7	20
1,1-Dichloroethane	0.0100	0.0102		mg/L		102	70 - 140	2	20

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-2
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: LCSD 600-300773/4 **Client Sample ID: Lab Control Sample Dup**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 300773

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichloroethane			0.0100	0.0112		mg/L		112	67 - 134	4	20
1,1-Dichloroethene			0.0100	0.00976		mg/L		98	58 - 148	2	20
trans-1,2-Dichloroethene			0.0100	0.00955		mg/L		95	68 - 131	2	20
1,2-Dichloropropane			0.0100	0.0110		mg/L		110	70 - 130	1	20
cis-1,3-Dichloropropene			0.0100	0.0104		mg/L		104	57 - 130	1	20
trans-1,3-Dichloropropene			0.0100	0.0107		mg/L		107	60 - 130	0	20
Trichlorofluoromethane			10.0	10.2		ug/L		102	43 - 150	3	20
Ethylbenzene			0.0100	0.00987		mg/L		99	70 - 130	3	20
2-Hexanone			0.0200	0.0289	*	mg/L		144	56 - 130	7	20
Methylene Chloride			0.0100	0.0108		mg/L		108	55 - 147	2	20
4-Methyl-2-pentanone (MIBK)			0.0200	0.0300	*	mg/L		150	62 - 136	6	20
Styrene			0.0100	0.00983		mg/L		98	70 - 130	2	20
1,1,2,2-Tetrachloroethane			0.0100	0.0117		mg/L		117	58 - 133	1	20
Tetrachloroethene			0.0100	0.00989		mg/L		99	47 - 150	4	20
Toluene			0.0100	0.00982		mg/L		98	70 - 130	2	20
1,1,1-Trichloroethane			0.0100	0.0101		mg/L		101	70 - 136	0	20
1,1,2-Trichloroethane			0.0100	0.0106		mg/L		106	70 - 130	1	20
Trichloroethene			0.0100	0.0102		mg/L		102	70 - 130	0	20
Vinyl acetate			0.0200	0.0290		mg/L		145	10 - 150	2	20
Vinyl chloride			0.0100	0.0128		mg/L		128	33 - 150	3	20
o-Xylene			0.0100	0.00984		mg/L		98	70 - 130	2	20
m-Xylene & p-Xylene			0.0100	0.00966		mg/L		97	70 - 130	3	20
Xylenes, Total			0.0200	0.0195		mg/L		98	70 - 130	3	20
Methyl acetate			20.0	28.3		ug/L		142	46 - 142	5	20
cis-1,2-Dichloroethene			0.0100	0.0100		mg/L		100	68 - 130	1	20
Bromodichloromethane			0.0100	0.0111		mg/L		111	70 - 131	3	20
1,2-Dichloroethene, Total			0.0200	0.0196		mg/L		98	69 - 130	0	20
1,1,2-Trichloro-1,2,2-trifluoroethane			0.0100	0.00992		mg/L		99	60 - 150	2	20
1,2,4-Trichlorobenzene			0.0100	0.0118		mg/L		118	46 - 150	1	20
1,2-Dibromo-3-Chloropropane			0.0100	0.0110		mg/L		110	41 - 142	5	20
1,2-Dichlorobenzene			0.0100	0.00998		mg/L		100	70 - 130	2	20
1,3-Dichlorobenzene			0.0100	0.00950		mg/L		95	70 - 130	3	20
1,4-Dichlorobenzene			0.0100	0.00990		mg/L		99	70 - 130	1	20
Cyclohexane			0.0100	0.0102		mg/L		102	10 - 150	2	20
Dichlorodifluoromethane			0.0100	0.0108		mg/L		108	10 - 150	4	20
1,2-Dibromoethane			0.0100	0.0102		mg/L		102	67 - 130	3	20
Isopropylbenzene			0.0100	0.00911		mg/L		91	65 - 132	4	20
Methyl tert-butyl ether			0.0100	0.0107		mg/L		107	56 - 132	4	20
Methylcyclohexane			10.0	10.8		ug/L		108	68 - 147	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*100*		*70 - 130*
Dibromofluoromethane	*127*		*62 - 130*
4-Bromofluorobenzene	*90*		*67 - 139*
1,2-Dichloroethane-d4 (Surr)	*126*		*50 - 134*

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-2
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-301064/6 **Client Sample ID: Method Blank**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 301064

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.40		mg/L			08/13/20 08:46	1

Lab Sample ID: LCS 600-301064/7 **Client Sample ID: Lab Control Sample**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 301064

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	20.0	20.1		mg/L		101	90 - 110

QC Association Summary

Client: GHD Services Inc. Job ID: 600-209487-2
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

GC/MS VOA

Analysis Batch: 300773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-40	GW-11213301-080520-CN-DPW-1	Total/NA	Water	8260B	
MB 600-300773/6	Method Blank	Total/NA	Water	8260B	
LCS 600-300773/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-300773/4	Lab Control Sample Dup	Total/NA	Water	8260B	

HPLC/IC

Analysis Batch: 301064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-40	GW-11213301-080520-CN-DPW-1	Total/NA	Water	300.0	
MB 600-301064/6	Method Blank	Total/NA	Water	300.0	
LCS 600-301064/7	Lab Control Sample	Total/NA	Water	300.0	

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-2
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: GW-11213301-080520-CN-DPW-1 Lab Sample ID: 600-209487-40

Date Collected: 08/05/20 17:45 **Matrix: Water**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	300773	08/10/20 15:40	YX1	TAL HOU
Total/NA	Analysis	300.0		100			301064	08/13/20 16:07	W1N	TAL HOU

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Accreditation/Certification Summary

Client: GHD Services Inc. Job ID: 600-209487-2
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Laboratory: Eurofins TestAmerica, Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	20-052-0	08-04-21
Louisiana	NELAP	01967	06-30-21
Oklahoma	State	2019-180	08-31-20
Texas	NELAP	T104704223-20-26	10-31-20
USDA	US Federal Programs	P330-18-00130	04-30-21

