

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	nAPP2202759509
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party EOG Resources, Inc	OGRID 7377
Contact Name Chase Settle	Contact Telephone 575-748-1471
Contact email Chase_Settle@eogresources.com	Incident # nAPP2202759509
Contact mailing address 104 S. 4th Street, Artesia, NM 88210	

### Location of Release Source

Latitude 32.79189 Longitude -104.06366  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Robinson B Federal #1	Site Type Battery
Date Release Discovered 1/26/2022	API# 30-015-03766

Unit Letter	Section	Township	Range	County
F	34	17S	29E	Eddy

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (Name: \_\_\_\_\_)

### Nature and Volume of Release

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

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) Unknown	Volume Recovered (bbls) 0
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) Unknown	Volume Recovered (bbls) 0
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release Historical impacts were discovered during the decommissioning of the battery as part of plugging process. The environmental consultant contracted to perform the remediation determined on 01/26/2022 based off the initial investigation that the volume released most likely breached the reportable threshold.

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Was this a major release as defined by 19.15.29.7(A) NMAC?  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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*

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> 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: <u>Chase Settle</u>	Title: <u>Rep Safety &amp; Environmental Sr</u>
Signature: <u>Chase Settle</u>	Date: <u>02/01/2022</u>
email: <u>Chase_Settle@eogresources.com</u>	Telephone: <u>575-748-1471</u>
<b><u>OCD Only</u></b>	
Received by: <u>Ramona Marcus</u>	Date: <u>2/9/2022</u>

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## Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>Unknown</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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.

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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: Chase Settle Title: Rep Safety & Environmental Sr.  
Signature: Chase Settle Date: 4/20/2022  
email: Chase Settle@eogresources.com Telephone: 575-748-1471

**OCD Only**

Received by: Robert Hamlet Date: 7/27/2022



Incident ID	nAPP202759509
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: Amber Griffin Title: Rep Safety & Environmental Sr  
Signature: Amber Griffin Date: 8/4/2022  
email: Amber\_Griffin@eogresources.com Telephone: 575-748-1471

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

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

Signature: Jennifer Nobui Date: 09/20/2022

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

Our ref: 12574110

August 03, 2022

New Mexico Oil Conservation Division  
District 2  
811 South First Street  
Artesia, New Mexico 88210

Re: Remediation Work Plan  
Robinson B Federal #1 Release Site  
EOG Resources Inc.  
Incident ID: nAPP2202759509  
F-34-17S-29E, Eddy County, New Mexico

To Whom It May Concern:

## 1. Introduction

GHD Services, Inc. (GHD), on behalf of EOG Resources (EOG), submits this Remediation Work Plan to the New Mexico Oil Conservation Division (NMOCD) District 2 Office. This Report provides documentation of delineation, sampling, and analyses in the affected area at the EOG Robinson B Federal #1 Release Site (Site). The Site is located in Unit Letter F Section 34 of Township 17 South and Range 29 East in Eddy County, New Mexico. The GPS coordinates for the release site are 32.79189 N latitude and 104.06366 W longitude. The surface owner of the land where the release occurred is the US Bureau of Land Management (BLM). Figure 1 depicts the Site location. The EOG production facility and other site details are depicted on Figure 2, Site Assessment: Soil Analytical Results Map.

## 2. Background Information

A C-141 Release Notification for this release was submitted to the NMOCD on February 1, 2022. The C-141 stated that no known volume or date could be assigned to this historical release. The potential release area was discovered during EOG well plugging and site abandonment activities associated with this location. Soils within the former tank battery containment appeared to be discolored and after discussions between field personnel and environmental staff, EOG made the decision to file a C-141 for this suspect release location.

The release falls under the jurisdiction of the NMOCD District 2 Office in Artesia, New Mexico. The NMOCD assigned the release with Incident Number nAPP2202759509. The Release Notification, Site Assessment/Characterization, and Remediation portions of Form C-141 are attached to the front of this report.

### 3. Groundwater and Site Characterization

GHD characterized the Site according to Table 1, Closure Criteria for Soils Impacted by a Release, from New Mexico Administrative Code (NMAC) Title 19, Chapter 15, Part 29, Section 12 (NMAC 19.15.29.12).

According to the Site characterization evaluation and 19.15.29.12.C(4)(a)(i) the site is located within 300 feet of a significant watercourse. Additionally, the Site is located within three hundred (300) feet of a wetland and is within a floodplain. No groundwater data could be located within one-half mile of the Site. No other receptors (water wells, playas, lakebeds or ordinance boundaries) were located within each specific boundaries or distance from the Site. The Site must be treated as if groundwater is less than fifty (50) feet below ground surface. The Site characterization documentation (Karst Potential, Points of Diversion, Significant Watercourse, FEMA, and Wetlands maps) are provided in Attachment A. The soil and Closure Criteria are listed below:

**General Site Characterization and Groundwater:**

Site Characterization	Average Groundwater Depth (ft)
300 Feet from a Significant Watercourse	Unknown, Treated as <50 feet

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

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

### 4. Soil Delineation Assessment Summary and Findings

From February 17, 2022, to March 24, 2022, GHD Services Inc. (GHD) and EOG's contractor Standard Safety and Supply (SS) installed twenty-three (23) test pits, TP1 through TP23, within the suspected impacted area. Soil samples were collected at depths ranging from surface to twenty (20) feet below ground surface. All soil samples were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8021B, total petroleum hydrocarbons (TPH) by Method 8015B Modified, and chloride by EPA Method 300 by Hall Environmental Analysis Laboratory (HEAL) in Albuquerque, New Mexico.

Fourteen (14) of the twenty-three (23) test pits had samples exceeding applicable Table I Closure Criteria for depth to water less than fifty (50) feet below ground surface: TP1, TP2, TP3, TP4, TP5, TP7, TP8, TP9, TP10, TP11, TP12, TP14, TP15, and TP17. Figure 2, Site Assessment: Soil Analytical Results Map, depicts the locations of the initial delineation samples and analytical concentrations. Analytical results are provided in Table 1, on Figure 2, and in the Laboratory Analytical Reports provided in Attachment B.

In order to vertically delineate TPH and chloride impacts, GHD and HCI Drilling (HCI) mobilized to the Site on April 27, 2022, to install two borings. SB-1 was installed to a depth of approximately thirty-five (35) feet below

ground surface and SB-2 was installed to a depth of approximately thirty (30) feet below ground surface. Soil samples were collected at five (5) foot intervals from five (5) feet below ground surface to total depth. All soil samples were submitted to HEAL in Albuquerque, New Mexico, and analyzed for BTEX by EPA Method 8021B, TPH by Method 8015B Modified, and chloride by EPA Method 300. Figure 2, Site Assessment: Soil Analytical Results Map, depicts the locations of the soil borings and analytical results. Analytical results are provided in Table 1, on Figure 2, and in the Laboratory Analytical Reports provided in Attachment B.

Six (6) of the thirteen (13) soil samples collected exhibited concentrations exceeding applicable Table I Closure Criteria for depth to water less than fifty (50) feet below ground surface listed below:

- TPH: SB-1 (5'), SB-1 (10'), SB-1 (15'), SB-1 (20'), and SB-2 (20')
- BTEX: SB-1 (15')
- Chloride: SB-2 (20') and SB-2 (25')

In SB-1 total BTEX and TPH concentrations were delineated to below 50 mg/kg and 100 mg/kg at fifteen (15) and twenty (20) feet below ground surface, respectively. In SB-2 total TPH and chloride concentrations were delineated to below 100 mg/kg and 600 mg/kg at twenty (20) and twenty-five (25) feet below ground surface, respectively. Soil boring logs are provided as Attachment C.