Released to Imaging: 6/7/2023 10:53:13 AM
Received by OCD: 6/2/2023 1:09:40 PM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: CN	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-78251-21066.1
Client Contact: Daniel Wascom	Phone: 716 818 0224	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page
Company: GHD Services Inc.				Job #:
Address: 5551 Corporate Boulevard Suite 200	Due Date Requested:			
City: Baton Rouge	TAT Requested (days):			
State, Zip: LA, 70808				
Phone:	PO #:			
Email: Daniel.Wascom@ghd.com	WO #:			
Project Name: 11213301-08 / Halliburton 2311 S 1st St	Project #: 60012556			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) TCL Volatiles	300_ORGFM_28D - 300 Chloride	Moisture	8015D_DRO/ ORO	8015B_GRO	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
S-11213301-080320-CN-DP-1-5'	8-3-20	1320	G	S			X	X	X	X	X		5 Day Turn around Rush!
S-11213301-080320-CN-DP-1-12'	8-3-20	1330					X	X	X	X	X		5 Day Turn around Rush!
S-11213301-080320-CN-DP-1-15'	8-3-20	1350					X	X	X	X	X		
S-11213301-080320-CN-DP-2-5'	8-3-20	1440					X	X	X	X	X		
S-11213301-080320-CN-DP-2-10'	8-3-20	1500					X	X	X	X	X		
S-11213301-080320-CN-DP-2-11'	8-3-20	1510					X	X	X	X	X		
S-11213301-080420-CN-DP-3-5'	8-4-20	0950					X	X	X	X	X		1/4
S-11213301-080420-CN-DP-3-10'	8-4-20	0955					X	X	X	X	X		
S-11213301-080420-CN-DP-3-15'	8-4-20	1000					X	X	X	X	X		
S-11213301-080420-CN-DP-4-5'	8-4-20	1030					X	X	X	X	X		
S-11213301-080420-CN-DP-4-10'	8-4-20	1035	V	V			X	X	X	X	X		

600-209487 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	8-6-20 1500	GHD		8/7/20 920	ETA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Released to Imaging: 6/7/2023 10:53:13 AM
Received by OCD: 6/2/2023 1:09:40 PM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Charles Neligh	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-78251-21066.1
Client Contact: Daniel Wascom	Phone: 716 818 0224	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page
Company: GHD Services Inc.				Job #:
Address: 5551 Corporate Boulevard Suite 200	Due Date Requested:			
City: Baton Rouge	TAT Requested (days):			
State, Zip: LA, 70808				
Phone:	PO #:			
Email: Daniel.Wascom@ghd.com	WO #:			
Project Name: 11213301-08 / Halliburton 2311 S 1st St	Project #: 60012556			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) TCL Volatiles	300_ORGFM_28D - 300 Chloride	Moisture	8015D_DRO/ ORO	8015B_GRO	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
S-11213301-080420-CN-DP-4-15'	8-4-20	1040	G	S			X	X	X	X	X		
S-11213301-080420-CN-DP-5-5'		1110					X	X	X	X	X		
S-11213301-080420-CN-DP-5-8'		1115					X	X	X	X	X		
S-11213301-080420-CN-DP-6-5'		1150					X	X	X	X	X		
S-11213301-080420-CN-DP-6-8'		1155					X	X	X	X	X		
S-11213301-080420-CN-DP-7-6'		1355					X	X	X	X	X		2/4
S-11213301-080420-CN-DP-7-9'		1400					X	X	X	X	X		
S-11213301-080420-CN-DP-8-6'		1500					X	X	X	X	X		
S-11213301-080420-CN-DP-8-9'		1505					X	X	X	X	X		
S-11213301-080420-CN-DP-9-6'		1550					X	X	X	X	X		
S-11213301-080420-CN-DP-9-9'		1555					X	X	X	X	X		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Charles Neligh	8-6-20 1500	GHD		8/7/20 920	EHA
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:

Ver: 01/16/2019

Released to Imaging: 6/7/2023 10:53:13 AM
Received by OCD: 6/2/2023 1:09:40 PM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: CN	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-78251-21066.1
Client Contact: Daniel Wascom	Phone: 716 818 0224	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page
Company: GHD Services Inc.				Job #:
Address: 5551 Corporate Boulevard Suite 200	Due Date Requested:			
City: Baton Rouge	TAT Requested (days):			
State, Zip: LA, 70808				
Phone:	PO #:			
Email: Daniel.Wascom@ghd.com	WO #:			
Project Name: 11213301-08 / Halliburton 2311 S 1st St	Project #: 60012556			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) TCL Volatiles	300_ORGFM_28D - 300 Chloride	Moisture	8015D_DRO/ ORO	8015B_GRO	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
S-11213301-080520-CN-DP-10-5'	8-5-20	0815	G	S									
S-11213301-080520-CN-DP-10-8'		0820											
S-11213301-080520-CN-DP-11-5'		0900											
S-11213301-080520-CN-DP-11-8'		0905											
S-11213301-080520-CN-DP-12-6'		0945											
S-11213301-080520-CN-DP-12-9'		0950											
S-11213301-080520-CN-DP-13-6'		1050											
S-11213301-080520-CN-DP-13-9'		1055											
S-11213301-080520-CN-DP-14-6'		1125											
S-11213301-080520-CN-DP-14-9'		1130											
S-11213301-080520-CN-DP-15-5'		1210											

5/14

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		8-6-20 - 1545	GHD		8/7/20 920	ETA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	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:

Ver: 01/16/2019

Released to Imaging: 6/7/2023 10:53:13 AM
Received by OCD: 6/2/2023 1:09:40 PM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: CN	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-78251-21066.1
Client Contact: Daniel Wascom	Phone: 716 818 0224	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page
Company: GHD Services Inc.				Job #:
Address: 5551 Corporate Boulevard Suite 200	Due Date Requested:			
City: Baton Rouge	TAT Requested (days):			
State, Zip: LA, 70808				
Phone:	PO #:			
Email: Daniel.Wascom@ghd.com	WO #:			
Project Name: 11213301-08 / Halliburton 2311 S 1st St	Project #: 60012556			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) TCL Volatiles [redacted]	300_ORGFM_28D - 300 Chloride	Moisture	8015D_DRO/ ORO	8015B_GRO	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
S-11213301-080520-CN-DP-15-11'	8-5-20	1715	G	S			X	X	X	X	X		
S-11213301-080520-CN-DP-15-20'		1720					X	X	X	X	X		
S-11213301-080520-CN-DP-16-5'		1445					X	X	X	X	X		
S-11213301-080520-CN-DP-16-8'		1460					X	X	X	X	X		4/4
S-11213301-080520-CN-DP-17-5'		1535					X	X	X	X	X		
S-11213301-080520-CN-DP-17-8'		1540					X	X	X	X	X		
GW-11213301-080520-CN-DPW-1		1745	G	W			X	X					HOLD DPW-1 untill results from DP-1-5' and DP-1-12'

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		8-16-20 1500	GHD		8/7/20 920	EHA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	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:

Ver: 01/16/2019

Loc: 600
209487

eurofins | Environment Testing TestAmerica

Eurofins TestAmerica Houston

Sample Receipt Checklist

'20 AUG 7 9:26

Date/Time Received: _____

JOB NUMBER: _____ CLIENT: GHD

UNPACKED BY: JR CARRIER/DRIVER: Fedex

Custody Seal Present: ☑YES ☐NO Number of Coolers Received: 4

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
0333	Y / N	Y / N	4.2	680	+0.1	4.3
0300	Y / N	Y / N	3.1			3.2
0311	Y / N	Y / N	1.9			2.0
0322	Y / N	Y / N	2.9			3.0
	Y / N	Y / N			8/7/20	
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☑YES ☐NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☑NO ☐YES

Base samples are>pH 12: ☐YES ☐NO Acid preserved are<pH 2: ☐YES ☐NO

TX1005 samples frozen upon receipt: ☐ YES DATE & TIME PUT IN FREEZER: _____

pH paper Lot #_____ VOA headspace acceptable (5-6mm): ☑YES ☐NO ☐NA

Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	☑YES	☐ NO

COMMENTS:

8/7/20

HS-SA-WI-013 Rev. 4A; 08/26/2019

Login Sample Receipt Checklist

Client: GHD Services Inc. Job Number: 600-209487-2

Login Number: 209487 **List Source: Eurofins TestAmerica, Houston**
List Number: 1
Creator: Rubio, Yuri

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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	4.3,3.2,2.0,3.0
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	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

about GHD

GHD is one of the world's leading professional services companies operating in the global markets of water, energy and resources, environment, property and buildings, and transportation. We provide engineering, environmental, and construction services to private and public sector clients.

Christine Mathews
Christine.mathews@ghd.com
505.269.0088

www.ghd.com

Appendix F
Groundwater Laboratory Analytical Data

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-209487-2
Client Project/Site: 11213301-08 / Halliburton 2311 S 1st St

For:
GHD Services Inc.
5551 Corporate Boulevard
Suite 200
Baton Rouge, Louisiana 70808

Attn: Daniel Wascom

Authorized for release by:
8/14/2020 11:11:17 AM
Tiffany Fleming, Project Management Assistant I
(361)289-2673
Tiffany.Fleming@Eurofinset.com

Designee for

Sachin Kudchadkar, Senior Project Manager
(713)690-4444
Sachin.Kudchadkar@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

Client: GHD Services Inc.
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Laboratory Job ID: 600-209487-2

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Case Narrative

Client: GHD Services Inc. Job ID: 600-209487-2
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Job ID: 600-209487-2

Laboratory: Eurofins TestAmerica, Houston

Narrative

Job Narrative
600-209487-2

Comments
No additional comments.

Receipt
The samples were received on 8/7/2020 9:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 2.0º C, 3.0º C, 3.2º C and 4.3º C.

Receipt Exceptions
1 Sample was not listed on the Chain-of-Custody (COC).

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) associated with batch 600-300773 recovered above the upper control limit for Chloromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCVIS 600-300773/2).

Method 8260B: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 600-300773 recovered outside control limits for the following analytes: MIBK and 2-Hexanone. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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.

Released to Imaging: 6/7/2023 10:53:13 AM

Method Summary

Client: GHD Services Inc. Job ID: 600-209487-2
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU
5030B	Purge and Trap	SW846	TAL HOU

Protocol References:

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.

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: GHD Services Inc.

Job ID: 600-209487-2

Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
600-209487-40	GW-11213301-080520-CN-DPW-1	Water	08/05/20 17:45	08/07/20 09:20	

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-2
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: GW-11213301-080520-CN-DPW-1 **Lab Sample ID: 600-209487-40**
Date Collected: 08/05/20 17:45 **Matrix: Water**
Date Received: 08/07/20 09:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.098**		0.0050		mg/L			08/10/20 15:40	1
Benzene	ND		0.0010		mg/L			08/10/20 15:40	1
Chlorobromomethane	ND		0.0010		mg/L			08/10/20 15:40	1
Bromoform	**0.0058**		0.0010		mg/L			08/10/20 15:40	1
Bromomethane	ND		0.0020		mg/L			08/10/20 15:40	1
2-Butanone (MEK)	**0.059**		0.0020		mg/L			08/10/20 15:40	1
Carbon disulfide	ND		0.0020		mg/L			08/10/20 15:40	1
Carbon tetrachloride	ND		0.0010		mg/L			08/10/20 15:40	1
Dibromochloromethane	**0.0022**		0.0010		mg/L			08/10/20 15:40	1
Chlorobenzene	ND		0.0010		mg/L			08/10/20 15:40	1
Chloroethane	ND		0.0020		mg/L			08/10/20 15:40	1
Chloroform	ND		0.0010		mg/L			08/10/20 15:40	1
Chloromethane	ND		0.0020		mg/L			08/10/20 15:40	1
1,1-Dichloroethane	ND		0.0010		mg/L			08/10/20 15:40	1
1,2-Dichloroethane	ND		0.0010		mg/L			08/10/20 15:40	1
1,1-Dichloroethene	ND		0.0010		mg/L			08/10/20 15:40	1
trans-1,2-Dichloroethene	ND		0.0010		mg/L			08/10/20 15:40	1
1,2-Dichloropropane	ND		0.0010		mg/L			08/10/20 15:40	1
cis-1,3-Dichloropropene	ND		0.0010		mg/L			08/10/20 15:40	1
trans-1,3-Dichloropropene	ND		0.0010		mg/L			08/10/20 15:40	1
Trichlorofluoromethane	ND		1.0		ug/L			08/10/20 15:40	1
Ethylbenzene	**0.0054**		0.0010		mg/L			08/10/20 15:40	1
2-Hexanone	ND	*	0.0020		mg/L			08/10/20 15:40	1
Methylene Chloride	ND		0.0050		mg/L			08/10/20 15:40	1
4-Methyl-2-pentanone (MIBK)	ND	*	0.0020		mg/L			08/10/20 15:40	1
Styrene	**0.0062**		0.0010		mg/L			08/10/20 15:40	1
1,1,2,2-Tetrachloroethane	ND		0.0010		mg/L			08/10/20 15:40	1
Tetrachloroethene	ND		0.0010		mg/L			08/10/20 15:40	1
Toluene	**0.017**		0.0010		mg/L			08/10/20 15:40	1
1,1,1-Trichloroethane	ND		0.0010		mg/L			08/10/20 15:40	1
1,1,2-Trichloroethane	ND		0.0010		mg/L			08/10/20 15:40	1
Trichloroethene	ND		0.0010		mg/L			08/10/20 15:40	1
Vinyl acetate	ND		0.0020		mg/L			08/10/20 15:40	1
Vinyl chloride	ND		0.0020		mg/L			08/10/20 15:40	1
o-Xylene	**0.019**		0.0010		mg/L			08/10/20 15:40	1
m-Xylene & p-Xylene	**0.0037**		0.0010		mg/L			08/10/20 15:40	1
Xylenes, Total	**0.023**		0.0020		mg/L			08/10/20 15:40	1
Methyl acetate	ND		5.0		ug/L			08/10/20 15:40	1
cis-1,2-Dichloroethene	ND		0.0010		mg/L			08/10/20 15:40	1
Bromodichloromethane	ND		0.0010		mg/L			08/10/20 15:40	1
1,2-Dichloroethene, Total	ND		0.0020		mg/L			08/10/20 15:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0010		mg/L			08/10/20 15:40	1
1,2,4-Trichlorobenzene	ND		0.0010		mg/L			08/10/20 15:40	1
1,2-Dibromo-3-Chloropropane	ND		0.0010		mg/L			08/10/20 15:40	1
1,2-Dichlorobenzene	ND		0.0010		mg/L			08/10/20 15:40	1
1,3-Dichlorobenzene	ND		0.0010		mg/L			08/10/20 15:40	1
1,4-Dichlorobenzene	ND		0.0010		mg/L			08/10/20 15:40	1
Cyclohexane	ND		0.0010		mg/L			08/10/20 15:40	1
Dichlorodifluoromethane	ND		0.0010		mg/L			08/10/20 15:40	1