## 5. nAPP2115335335 Proposed Work Plan

TP1, TP2, TP3, TP4, TP5, TP7, TP8, TP9, TP10, TP11, TP12, TP14, TP15, TP17, SB-1 and SB-2 exhibited BTEX, TPH and/or chloride concentrations above Table I Closure Criteria to varying depths between surface and twenty-five (25) feet below ground surface.

GHD, on behalf of EOG, proposes to excavate soils to the following depths:

- TP8, TP9, and TP10 will be excavated to a depth of approximately two (2) feet below ground surface or until concentrations are below Table I Closure Criteria.
- TP14 will be excavated to a depth of approximately two (2) to four (4) feet below ground surface or until concentrations are below Table I Closure Criteria.
- TP7 will be excavated to a depth of approximately four (4) to six (6) feet below ground surface or until concentrations are below Table I Closure Criteria.
- TP11 will be excavated to a depth of approximately four (4) to eight (8) feet below ground surface or until concentrations are below Table I Closure Criteria.
- TP17 will be excavated to a depth of approximately eight (8) to ten (10) feet below ground surface or until concentrations are below Table I Closure Criteria.
- TP5 will be excavated to a depth of approximately eight (8) to twelve (12) feet below ground surface or until concentrations are below Table I Closure Criteria.
- TP12 and TP15 will be excavated to a depth of approximately twelve (12) to fourteen (14) feet below ground surface or until concentrations are below Table I Closure Criteria.
- TP4 will be excavated to a depth of approximately twelve (12) to sixteen (16) feet below ground surface or until concentrations are below Table I Closure Criteria.

- TP1, TP3, and SB-1 will be excavated to a depth of approximately twenty (20) to twenty-five (25) feet below ground surface or until concentrations are below Table I Closure Criteria.
- TP2 and SB-2 will be excavated to a depth of approximately twenty-six (26) feet below ground surface or until concentrations are below Table I Closure Criteria if it is reasonably safe to do so.

Composite confirmation samples will be collected from the bottom of the excavation and the sidewalls of the excavation from areas representing no more than two hundred (200) square feet. Discrete soil samples will be collected from the sidewalls if any staining is observed. All confirmation samples will be taken to a certified laboratory and analyzed for BTEX by EPA Method 8021B, TPH by Method 8015B Modified, and chloride by EPA Method 300.

Excavated soils will be transported to a NMOCD approved disposal facility for disposal. The anticipated volume of soil to be disposed of is approximately 6,700 to 8,000 cubic yards depending on the final dimensions of the excavation based on the depth and site conditions encountered. The excavation will be backfilled with non-impacted soil transported to the site. The remediation will be performed within 90 days after the work plan has been approved.

If all analytical results are below Table I Closure Criteria a closure report will be submitted to the NMOCD requesting site closure. If during excavation of TP1, TP2, TP3, SB-1 and/or SB-2 it is deemed unsafe to continue to the proposed depth of twenty (20) to twenty-six (26) feet below ground surface, further vertical excavation activities will cease. The sidewall of the deeper excavation will be excavated until concentrations are below Table I concentrations, the excavation will be backfilled, and an amended Site Remediation Work Plan will be submitted for NMOCD consideration.

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

Sincerely,

GHD



Becky Haskell  
Senior Project Manager



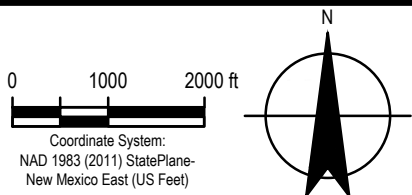
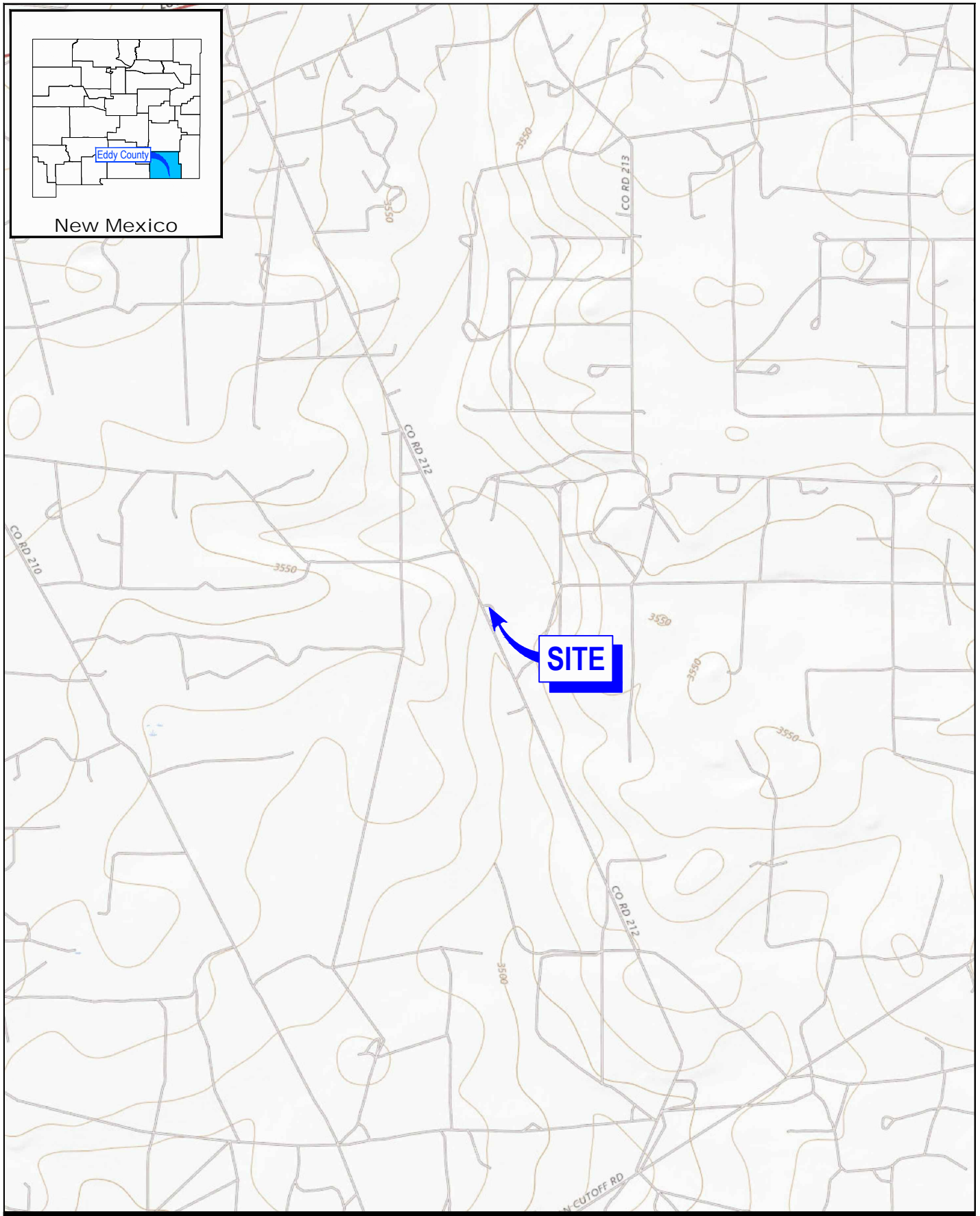
Nate Reece  
Environmental Scientist