Client Sample Results

Client: GHD Services Inc. Job ID: 600-209487-2
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: GW-11213301-080520-CN-DPW-1 **Lab Sample ID: 600-209487-40**
Date Collected: 08/05/20 17:45 **Matrix: Water**
Date Received: 08/07/20 09:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.0010		mg/L			08/10/20 15:40	1
Isopropylbenzene	ND		0.0010		mg/L			08/10/20 15:40	1
Methyl tert-butyl ether	ND		0.0010		mg/L			08/10/20 15:40	1
Methylcyclohexane	ND		1.0		ug/L			08/10/20 15:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/10/20 15:40*	*1*
Dibromofluoromethane	*122*		*62 - 130*		*08/10/20 15:40*	*1*
4-Bromofluorobenzene	*88*		*67 - 139*		*08/10/20 15:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*123*		*50 - 134*		*08/10/20 15:40*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**650**		40		mg/L			08/13/20 16:07	100

Definitions/Glossary

Client: GHD Services Inc. Job ID: 600-209487-2
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

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

Surrogate Summary

Client: GHD Services Inc. Job ID: 600-209487-2
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DBFM	BFB	DCA
Lab Sample ID	Client Sample ID	(70-130)	(62-130)	(67-139)	(50-134)
600-209487-40	GW-11213301-080520-CN-DPW-1	97	122	88	123
LCS 600-300773/3	Lab Control Sample	103	123	90	122
LCSD 600-300773/4	Lab Control Sample Dup	100	127	90	126
MB 600-300773/6	Method Blank	95	118	91	119

Surrogate Legend

TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane
BFB = 4-Bromofluorobenzene
DCA = 1,2-Dichloroethane-d4 (Surr)

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-2
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: MB 600-300773/6 **Client Sample ID: Method Blank**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 300773

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0050		mg/L			08/10/20 14:27	1
Benzene	ND		0.0010		mg/L			08/10/20 14:27	1
Chlorobromomethane	ND		0.0010		mg/L			08/10/20 14:27	1
Bromoform	ND		0.0010		mg/L			08/10/20 14:27	1
Bromomethane	ND		0.0020		mg/L			08/10/20 14:27	1
2-Butanone (MEK)	ND		0.0020		mg/L			08/10/20 14:27	1
Carbon disulfide	ND		0.0020		mg/L			08/10/20 14:27	1
Carbon tetrachloride	ND		0.0010		mg/L			08/10/20 14:27	1
Dibromochloromethane	ND		0.0010		mg/L			08/10/20 14:27	1
Chlorobenzene	ND		0.0010		mg/L			08/10/20 14:27	1
Chloroethane	ND		0.0020		mg/L			08/10/20 14:27	1
Chloroform	ND		0.0010		mg/L			08/10/20 14:27	1
Chloromethane	ND		0.0020		mg/L			08/10/20 14:27	1
1,1-Dichloroethane	ND		0.0010		mg/L			08/10/20 14:27	1
1,2-Dichloroethane	ND		0.0010		mg/L			08/10/20 14:27	1
1,1-Dichloroethene	ND		0.0010		mg/L			08/10/20 14:27	1
trans-1,2-Dichloroethene	ND		0.0010		mg/L			08/10/20 14:27	1
1,2-Dichloropropane	ND		0.0010		mg/L			08/10/20 14:27	1
cis-1,3-Dichloropropene	ND		0.0010		mg/L			08/10/20 14:27	1
trans-1,3-Dichloropropene	ND		0.0010		mg/L			08/10/20 14:27	1
Trichlorofluoromethane	ND		1.0		ug/L			08/10/20 14:27	1
Ethylbenzene	ND		0.0010		mg/L			08/10/20 14:27	1
2-Hexanone	ND		0.0020		mg/L			08/10/20 14:27	1
Methylene Chloride	ND		0.0050		mg/L			08/10/20 14:27	1
4-Methyl-2-pentanone (MIBK)	ND		0.0020		mg/L			08/10/20 14:27	1
Styrene	ND		0.0010		mg/L			08/10/20 14:27	1
1,1,2,2-Tetrachloroethane	ND		0.0010		mg/L			08/10/20 14:27	1
Tetrachloroethene	ND		0.0010		mg/L			08/10/20 14:27	1
Toluene	ND		0.0010		mg/L			08/10/20 14:27	1
1,1,1-Trichloroethane	ND		0.0010		mg/L			08/10/20 14:27	1
1,1,2-Trichloroethane	ND		0.0010		mg/L			08/10/20 14:27	1
Trichloroethene	ND		0.0010		mg/L			08/10/20 14:27	1
Vinyl acetate	ND		0.0020		mg/L			08/10/20 14:27	1
Vinyl chloride	ND		0.0020		mg/L			08/10/20 14:27	1
o-Xylene	ND		0.0010		mg/L			08/10/20 14:27	1
m-Xylene & p-Xylene	ND		0.0010		mg/L			08/10/20 14:27	1
Xylenes, Total	ND		0.0020		mg/L			08/10/20 14:27	1
Methyl acetate	ND		5.0		ug/L			08/10/20 14:27	1
cis-1,2-Dichloroethene	ND		0.0010		mg/L			08/10/20 14:27	1
Bromodichloromethane	ND		0.0010		mg/L			08/10/20 14:27	1
1,2-Dichloroethene, Total	ND		0.0020		mg/L			08/10/20 14:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0010		mg/L			08/10/20 14:27	1
1,2,4-Trichlorobenzene	ND		0.0010		mg/L			08/10/20 14:27	1
1,2-Dibromo-3-Chloropropane	ND		0.0010		mg/L			08/10/20 14:27	1
1,2-Dichlorobenzene	ND		0.0010		mg/L			08/10/20 14:27	1
1,3-Dichlorobenzene	ND		0.0010		mg/L			08/10/20 14:27	1
1,4-Dichlorobenzene	ND		0.0010		mg/L			08/10/20 14:27	1
Cyclohexane	ND		0.0010		mg/L			08/10/20 14:27	1