BH/NR/1

Encl. Figure 1 – Site Location Map  
Figure 2 – Site Assessment: Soil Analytical Results and Proposed Excavation Map  
Table 1 – Summary of Soil Analytical Data  
Attachment A – Site Characterization Documentation  
Attachment B – Laboratory Analytical Reports and Chain-of-Custody Documentation  
Attachment C – Soil Boring Logs

cc: Chase Settle

## Figures



EOG RESOURCES  
EDDY COUNTY, NEW MEXICO  
ROBINSON B FEDERAL #1

Project No. 12574110  
Date April 2022

SITE LOCATION MAP

FIGURE 1

Filename: \\ghdnet\ghd\USMidland\Projects\562\12574110\Digital\_Design\ACAD\Figures\RPT001\12574110-GHD-0000-RPT-EN-0101-DL-001.dwg

Data Source: USGS 7.5 Minute Quad "Red Lake SE, New Mexico"  
Lat/Long: 32.791751° North, 104.063586° West



Sample ID	Sample Date	Depth (ft bgs)	Benzene	BTEX	TPH	Chloride
			(mg/kg)	(mg/kg)	Total GRO/DRO/MRO	(mg/kg)
			Table I Closure Criteria for Soils <50 feet Depth to Groundwater 19.15.29 NMAC			
			10 mg/kg	50 mg/kg	100 mg/kg	600 mg/kg
Initial Assessment Samples						
TP1-4	2/17/22	4	<0.12	<0.50	10,800	<60
TP1-12	2/17/22	12	0.52	32.52	5,210	970
TP1-19	2/17/22	19	<0.40	11.1	5,070	110
TP2-2	2/17/22	2	<0.023	<0.094	2,800	71
TP2-8	2/17/22	8	<0.12	<0.49	5,800	420
TP2-10	2/17/22	10	<0.024	<0.098	480	1,100
TP2-14	3/23/22	14	<0.025	<0.099	1,300	500
TP2-16	3/23/22	16	<0.025	<0.099	<47	130
TP2-20	3/23/22	20	<0.016	<0.064	<50	710
TP3-S	2/17/22	Surface	<0.024	<0.097	6,300	<60
TP3-2	2/17/22	2	<0.025	<0.099	3,800	<60
TP3-4	2/17/22	4	<0.025	<0.099	6,100	<60
TP3-8	3/23/22	8	<0.024	<0.098	2,300	<60
TP3-12	3/23/22	12	37	757	35,300	89
TP3-16	3/23/22	16	3.1	104.1	7,400	200
TP3-19	3/23/22	19	0.87	21.77	2,050	190
TP4-4	2/17/22	4	<0.12	<0.48	9,900	<60
TP4-12	2/17/22	12	<0.024	<0.097	5,500	230
TP4-16	2/17/22	16	<0.024	<0.095	57	86
TP5-S	2/17/22	Surface	<0.024	<0.096	<44	170
TP5-2	2/17/22	2	<0.023	<0.092	<49	320
TP5-4	2/17/22	4	<0.024	<0.094	1,710	<60
TP5-6	2/17/22	6	<0.024	<0.098	670	<60
TP5-8	3/23/22	8	<0.025	<0.098	421	91
TP5-12	3/23/22	12	<0.025	<0.10	<51	<60
TP6-2	2/17/22	2	<0.024	<0.098	<46	<60
TP6-4	2/17/22	4	<0.025	<0.10	<49	350
TP6-6	2/17/22	6	<0.024	<0.098	<46	460
TP7-S	2/18/22	Surface	<0.12	<0.46	12,300	3,200
TP7-2	2/18/22	2	<0.025	<0.099	<48	890
TP7-4	2/18/22	4	<0.025	<0.098	<49	640
TP7-6	3/23/22	6	<0.025	<0.099	<46	92
TP8-S	2/18/22	Surface	<0.12	<0.48	372	65
TP8-2	2/18/22	2	<0.024	<0.097	<45	65
TP8-4	2/18/22	4	<0.025	<0.10	<49	63
TP9-S	2/18/22	Surface	<0.12	<0.47	60	2,700
TP9-2	2/18/22	2	<0.023	<0.093	<46	140
TP10-S	2/18/22	Surface	<0.12	<0.50	8,100	<60
TP10-2	2/18/22	2	<0.12	<0.49	<44	<60
TP11-S	2/18/22	Surface	<0.12	<0.50	1,910	1,500
TP11-2	2/18/22	2	<0.12	<0.49	1,650	140
TP11-4	2/18/22	4	<0.12	<0.50	1,830	140
TP11-8	3/23/22	8	<0.024	<0.098	<49	130
TP12-S	2/18/22	Surface	<0.12	<0.48	1,860	<60
TP12-4	2/18/22	4	<0.12	<0.48	136	<60
TP12-6	2/18/22	6	<0.12	<0.49	233	<60
TP12-8	3/23/22	8	<0.024	<0.097	1,500	<60
TP12-12	3/23/22	12	<0.025	<0.099	236	240
TP12-14	3/23/22	14	<0.025	<0.10	63	<61

4'

PROPOSED EXCAVATION AREA/DEPTH

TEST PIT LOCATION

PROPOSED SOIL BORING LOCATION

DEPTH

DEPTH OF SAMPLE (FT)

BTEX

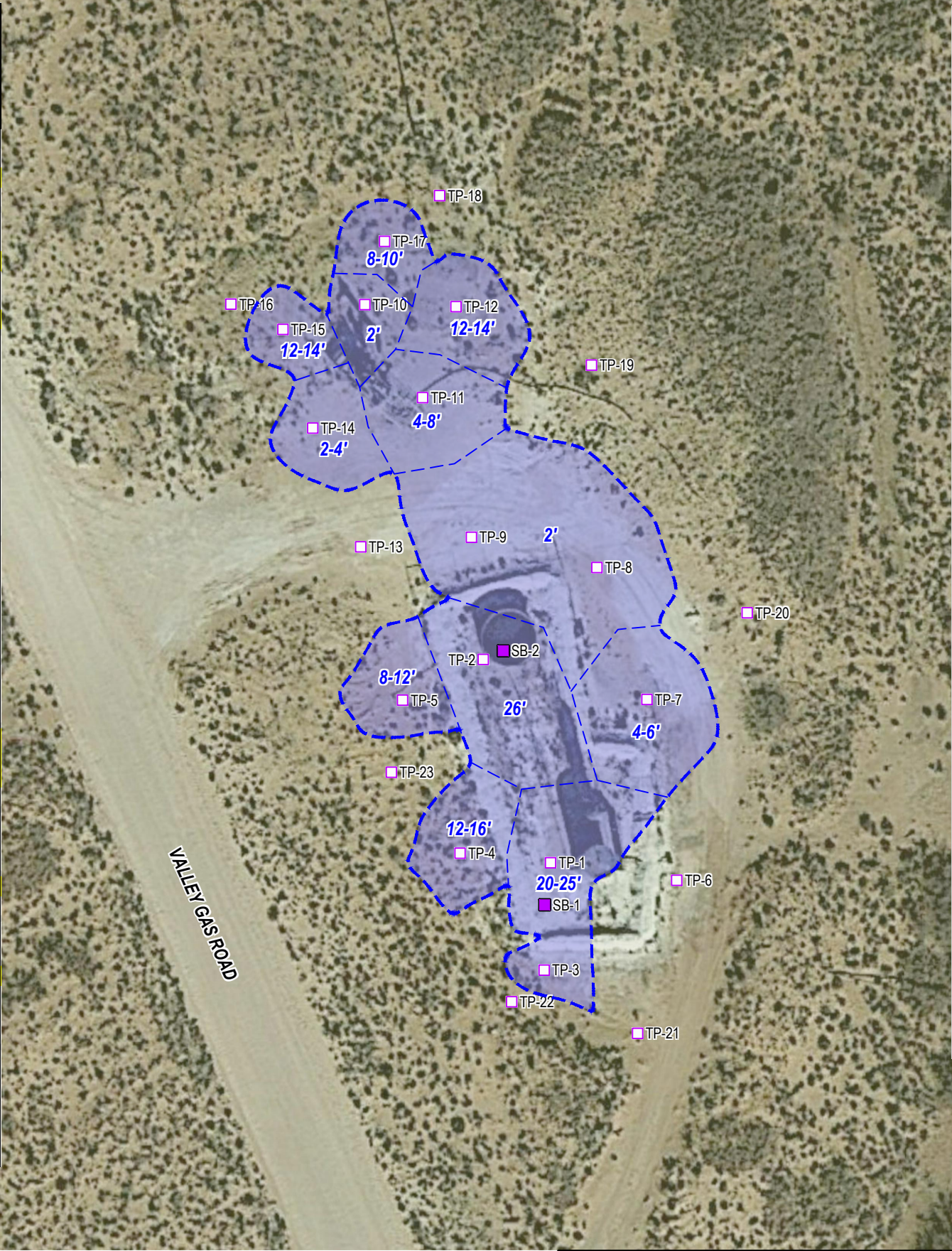
BENZENE, TOLUENE, ETHYLBENZENE & XYLENES CONCENTRATION (MG/KG)

TPH

TOTAL PETROLEUM HYDROCARBONS CONCENTRATION (MG/KG)

LEGEND

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





## Tables

**Table 1**  
**Summary of Soil Analytical Data**  
**Robinson B Federal #1**  
**EOG Resources**  
**Eddy County, New Mexico**

Sample ID	Sample Date	Depth (ft bgs)	Benzene	Toluene	Ethylbenzene	Xylenes	BTEX	TPH				Chloride
								GRO (C6-C10)	DRO (C10-C28)	MRO (C28-C35)	Total GRO/DRO/MRO	
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
			Table I Closure Criteria for Soils <50 feet Depth to Groundwater 19.15.29 NMAC									
10 mg/kg	---	---	---	50 mg/kg	---			100 mg/kg	600 mg/kg			
Initial Assessment Samples												
TP1-4	2/17/22	4	<0.12	<0.25	<0.25	<0.50	<0.50	<25	5,700	5,100	10,800	<60
TP1-12	2/17/22	12	0.52	<1.0	17	15.0	32.52	410	3,400	1,400	5,210	970
TP1-19	2/17/22	19	<0.40	<0.40	6.1	5.0	11.1	170	1,800	3,100	5,070	110
TP2-2	2/17/22	2	<0.023	<0.047	<0.047	<0.094	<0.094	<4.7	1,300	1,500	2,800	71
TP2-8	2/17/22	8	<0.12	<0.24	<0.24	<0.49	<0.49	<24	3,000	2,800	5,800	420
TP2-10	2/17/22	10	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	160	320	480	1,100
TP2-14	3/23/22	14	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	610	690	1,300	500
TP2-16	3/23/22	16	<0.025	<0.049	<0.049	<0.099	<0.099	<5.0	<9.3	<47	<47	130
TP2-20	3/23/22	20	<0.016	<0.032	<0.032	<0.064	<0.064	<3.2	<10	<50	<50	710
TP3-S	2/17/22	Surface	<0.024	<0.048	<0.048	<0.097	<0.097	<4.8	2,200	4,100	6,300	<60
TP3-2	2/17/22	2	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	1,500	2,300	3,800	<60
TP3-4	2/17/22	4	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	2,000	4,100	6,100	<60
TP3-8	3/23/22	8	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	1,000	1,300	2,300	<60
TP3-12	3/23/22	12	37	240	220	260	757	5,300	26,000	9,300	35,300	89
TP3-16	3/23/22	16	3.1	18	37	46	104.1	1,100	5,400	2,000	7,400	200
TP3-19	3/23/22	19	0.87	3.6	7.9	9.4	21.77	270	1,200	580	2,050	190
TP4-4	2/17/22	4	<0.12	<0.24	<0.24	<0.48	<0.48	<24	4,800	5,100	9,900	<60
TP4-12	2/17/22	12	<0.024	<0.048	<0.048	<0.097	<0.097	<4.8	2,100	3,400	5,500	230
TP4-16	2/17/22	16	<0.024	<0.047	<0.047	<0.095	<0.095	<4.7	9.2	48	57	86
TP5-S	2/17/22	Surface	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<8.9	<44	<44	170
TP5-2	2/17/22	2	<0.023	<0.046	<0.046	<0.092	<0.092	<4.6	<9.8	<49	<49	320
TP5-4	2/17/22	4	<0.024	<0.047	<0.047	<0.094	<0.094	<4.7	610	1,100	1,710	<60
TP5-6	2/17/22	6	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	140	530	670	<60
TP5-8	3/23/22	8	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	91	330	421	91
TP5-12	3/23/22	12	<0.025	<0.50	<0.50	<0.10	<0.10	<5.0	<10	<51	<51	<60
TP6-2	2/17/22	2	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	<9.2	<46	<46	<60
TP6-4	2/17/22	4	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<9.8	<49	<49	350
TP6-6	2/17/22	6	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	<9.3	<46	<46	460

**Table 1**  
**Summary of Soil Analytical Data**  
**Robinson B Federal #1**  
**EOG Resources**  
**Eddy County, New Mexico**

Sample ID	Sample Date	Depth (ft bgs)	Benzene	Toluene	Ethylbenzene	Xylenes	BTEX	TPH				Chloride
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	GRO (C6-C10)	DRO (C10-C28)	MRO (C28-C35)	Total GRO/DRO/MRO	(mg/kg)
			Table I Closure Criteria for Soils <50 feet Depth to Groundwater 19.15.29 NMAC									
			10 mg/kg	---	---	---	50 mg/kg	---	---	---	100 mg/kg	600 mg/kg
TP7-S	2/18/22	Surface	<0.12	<0.23	<0.23	<0.46	<0.46	<0.23	6,700	5,600	12,300	3,200
TP7-2	2/18/22	2	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	<9.6	<48	<48	890
TP7-4	2/18/22	4	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	<9.7	<49	<49	640
TP7-6	3/23/22	6	<0.025	<0.050	<0.050	<0.099	<0.099	<5.0	<9.2	<46	<46	92
TP8-S	2/18/22	Surface	<0.12	<0.24	<0.24	<0.48	<0.48	<24	62	310	372	65
TP8-2	2/18/22	2	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	<8.9	<45	<45	65
TP8-4	2/18/22	4	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<9.8	<49	<49	63
TP9-S	2/18/22	Surface	<0.12	<0.24	<0.24	<0.47	<0.47	<24	12	48	60	2,700
TP9-2	2/18/22	2	<0.023	<0.046	<0.046	<0.093	<0.093	<4.6	<9.3	<46	<46	140
TP10-S	2/18/22	Surface	<0.12	<0.25	<0.25	<0.50	<0.50	<25	3,500	4,600	8,100	<60
TP10-2	2/18/22	2	<0.12	<0.25	<0.25	<0.49	<0.49	<25	<8.9	<44	<44	<60
TP11-S	2/18/22	Surface	<0.12	<0.25	<0.25	<0.50	<0.50	<25	510	1,400	1,910	1,500
TP11-2	2/18/22	2	<0.12	<0.24	<0.24	<0.49	<0.49	<24	550	1,100	1,650	140
TP11-4	2/18/22	4	<0.12	<0.25	<0.25	<0.50	<0.50	<25	840	990	1,830	140
TP11-8	3/23/22	8	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	<9.9	<49	<49	130
TP12-S	2/18/22	Surface	<0.12	<0.24	<0.24	<0.48	<0.48	<24	460	1,400	1,860	<60
TP12-4	2/18/22	4	<0.12	<0.24	<0.24	<0.48	<0.48	<24	65	71	136	<60
TP12-6	2/18/22	6	<0.12	<0.25	<0.25	<0.49	<0.49	<25	73	160	233	<60
TP12-8	3/23/22	8	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	520	980	1,500	<60
TP12-12	3/23/22	12	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	46	190	236	240
TP12-14	3/23/22	14	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	11	52	63	<61
TP13-S	2/21/22	Surface	<0.023	<0.047	<0.047	<0.093	<0.093	<4.7	9.7	<42	9.7	560
TP13-2	2/21/22	2	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<9.8	<49	<49	160
TP13-4	2/21/22	4	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<10	<50	<50	140
TP14-S	2/21/22	Surface	<0.023	<0.046	<0.046	<0.092	<0.092	<4.6	<9.1	<45	<45	94
TP14-2	2/21/22	2	<0.024	<0.048	<0.048	<0.097	<0.097	<4.8	70	250	320	<60
TP14-4	2/21/22	4	<0.024	<0.047	<0.047	<0.095	<0.095	<4.7	<9.2	<46	<46	69
TP15-S	2/21/22	Surface	<0.12	<0.25	<0.25	<0.50	<0.50	<25	250	1,000	1,250	<60
TP15-4	2/21/22	4	<0.12	<0.24	<0.24	<0.48	<0.48	<24	1,100	2,800	3,900	<60
TP15-8	2/21/22	8	<0.12	<0.24	<0.24	<0.48	<0.48	<24	630	2,400	3,030	<60
TP15-12	2/21/22	12	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	66	240	306	97