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-2
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: MB 600-300773/6 **Client Sample ID: Method Blank**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 300773

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.0010		mg/L			08/10/20 14:27	1
1,2-Dibromoethane	ND		0.0010		mg/L			08/10/20 14:27	1
Isopropylbenzene	ND		0.0010		mg/L			08/10/20 14:27	1
Methyl tert-butyl ether	ND		0.0010		mg/L			08/10/20 14:27	1
Methylcyclohexane	ND		1.0		ug/L			08/10/20 14:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/10/20 14:27*	*1*
Dibromofluoromethane	*118*		*62 - 130*		*08/10/20 14:27*	*1*
4-Bromofluorobenzene	*91*		*67 - 139*		*08/10/20 14:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*119*		*50 - 134*		*08/10/20 14:27*	*1*

Lab Sample ID: LCS 600-300773/3 **Client Sample ID: Lab Control Sample**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 300773

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0200	0.0261		mg/L		130	18 - 144
Benzene	0.0100	0.00999		mg/L		100	70 - 130
Chlorobromomethane	0.0100	0.00980		mg/L		98	58 - 130
Bromoform	0.0100	0.00999		mg/L		100	54 - 133
Bromomethane	0.0100	0.00762		mg/L		76	25 - 150
2-Butanone (MEK)	0.0200	0.0260		mg/L		130	41 - 141
Carbon disulfide	0.0100	0.00978		mg/L		98	55 - 150
Carbon tetrachloride	0.0100	0.0104		mg/L		104	70 - 144
Dibromochloromethane	0.0100	0.0109		mg/L		109	62 - 130
Chlorobenzene	0.0100	0.0101		mg/L		101	69 - 130
Chloroethane	0.0100	0.00943		mg/L		94	47 - 150
Chloroform	0.0100	0.0102		mg/L		102	70 - 130
Chloromethane	0.0100	0.0139		mg/L		139	10 - 150
1,1-Dichloroethane	0.0100	0.0104		mg/L		104	70 - 140
1,2-Dichloroethane	0.0100	0.0108		mg/L		108	67 - 134
1,1-Dichloroethene	0.0100	0.00998		mg/L		100	58 - 148
trans-1,2-Dichloroethene	0.0100	0.00973		mg/L		97	68 - 131
1,2-Dichloropropane	0.0100	0.0109		mg/L		109	70 - 130
cis-1,3-Dichloropropene	0.0100	0.0104		mg/L		104	57 - 130
trans-1,3-Dichloropropene	0.0100	0.0106		mg/L		106	60 - 130
Trichlorofluoromethane	10.0	9.91		ug/L		99	43 - 150
Ethylbenzene	0.0100	0.0102		mg/L		102	70 - 130
2-Hexanone	0.0200	0.0270	*	mg/L		135	56 - 130
Methylene Chloride	0.0100	0.0105		mg/L		105	55 - 147
4-Methyl-2-pentanone (MIBK)	0.0200	0.0283	*	mg/L		142	62 - 136
Styrene	0.0100	0.0100		mg/L		100	70 - 130
1,1,2,2-Tetrachloroethane	0.0100	0.0118		mg/L		118	58 - 133
Tetrachloroethene	0.0100	0.0103		mg/L		103	47 - 150
Toluene	0.0100	0.00998		mg/L		100	70 - 130
1,1,1-Trichloroethane	0.0100	0.0101		mg/L		101	70 - 136
1,1,2-Trichloroethane	0.0100	0.0105		mg/L		105	70 - 130

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-2
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: LCS 600-300773/3 **Client Sample ID: Lab Control Sample**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 300773