**Table 1**  
**Summary of Soil Analytical Data**  
**Robinson B Federal #1**  
**EOG Resources**  
**Eddy County, New Mexico**

Sample ID	Sample Date	Depth (ft bgs)	Benzene	Toluene	Ethylbenzene	Xylenes	BTEX	TPH				Chloride
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	GRO (C6-C10)	DRO (C10-C28)	MRO (C28-C35)	Total GRO/DRO/MRO	(mg/kg)
			Table I Closure Criteria for Soils <50 feet Depth to Groundwater 19.15.29 NMAC									
			10 mg/kg	---	---	---	50 mg/kg	---	---	---	100 mg/kg	600 mg/kg
TP15-14	3/23/22	14	<0.024	<0.048	<0.048	<0.095	<0.095	<4.8	<9.7	76	76	150
TP16-S	3/23/22	Surface	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	<9.5	<48	<48	<61
TP16-2	3/23/22	2	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<9.8	<49	<49	<60
TP17-2	3/23/22	2	<0.025	<0.050	<0.050	<0.099	<0.099	<5.0	680	1,200	1,880	<60
TP17-4	3/23/22	4	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	2,400	3,800	6,200	<60
TP17-8	3/23/22	8	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	310	800	1,110	<60
TP17-10	3/23/22	10	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<10	<50	<50	<61
TP18-S	3/23/22	Surface	<0.025	<0.050	<0.050	<0.099	<0.099	<5.0	<9.9	90	90	<60
TP18-2	3/23/22	2	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	<9.6	<50	<50	<60
TP19-S	3/24/22	Surface	<0.024	<0.048	<0.048	<0.097	<0.097	<4.8	<9.7	<49	<49	<60
TP19-2	3/24/22	2	<0.024	<0.047	<0.047	<0.095	<0.095	<4.7	<9.4	<47	<47	<60
TP20-S	3/24/22	Surface	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	<9.6	<48	<48	<60
TP20-2	3/24/22	2	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<9.7	<49	<49	<60
TP21-S	3/24/22	Surface	<0.023	<0.047	<0.047	<0.094	<0.094	<4.7	<10	<50	<50	<60
TP21-2	3/24/22	2	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	<9.4	<47	<47	<59
TP22-S	3/24/22	Surface	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	<9.6	<48	<48	<60
TP22-2	3/24/22	2	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	<9.9	<49	<49	<60
TP23-S	3/24/22	Surface	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	<9.4	<47	<47	<60
TP23-2	3/24/22	2	<0.023	<0.046	<0.046	<0.093	<0.093	<4.6	<9.5	<47	<47	<60
<b>Soil Borings</b>												
SB-1 (5')	4/27/22	5	1.4	<0.50	16	9.5	26.9	660	2,300	1,300	4,260	<60
SB-1 (10')	4/27/22	10	<0.12	<0.23	3.1	3.5	6.6	120	1,000	690	1,810	<61
SB-1 (15')	4/27/22	15	16	61	66	79	222	2,200	6,500	2,400	11,100	67
SB-1 (20')	4/27/22	20	<0.12	0.52	2.7	3.5	6.72	110	2,600	1,100	3,810	140
SB-1 (25')	4/27/22	25	<0.12	<0.25	<0.25	<0.49	<0.49	<35	<9.8	<49	<49	230
SB-1 (30')	4/27/22	30	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<9.9	<50	<50	150
SB-1 (35')	4/27/22	35	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<9.4	<47	<47	<60
SB-2 (5')	4/27/22	5	<0.024	<0.048	<0.048	<0.095	<0.095	<4.8	<9.5	<48	<48	130
SB-2 (10')	4/27/22	10	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	<9.4	<47	<47	280
SB-2 (15')	4/27/22	15	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<10	<50	<50	170
SB-2 (20')	4/27/22	20	<0.12	<0.23	<0.23	<0.47	<0.47	<23	210	200	410	3,000

**Table 1**  
**Summary of Soil Analytical Data**  
**Robinson B Federal #1**  
**EOG Resources**  
**Eddy County, New Mexico**

Sample ID	Sample Date	Depth (ft bgs)	Benzene	Toluene	Ethylbenzene	Xylenes	BTEX	TPH				Chloride
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	GRO (C6-C10)	DRO (C10-C28)	MRO (C28-C35)	Total GRO/DRO/MRO	(mg/kg)
			Table 1 Closure Criteria for Soils <50 feet Depth to Groundwater 19.15.29 NMAC									
			10 mg/kg	---	---	---	50 mg/kg	---			100 mg/kg	600 mg/kg
SB-2 (25')	4/27/22	25	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	15	<49	15	1,700
SB-2 (30')	4/27/22	30	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<10	<50	<50	<61

**Notes:**

1. Values reported in mg/kg

2. < = Value Less than Reporting Limit (RL)

3. Bold Indicates Analyte Detected

4. BTEX analyses by EPA Method SW 8021B.

5. TPH analyses by EPA Method SW 8015 Mod.

 Sample Point Excavated

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

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

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

# **Attachment A**

## **Site Characterization Documentation**

# Robinson B Federal #1

Karst Potential Map

## Legend

- High
- Low
- Medium
- Robinson B Federal 1



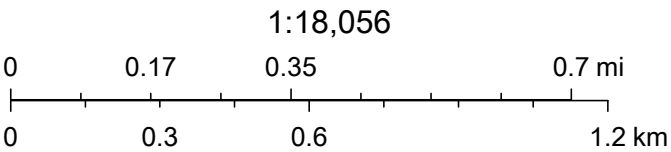


# OSE POD Locations Map



3/1/2022, 11:39:00 AM


- Override 1
- OSE District Boundary
- New Mexico State Trust Lands
- Subsurface Estate
- Both Estates
- SiteBoundaries




Esri, HERE, GeoTechnologies, Inc., Esri, HERE, Garmin, GeoTechnologies, Inc., U.S. Department of Energy Office of Legacy Management, Maxar

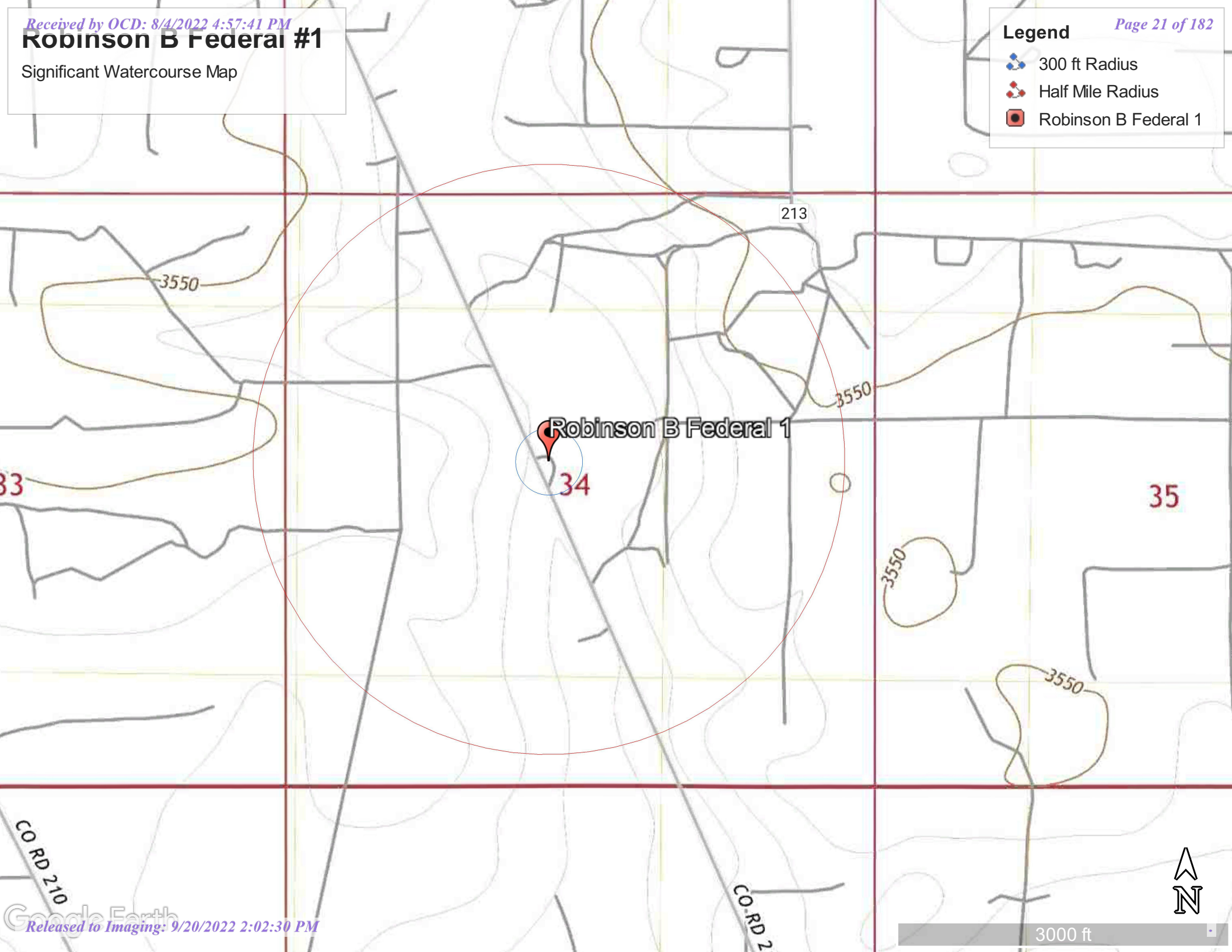


Legend

 300 ft Radius

 Half Mile Radius

 Robinson B Federal 1







## Robinson B Federal #1



March 2, 2022

**Wetlands**

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

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

- Lake
- Other
- Riverine

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



# National Flood Hazard Layer FIRMette



104°4'8"W 32°47'45"N



### Legend

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

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

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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/1/2022 at 12:27 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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

# **Attachment B**

## **Laboratory Analytical Reports and Chain-of-Custody Documentation**



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [clients.hallenvironmental.com](http://clients.hallenvironmental.com)

March 08, 2022

Tom Larson  
GHD Midland  
2135 S Loop 250 W  
Midland, TX 79703  
TEL: (432) 686-0086  
FAX:

RE: Robinson B Federal 1

OrderNo.: 2202A39

Dear Tom Larson:

Hall Environmental Analysis Laboratory received 19 sample(s) on 2/23/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 2202A39

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP1-4

Project: Robinson B Federal 1

Collection Date: 2/17/2022 9:35:00 AM

Lab ID: 2202A39-001

Matrix: SOIL

Received Date: 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/1/2022 2:15:22 PM	65853
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	5700	450		mg/Kg	50	2/25/2022 12:15:43 AM	65766
Motor Oil Range Organics (MRO)	5100	2300		mg/Kg	50	2/25/2022 12:15:43 AM	65766
Surr: DNOP	0	51.1-141	S	%Rec	50	2/25/2022 12:15:43 AM	65766
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	25		mg/Kg	5	2/24/2022 6:30:00 PM	65760
Surr: BFB	109	70-130		%Rec	5	2/24/2022 6:30:00 PM	65760
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	ND	0.12		mg/Kg	5	2/24/2022 6:30:00 PM	65760
Toluene	ND	0.25		mg/Kg	5	2/24/2022 6:30:00 PM	65760
Ethylbenzene	ND	0.25		mg/Kg	5	2/24/2022 6:30:00 PM	65760
Xylenes, Total	ND	0.50		mg/Kg	5	2/24/2022 6:30:00 PM	65760
Surr: 4-Bromofluorobenzene	92.8	70-130		%Rec	5	2/24/2022 6:30:00 PM	65760

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202A39

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP1-12

Project: Robinson B Federal 1

Collection Date: 2/17/2022 9:45:00 AM

Lab ID: 2202A39-002

Matrix: SOIL

Received Date: 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	970	60		mg/Kg	20	3/1/2022 2:52:37 PM	65853
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	3400	170		mg/Kg	20	2/28/2022 5:08:46 PM	65766
Motor Oil Range Organics (MRO)	1400	870		mg/Kg	20	2/28/2022 5:08:46 PM	65766
Surr: DNOP	0	51.1-141	S	%Rec	20	2/28/2022 5:08:46 PM	65766
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	410	100		mg/Kg	20	2/24/2022 6:50:00 PM	65760
Surr: BFB	220	70-130	S	%Rec	20	2/24/2022 6:50:00 PM	65760
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	0.52	0.50		mg/Kg	20	2/24/2022 6:50:00 PM	65760
Toluene	ND	1.0		mg/Kg	20	2/24/2022 6:50:00 PM	65760
Ethylbenzene	17	1.0		mg/Kg	20	2/24/2022 6:50:00 PM	65760
Xylenes, Total	15	2.0		mg/Kg	20	2/24/2022 6:50:00 PM	65760
Surr: 4-Bromofluorobenzene	115	70-130		%Rec	20	2/24/2022 6:50:00 PM	65760

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202A39

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP1-19

Project: Robinson B Federal 1

Collection Date: 2/17/2022 9:55:00 AM

Lab ID: 2202A39-003

Matrix: SOIL

Received Date: 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	110	60		mg/Kg	20	3/1/2022 3:05:01 PM	65853
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	1800	460		mg/Kg	50	2/25/2022 12:37:00 AM	65766
Motor Oil Range Organics (MRO)	3100	2300		mg/Kg	50	2/25/2022 12:37:00 AM	65766
Surr: DNOP	0	51.1-141	S	%Rec	50	2/25/2022 12:37:00 AM	65766
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	170	99		mg/Kg	20	2/24/2022 7:10:00 PM	65760
Surr: BFB	166	70-130	S	%Rec	20	2/24/2022 7:10:00 PM	65760
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	ND	0.40	D	mg/Kg	20	2/24/2022 7:10:00 PM	65760
Toluene	ND	0.40	D	mg/Kg	20	2/24/2022 7:10:00 PM	65760
Ethylbenzene	6.1	0.99	D	mg/Kg	20	2/24/2022 7:10:00 PM	65760
Xylenes, Total	5.0	2.0	D	mg/Kg	20	2/24/2022 7:10:00 PM	65760
Surr: 4-Bromofluorobenzene	103	70-130	D	%Rec	20	2/24/2022 7:10:00 PM	65760