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichloroethene	0.0100	0.0102		mg/L		102	70 - 130
Vinyl acetate	0.0200	0.0283		mg/L		142	10 - 150
Vinyl chloride	0.0100	0.0124		mg/L		124	33 - 150
o-Xylene	0.0100	0.0101		mg/L		101	70 - 130
m-Xylene & p-Xylene	0.0100	0.00992		mg/L		99	70 - 130
Xylenes, Total	0.0200	0.0200		mg/L		100	70 - 130
Methyl acetate	20.0	27.0		ug/L		135	46 - 142
cis-1,2-Dichloroethene	0.0100	0.00991		mg/L		99	68 - 130
Bromodichloromethane	0.0100	0.0107		mg/L		107	70 - 131
1,2-Dichloroethene, Total	0.0200	0.0196		mg/L		98	69 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0100	0.0101		mg/L		101	60 - 150
1,2,4-Trichlorobenzene	0.0100	0.0116		mg/L		116	46 - 150
1,2-Dibromo-3-Chloropropane	0.0100	0.0105		mg/L		105	41 - 142
1,2-Dichlorobenzene	0.0100	0.0102		mg/L		102	70 - 130
1,3-Dichlorobenzene	0.0100	0.00975		mg/L		97	70 - 130
1,4-Dichlorobenzene	0.0100	0.0100		mg/L		100	70 - 130
Cyclohexane	0.0100	0.0104		mg/L		104	10 - 150
Dichlorodifluoromethane	0.0100	0.0104		mg/L		104	10 - 150
1,2-Dibromoethane	0.0100	0.00987		mg/L		99	67 - 130
Isopropylbenzene	0.0100	0.00949		mg/L		95	65 - 132
Methyl tert-butyl ether	0.0100	0.0103		mg/L		103	56 - 132
Methylcyclohexane	10.0	10.8		ug/L		108	68 - 147

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*103*		*70 - 130*
Dibromofluoromethane	*123*		*62 - 130*
4-Bromofluorobenzene	*90*		*67 - 139*
1,2-Dichloroethane-d4 (Surr)	*122*		*50 - 134*

Lab Sample ID: LCSD 600-300773/4 **Client Sample ID: Lab Control Sample Dup**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 300773

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.0200	0.0285		mg/L		143	18 - 144	9	20
Benzene	0.0100	0.00998		mg/L		100	70 - 130	0	20
Chlorobromomethane	0.0100	0.00995		mg/L		100	58 - 130	2	20
Bromoform	0.0100	0.00995		mg/L		99	54 - 133	0	20
Bromomethane	0.0100	0.00797		mg/L		80	25 - 150	4	20
2-Butanone (MEK)	0.0200	0.0277		mg/L		139	41 - 141	7	20
Carbon disulfide	0.0100	0.00961		mg/L		96	55 - 150	2	20
Carbon tetrachloride	0.0100	0.0103		mg/L		103	70 - 144	1	20
Dibromochloromethane	0.0100	0.0109		mg/L		109	62 - 130	0	20
Chlorobenzene	0.0100	0.00987		mg/L		99	69 - 130	2	20
Chloroethane	0.0100	0.0101		mg/L		101	47 - 150	7	20
Chloroform	0.0100	0.0101		mg/L		101	70 - 130	1	20
Chloromethane	0.0100	0.0149		mg/L		149	10 - 150	7	20
1,1-Dichloroethane	0.0100	0.0102		mg/L		102	70 - 140	2	20

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-2
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

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

Lab Sample ID: LCSD 600-300773/4 **Client Sample ID: Lab Control Sample Dup**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 300773

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichloroethane			0.0100	0.0112		mg/L		112	67 - 134	4	20
1,1-Dichloroethene			0.0100	0.00976		mg/L		98	58 - 148	2	20
trans-1,2-Dichloroethene			0.0100	0.00955		mg/L		95	68 - 131	2	20
1,2-Dichloropropane			0.0100	0.0110		mg/L		110	70 - 130	1	20
cis-1,3-Dichloropropene			0.0100	0.0104		mg/L		104	57 - 130	1	20
trans-1,3-Dichloropropene			0.0100	0.0107		mg/L		107	60 - 130	0	20
Trichlorofluoromethane			10.0	10.2		ug/L		102	43 - 150	3	20
Ethylbenzene			0.0100	0.00987		mg/L		99	70 - 130	3	20
2-Hexanone			0.0200	0.0289	*	mg/L		144	56 - 130	7	20
Methylene Chloride			0.0100	0.0108		mg/L		108	55 - 147	2	20
4-Methyl-2-pentanone (MIBK)			0.0200	0.0300	*	mg/L		150	62 - 136	6	20
Styrene			0.0100	0.00983		mg/L		98	70 - 130	2	20
1,1,2,2-Tetrachloroethane			0.0100	0.0117		mg/L		117	58 - 133	1	20
Tetrachloroethene			0.0100	0.00989		mg/L		99	47 - 150	4	20
Toluene			0.0100	0.00982		mg/L		98	70 - 130	2	20
1,1,1-Trichloroethane			0.0100	0.0101		mg/L		101	70 - 136	0	20
1,1,2-Trichloroethane			0.0100	0.0106		mg/L		106	70 - 130	1	20
Trichloroethene			0.0100	0.0102		mg/L		102	70 - 130	0	20
Vinyl acetate			0.0200	0.0290		mg/L		145	10 - 150	2	20
Vinyl chloride			0.0100	0.0128		mg/L		128	33 - 150	3	20
o-Xylene			0.0100	0.00984		mg/L		98	70 - 130	2	20
m-Xylene & p-Xylene			0.0100	0.00966		mg/L		97	70 - 130	3	20
Xylenes, Total			0.0200	0.0195		mg/L		98	70 - 130	3	20
Methyl acetate			20.0	28.3		ug/L		142	46 - 142	5	20
cis-1,2-Dichloroethene			0.0100	0.0100		mg/L		100	68 - 130	1	20
Bromodichloromethane			0.0100	0.0111		mg/L		111	70 - 131	3	20
1,2-Dichloroethene, Total			0.0200	0.0196		mg/L		98	69 - 130	0	20
1,1,2-Trichloro-1,2,2-trifluoroethane			0.0100	0.00992		mg/L		99	60 - 150	2	20
1,2,4-Trichlorobenzene			0.0100	0.0118		mg/L		118	46 - 150	1	20
1,2-Dibromo-3-Chloropropane			0.0100	0.0110		mg/L		110	41 - 142	5	20
1,2-Dichlorobenzene			0.0100	0.00998		mg/L		100	70 - 130	2	20
1,3-Dichlorobenzene			0.0100	0.00950		mg/L		95	70 - 130	3	20
1,4-Dichlorobenzene			0.0100	0.00990		mg/L		99	70 - 130	1	20
Cyclohexane			0.0100	0.0102		mg/L		102	10 - 150	2	20
Dichlorodifluoromethane			0.0100	0.0108		mg/L		108	10 - 150	4	20
1,2-Dibromoethane			0.0100	0.0102		mg/L		102	67 - 130	3	20
Isopropylbenzene			0.0100	0.00911		mg/L		91	65 - 132	4	20
Methyl tert-butyl ether			0.0100	0.0107		mg/L		107	56 - 132	4	20
Methylcyclohexane			10.0	10.8		ug/L		108	68 - 147	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*100*		*70 - 130*
Dibromofluoromethane	*127*		*62 - 130*
4-Bromofluorobenzene	*90*		*67 - 139*
1,2-Dichloroethane-d4 (Surr)	*126*		*50 - 134*