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202A39

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP2-2

Project: Robinson B Federal 1

Collection Date: 2/17/2022 10:45:00 AM

Lab ID: 2202A39-004

Matrix: SOIL

Received Date: 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	71	60		mg/Kg	20	3/1/2022 3:42:15 PM	65853
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	1300	170		mg/Kg	20	2/25/2022 12:47:39 AM	65766
Motor Oil Range Organics (MRO)	1500	840		mg/Kg	20	2/25/2022 12:47:39 AM	65766
Surr: DNOP	0	51.1-141	S	%Rec	20	2/25/2022 12:47:39 AM	65766
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/24/2022 8:29:00 PM	65760
Surr: BFB	100	70-130		%Rec	1	2/24/2022 8:29:00 PM	65760
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	ND	0.023		mg/Kg	1	2/24/2022 8:29:00 PM	65760
Toluene	ND	0.047		mg/Kg	1	2/24/2022 8:29:00 PM	65760
Ethylbenzene	ND	0.047		mg/Kg	1	2/24/2022 8:29:00 PM	65760
Xylenes, Total	ND	0.094		mg/Kg	1	2/24/2022 8:29:00 PM	65760
Surr: 4-Bromofluorobenzene	85.5	70-130		%Rec	1	2/24/2022 8:29:00 PM	65760

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202A39

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP2-8

Project: Robinson B Federal 1

Collection Date: 2/17/2022 10:50:00 AM

Lab ID: 2202A39-005

Matrix: SOIL

Received Date: 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	420	60		mg/Kg	20	3/1/2022 3:54:39 PM	65853
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	3000	190		mg/Kg	20	2/25/2022 12:58:20 AM	65766
Motor Oil Range Organics (MRO)	2800	940		mg/Kg	20	2/25/2022 12:58:20 AM	65766
Surr: DNOP	0	51.1-141	S	%Rec	20	2/25/2022 12:58:20 AM	65766
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	24		mg/Kg	5	2/24/2022 8:48:00 PM	65760
Surr: BFB	103	70-130		%Rec	5	2/24/2022 8:48:00 PM	65760
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	ND	0.12		mg/Kg	5	2/24/2022 8:48:00 PM	65760
Toluene	ND	0.24		mg/Kg	5	2/24/2022 8:48:00 PM	65760
Ethylbenzene	ND	0.24		mg/Kg	5	2/24/2022 8:48:00 PM	65760
Xylenes, Total	ND	0.49		mg/Kg	5	2/24/2022 8:48:00 PM	65760
Surr: 4-Bromofluorobenzene	86.5	70-130		%Rec	5	2/24/2022 8:48:00 PM	65760

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202A39

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP2-10

Project: Robinson B Federal 1

Collection Date: 2/17/2022 10:55:00 AM

Lab ID: 2202A39-006

Matrix: SOIL

Received Date: 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	1100	60		mg/Kg	20	3/1/2022 4:07:04 PM	65853
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	170	49		mg/Kg	5	3/1/2022 9:18:25 PM	65766
Motor Oil Range Organics (MRO)	320	240		mg/Kg	5	3/1/2022 9:18:25 PM	65766
Surr: DNOP	79.8	51.1-141		%Rec	5	3/1/2022 9:18:25 PM	65766
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/24/2022 9:08:00 PM	65760
Surr: BFB	98.2	70-130		%Rec	1	2/24/2022 9:08:00 PM	65760
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	2/24/2022 9:08:00 PM	65760
Toluene	ND	0.049		mg/Kg	1	2/24/2022 9:08:00 PM	65760
Ethylbenzene	ND	0.049		mg/Kg	1	2/24/2022 9:08:00 PM	65760
Xylenes, Total	ND	0.098		mg/Kg	1	2/24/2022 9:08:00 PM	65760
Surr: 4-Bromofluorobenzene	86.9	70-130		%Rec	1	2/24/2022 9:08:00 PM	65760

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202A39

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP3-S

Project: Robinson B Federal 1

Collection Date: 2/17/2022 12:30:00 PM

Lab ID: 2202A39-007

Matrix: SOIL

Received Date: 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/1/2022 4:19:29 PM	65853
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	2200	440		mg/Kg	50	3/1/2022 9:50:26 PM	65777
Motor Oil Range Organics (MRO)	4100	2200		mg/Kg	50	3/1/2022 9:50:26 PM	65777
Surr: DNOP	0	51.1-141	S	%Rec	50	3/1/2022 9:50:26 PM	65777
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/24/2022 9:28:00 PM	65760
Surr: BFB	104	70-130		%Rec	1	2/24/2022 9:28:00 PM	65760
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	2/24/2022 9:28:00 PM	65760
Toluene	ND	0.048		mg/Kg	1	2/24/2022 9:28:00 PM	65760
Ethylbenzene	ND	0.048		mg/Kg	1	2/24/2022 9:28:00 PM	65760
Xylenes, Total	ND	0.097		mg/Kg	1	2/24/2022 9:28:00 PM	65760
Surr: 4-Bromofluorobenzene	86.0	70-130		%Rec	1	2/24/2022 9:28:00 PM	65760

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202A39

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP3-2

Project: Robinson B Federal 1

Collection Date: 2/17/2022 12:35:00 PM

Lab ID: 2202A39-008

Matrix: SOIL

Received Date: 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/1/2022 4:31:54 PM	65853
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	1500	190		mg/Kg	20	3/2/2022 12:22:49 PM	65777
Motor Oil Range Organics (MRO)	2300	940		mg/Kg	20	3/2/2022 12:22:49 PM	65777
Surr: DNOP	0	51.1-141	S	%Rec	20	3/2/2022 12:22:49 PM	65777
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/24/2022 9:47:00 PM	65760
Surr: BFB	100	70-130		%Rec	1	2/24/2022 9:47:00 PM	65760
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	2/24/2022 9:47:00 PM	65760
Toluene	ND	0.049		mg/Kg	1	2/24/2022 9:47:00 PM	65760
Ethylbenzene	ND	0.049		mg/Kg	1	2/24/2022 9:47:00 PM	65760
Xylenes, Total	ND	0.099		mg/Kg	1	2/24/2022 9:47:00 PM	65760
Surr: 4-Bromofluorobenzene	88.7	70-130		%Rec	1	2/24/2022 9:47:00 PM	65760

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202A39

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP3-4

Project: Robinson B Federal 1

Collection Date: 2/17/2022 12:40:00 PM

Lab ID: 2202A39-009

Matrix: SOIL

Received Date: 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/1/2022 4:44:19 PM	65853
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	2000	480		mg/Kg	50	3/1/2022 10:43:35 PM	65777
Motor Oil Range Organics (MRO)	4100	2400		mg/Kg	50	3/1/2022 10:43:35 PM	65777
Surr: DNOP	0	51.1-141	S	%Rec	50	3/1/2022 10:43:35 PM	65777
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/24/2022 10:07:00 PM	65760
Surr: BFB	103	70-130		%Rec	1	2/24/2022 10:07:00 PM	65760
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	2/24/2022 10:07:00 PM	65760
Toluene	ND	0.049		mg/Kg	1	2/24/2022 10:07:00 PM	65760
Ethylbenzene	ND	0.049		mg/Kg	1	2/24/2022 10:07:00 PM	65760
Xylenes, Total	ND	0.099		mg/Kg	1	2/24/2022 10:07:00 PM	65760
Surr: 4-Bromofluorobenzene	87.8	70-130		%Rec	1	2/24/2022 10:07:00 PM	65760