QC Sample Results

Client: GHD Services Inc. Job ID: 600-209487-2
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-301064/6 **Client Sample ID: Method Blank**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 301064

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.40		mg/L			08/13/20 08:46	1

Lab Sample ID: LCS 600-301064/7 **Client Sample ID: Lab Control Sample**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 301064

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			20.0	20.1		mg/L		101	90 - 110		

QC Association Summary

Client: GHD Services Inc. Job ID: 600-209487-2
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

GC/MS VOA

Analysis Batch: 300773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-40	GW-11213301-080520-CN-DPW-1	Total/NA	Water	8260B	
MB 600-300773/6	Method Blank	Total/NA	Water	8260B	
LCS 600-300773/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-300773/4	Lab Control Sample Dup	Total/NA	Water	8260B	

HPLC/IC

Analysis Batch: 301064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-209487-40	GW-11213301-080520-CN-DPW-1	Total/NA	Water	300.0	
MB 600-301064/6	Method Blank	Total/NA	Water	300.0	
LCS 600-301064/7	Lab Control Sample	Total/NA	Water	300.0	

Lab Chronicle

Client: GHD Services Inc. Job ID: 600-209487-2
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Client Sample ID: GW-11213301-080520-CN-DPW-1 Lab Sample ID: 600-209487-40

Date Collected: 08/05/20 17:45 **Matrix: Water**
Date Received: 08/07/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	300773	08/10/20 15:40	YX1	TAL HOU
Total/NA	Analysis	300.0		100			301064	08/13/20 16:07	W1N	TAL HOU

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Accreditation/Certification Summary

Client: GHD Services Inc. Job ID: 600-209487-2
Project/Site: 11213301-08 / Halliburton 2311 S 1st St

Laboratory: Eurofins TestAmerica, Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	20-052-0	08-04-21
Louisiana	NELAP	01967	06-30-21
Oklahoma	State	2019-180	08-31-20
Texas	NELAP	T104704223-20-26	10-31-20
USDA	US Federal Programs	P330-18-00130	04-30-21

Released to Imaging: 6/7/2023 10:53:13 AM
Received by OCD: 6/2/2023 1:09:40 PM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: CN	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-78251-21066.1
Client Contact: Daniel Wascom	Phone: 716 818 0224	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page
Company: GHD Services Inc.				Job #:
Address: 5551 Corporate Boulevard Suite 200	Due Date Requested:			
City: Baton Rouge	TAT Requested (days):			
State, Zip: LA, 70808				
Phone:	PO #:			
Email: Daniel.Wascom@ghd.com	WO #:			
Project Name: 11213301-08 / Halliburton 2311 S 1st St	Project #: 60012556			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) TCL Volatiles	300_ORGFM_28D - 300 Chloride	Moisture	8015D_DRO/ ORO	8015B_GRO	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
S-11213301-080320-CN-DP-1-5'	8-3-20	1320	G	S			X	X	X	X	X		5 Day Turn around Rush!
S-11213301-080320-CN-DP-1-12'	8-3-20	1330					X	X	X	X	X		5 Day Turn around Rush!
S-11213301-080320-CN-DP-1-15'	8-3-20	1350					X	X	X	X	X		
S-11213301-080320-CN-DP-2-5'	8-3-20	1440					X	X	X	X	X		
S-11213301-080320-CN-DP-2-10'	8-3-20	1500					X	X	X	X	X		
S-11213301-080320-CN-DP-2-11'	8-3-20	1510					X	X	X	X	X		
S-11213301-080420-CN-DP-3-5'	8-4-20	0950					X	X	X	X	X		1/4
S-11213301-080420-CN-DP-3-10'	8-4-20	0955					X	X	X	X	X		
S-11213301-080420-CN-DP-3-15'	8-4-20	1000					X	X	X	X	X		
S-11213301-080420-CN-DP-4-5'	8-4-20	1030					X	X	X	X	X		
S-11213301-080420-CN-DP-4-10'	8-4-20	1035	V	V			X	X	X	X	X		

600-209487 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	8-6-20 1500	GHD		8/7/20 920	ETA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Released to Imaging: 6/7/2023 10:53:13 AM
Received by OCD: 6/2/2023 1:09:40 PM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Charles Neligh	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-78251-21066.1
Client Contact: Daniel Wascom	Phone: 716 818 0224	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page
Company: GHD Services Inc.				Job #:
Address: 5551 Corporate Boulevard Suite 200	Due Date Requested:			
City: Baton Rouge	TAT Requested (days):			
State, Zip: LA, 70808				
Phone:	PO #:			
Email: Daniel.Wascom@ghd.com	WO #:			
Project Name: 11213301-08 / Halliburton 2311 S 1st St	Project #: 60012556			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) TCL Volatiles	300_ORGFM_28D - 300 Chloride	Moisture	8015D_DRO/ ORO	8015B_GRO	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
S-11213301-080420-CN-DP-4-15'	8-4-20	1040	G	S			X	X	X	X	X		
S-11213301-080420-CN-DP-5-5'		1110					X	X	X	X	X		
S-11213301-080420-CN-DP-5-8'		1115					X	X	X	X	X		
S-11213301-080420-CN-DP-6-5'		1150					X	X	X	X	X		
S-11213301-080420-CN-DP-6-8'		1155					X	X	X	X	X		
S-11213301-080420-CN-DP-7-6'		1355					X	X	X	X	X		2/4
S-11213301-080420-CN-DP-7-9'		1400					X	X	X	X	X		
S-11213301-080420-CN-DP-8-6'		1500					X	X	X	X	X		
S-11213301-080420-CN-DP-8-9'		1505					X	X	X	X	X		
S-11213301-080420-CN-DP-9-6'		1550					X	X	X	X	X		
S-11213301-080420-CN-DP-9-9'		1555					X	X	X	X	X		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Charles Neligh	8-6-20 1500	GHD		8/7/20 920	EHA
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:

Ver: 01/16/2019

Released to Imaging: 6/7/2023 10:53:13 AM
Received by OCD: 6/2/2023 1:09:40 PM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: CN	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-78251-21066.1
Client Contact: Daniel Wascom	Phone: 716 818 0224	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page
Company: GHD Services Inc.				Job #:
Address: 5551 Corporate Boulevard Suite 200	Due Date Requested:			
City: Baton Rouge	TAT Requested (days):			
State, Zip: LA, 70808				
Phone:	PO #:			
Email: Daniel.Wascom@ghd.com	WO #:			
Project Name: 11213301-08 / Halliburton 2311 S 1st St	Project #: 60012556			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) TCL Volatiles	300_ORGFM_28D - 300 Chloride	Moisture	8015D_DRO/ ORO	8015B_GRO	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
S-11213301-080520-CN-DP-10-5'	8-5-20	0815	G	S									
S-11213301-080520-CN-DP-10-8'		0820											
S-11213301-080520-CN-DP-11-5'		0900											
S-11213301-080520-CN-DP-11-8'		0905											
S-11213301-080520-CN-DP-12-6'		0945											
S-11213301-080520-CN-DP-12-9'		0950											
S-11213301-080520-CN-DP-13-6'		1050											
S-11213301-080520-CN-DP-13-9'		1055											
S-11213301-080520-CN-DP-14-6'		1125											
S-11213301-080520-CN-DP-14-9'		1130											
S-11213301-080520-CN-DP-15-5'		1210											

5/14

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		8-6-20 - 1515	GHD		8/7/20 920	ETA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	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:

Ver: 01/16/2019

Released to Imaging: 6/7/2023 10:53:13 AM
Received by OCD: 6/2/2023 1:09:40 PM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: CN	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-78251-21066.1
Client Contact: Daniel Wascom	Phone: 716 818 0224	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page
Company: GHD Services Inc.				Job #:
Address: 5551 Corporate Boulevard Suite 200	Due Date Requested:			
City: Baton Rouge	TAT Requested (days):			
State, Zip: LA, 70808				
Phone:	PO #:			
Email: Daniel.Wascom@ghd.com	WO #:			
Project Name: 11213301-08 / Halliburton 2311 S 1st St	Project #: 60012556			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) TCL Volatiles [redacted]	300_ORGFM_28D - 300 Chloride	Moisture	8015D_DRO/ ORO	8015B_GRO	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
S-11213301-080520-CN-DP-15-11'	8-5-20	1715	G	S			X	X	X	X	X		
S-11213301-080520-CN-DP-15-20'	↓	1720	↓	↓			X	X	X	X	X		
S-11213301-080520-CN-DP-16-5'		1445					X	X	X	X	X		
S-11213301-080520-CN-DP-16-8'		1460					X	X	X	X	X		4/4
S-11213301-080520-CN-DP-17-5'		1535					X	X	X	X	X		
S-11213301-080520-CN-DP-17-8'		1540		↓			X	X	X	X	X		
GW-11213301-080520-CN-DPW-1	↓	1745	G	W			X	X					HOLD DPW-1 untill results from DP-1-5' and DP-1-12'
			↓										

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	[signature]	8-16-20 1500	GHD	[signature]	8/7/20 920	EHA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	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:

Ver: 01/16/2019

Loc: 600
209487

eurofins | Environment Testing TestAmerica

Eurofins TestAmerica Houston

Sample Receipt Checklist

'20 AUG 7 9:20

Date/Time Received: _____

JOB NUMBER: _____ CLIENT: GHD

UNPACKED BY: JR CARRIER/DRIVER: Fedex

Custody Seal Present: ☑YES ☐NO Number of Coolers Received: 4

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
0333	Y / N	Y / N	4.2	680	+0.1	4.3
0300	Y / N	Y / N	3.1			3.2
0311	Y / N	Y / N	1.9			2.0
0322	Y / N	Y / N	2.9			3.0
	Y / N	Y / N			8/7/20	
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☑YES ☐NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☑NO ☐YES

Base samples are>pH 12: ☐YES ☐NO Acid preserved are<pH 2: ☐YES ☐NO

TX1005 samples frozen upon receipt: ☐ YES DATE & TIME PUT IN FREEZER: _____

pH paper Lot #_____ VOA headspace acceptable (5-6mm): ☑YES ☐NO ☐NA

Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	☑YES	☐ NO

COMMENTS:

8/7/20

HS-SA-WI-013 Rev. 4A; 08/26/2019

Login Sample Receipt Checklist

Client: GHD Services Inc. Job Number: 600-209487-2

Login Number: 209487 **List Source: Eurofins TestAmerica, Houston**
List Number: 1
Creator: Rubio, Yuri

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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	4.3,3.2,2.0,3.0
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	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Form C-141
Page 5

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2315345615
District RP	
Facility ID	
Application ID	

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: **James McGinty** Title: **Project Manager**

Signature: _____ Date: **10/6/2022**

email: **jim.mcginty@halliburton.com** Telephone: **1-281-575-4428**

OCD Only

Received by: Jocelyn Harimon Date: 06/05/2023

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

Signature: Robert Hamlet Date: 6/7/2023

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
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 223368

CONDITIONS

Operator: HALLIBURTON ENERGY SERVICES, INC. 3000 North Sam Houston Pkwy E. Houston, TX 77032	OGRID: 310629
	Action Number: 223368
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	The Remediation Plan is Conditionally Approved. Due to shallow groundwater, the release needs to meet the strictest closure criteria standards. Investigate soil for heavy metals 40 CFR 261.248. Include all communications involving groundwater impact and removal of contaminated soil around Leaking Underground Storage Tanks (LUSTS) identified during the Phase 1 ESA. Soil impacted around acid neutralization holding tanks should additionally be tested for pH. Include status/results of soil boring DP-1 (groundwater encountered at approximately 13 feet). Please include results of groundwater sample collected after well was purged. Remove soil impacted by TPH and chlorides that was detected 12 feet below grade (center of Area 1 Excavation). If groundwater is exposed during excavation (test for chemistry including major cations and anions). GHD is consulting with NMED on groundwater study. Include any emails suggesting that PSTB is responsible for groundwater investigation.	6/7/2023