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202A39

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP4-4

Project: Robinson B Federal 1

Collection Date: 2/17/2022 1:20:00 PM

Lab ID: 2202A39-010

Matrix: SOIL

Received Date: 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/1/2022 4:56:43 PM	65853
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	4800	480		mg/Kg	50	2/26/2022 3:30:52 AM	65777
Motor Oil Range Organics (MRO)	5100	2400		mg/Kg	50	2/26/2022 3:30:52 AM	65777
Surr: DNOP	0	51.1-141	S	%Rec	50	2/26/2022 3:30:52 AM	65777
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	24		mg/Kg	5	2/24/2022 10:27:00 PM	65760
Surr: BFB	102	70-130		%Rec	5	2/24/2022 10:27:00 PM	65760
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	ND	0.12		mg/Kg	5	2/24/2022 10:27:00 PM	65760
Toluene	ND	0.24		mg/Kg	5	2/24/2022 10:27:00 PM	65760
Ethylbenzene	ND	0.24		mg/Kg	5	2/24/2022 10:27:00 PM	65760
Xylenes, Total	ND	0.48		mg/Kg	5	2/24/2022 10:27:00 PM	65760
Surr: 4-Bromofluorobenzene	90.0	70-130		%Rec	5	2/24/2022 10:27:00 PM	65760

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202A39

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP4-12

Project: Robinson B Federal 1

Collection Date: 2/17/2022 1:25:00 PM

Lab ID: 2202A39-011

Matrix: SOIL

Received Date: 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	230	59		mg/Kg	20	3/1/2022 5:09:07 PM	65853
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	2100	470		mg/Kg	50	3/1/2022 11:04:48 PM	65777
Motor Oil Range Organics (MRO)	3400	2300		mg/Kg	50	3/1/2022 11:04:48 PM	65777
Surr: DNOP	0	51.1-141	S	%Rec	50	3/1/2022 11:04:48 PM	65777
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/24/2022 10:46:00 PM	65760
Surr: BFB	103	70-130		%Rec	1	2/24/2022 10:46:00 PM	65760
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	2/24/2022 10:46:00 PM	65760
Toluene	ND	0.048		mg/Kg	1	2/24/2022 10:46:00 PM	65760
Ethylbenzene	ND	0.048		mg/Kg	1	2/24/2022 10:46:00 PM	65760
Xylenes, Total	ND	0.097		mg/Kg	1	2/24/2022 10:46:00 PM	65760
Surr: 4-Bromofluorobenzene	86.0	70-130		%Rec	1	2/24/2022 10:46:00 PM	65760

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202A39

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP4-16

Project: Robinson B Federal 1

Collection Date: 2/17/2022 1:30:00 PM

Lab ID: 2202A39-012

Matrix: SOIL

Received Date: 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	86	60		mg/Kg	20	3/1/2022 5:21:32 PM	65853
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	9.2	7.7		mg/Kg	1	2/28/2022 6:05:11 PM	65777
Motor Oil Range Organics (MRO)	48	39		mg/Kg	1	2/28/2022 6:05:11 PM	65777
Surr: DNOP	117	51.1-141		%Rec	1	2/28/2022 6:05:11 PM	65777
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/24/2022 11:06:00 PM	65760
Surr: BFB	109	70-130		%Rec	1	2/24/2022 11:06:00 PM	65760
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	2/24/2022 11:06:00 PM	65760
Toluene	ND	0.047		mg/Kg	1	2/24/2022 11:06:00 PM	65760
Ethylbenzene	ND	0.047		mg/Kg	1	2/24/2022 11:06:00 PM	65760
Xylenes, Total	ND	0.095		mg/Kg	1	2/24/2022 11:06:00 PM	65760
Surr: 4-Bromofluorobenzene	89.8	70-130		%Rec	1	2/24/2022 11:06:00 PM	65760

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202A39

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP5-S

Project: Robinson B Federal 1

Collection Date: 2/17/2022 2:00:00 PM

Lab ID: 2202A39-013

Matrix: SOIL

Received Date: 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	170	60		mg/Kg	20	3/1/2022 7:54:17 PM	65877
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	2/26/2022 4:12:25 AM	65777
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	2/26/2022 4:12:25 AM	65777
Surr: DNOP	151	51.1-141	S	%Rec	1	2/26/2022 4:12:25 AM	65777
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/24/2022 11:25:00 PM	65760
Surr: BFB	102	70-130		%Rec	1	2/24/2022 11:25:00 PM	65760
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	2/24/2022 11:25:00 PM	65760
Toluene	ND	0.048		mg/Kg	1	2/24/2022 11:25:00 PM	65760
Ethylbenzene	ND	0.048		mg/Kg	1	2/24/2022 11:25:00 PM	65760
Xylenes, Total	ND	0.096		mg/Kg	1	2/24/2022 11:25:00 PM	65760
Surr: 4-Bromofluorobenzene	87.9	70-130		%Rec	1	2/24/2022 11:25:00 PM	65760

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202A39

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP5-2

Project: Robinson B Federal 1

Collection Date: 2/17/2022 2:05:00 PM

Lab ID: 2202A39-014

Matrix: SOIL

Received Date: 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	320	60		mg/Kg	20	3/1/2022 8:06:41 PM	65877
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	2/28/2022 6:35:12 PM	65777
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/28/2022 6:35:12 PM	65777
Surr: DNOP	89.7	51.1-141		%Rec	1	2/28/2022 6:35:12 PM	65777
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	2/24/2022 9:07:12 PM	65765
Surr: BFB	107	70-130		%Rec	1	2/24/2022 9:07:12 PM	65765
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	2/24/2022 9:07:12 PM	65765
Toluene	ND	0.046		mg/Kg	1	2/24/2022 9:07:12 PM	65765
Ethylbenzene	ND	0.046		mg/Kg	1	2/24/2022 9:07:12 PM	65765
Xylenes, Total	ND	0.092		mg/Kg	1	2/24/2022 9:07:12 PM	65765
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	2/24/2022 9:07:12 PM	65765

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202A39

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP5-4

Project: Robinson B Federal 1

Collection Date: 2/17/2022 2:10:00 PM

Lab ID: 2202A39-015

Matrix: SOIL

Received Date: 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/1/2022 8:19:05 PM	65877
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	610	85		mg/Kg	10	2/26/2022 4:33:16 AM	65777
Motor Oil Range Organics (MRO)	1100	420		mg/Kg	10	2/26/2022 4:33:16 AM	65777
Surr: DNOP	0	51.1-141	S	%Rec	10	2/26/2022 4:33:16 AM	65777
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/24/2022 10:17:19 PM	65765
Surr: BFB	107	70-130		%Rec	1	2/24/2022 10:17:19 PM	65765
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	2/24/2022 10:17:19 PM	65765
Toluene	ND	0.047		mg/Kg	1	2/24/2022 10:17:19 PM	65765
Ethylbenzene	ND	0.047		mg/Kg	1	2/24/2022 10:17:19 PM	65765
Xylenes, Total	ND	0.094		mg/Kg	1	2/24/2022 10:17:19 PM	65765
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	2/24/2022 10:17:19 PM	65765

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202A39

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP5-6

Project: Robinson B Federal 1

Collection Date: 2/17/2022 2:15:00 PM

Lab ID: 2202A39-016

Matrix: SOIL

Received Date: 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/1/2022 8:31:29 PM	65877
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	140	94		mg/Kg	10	2/28/2022 7:04:55 PM	65777
Motor Oil Range Organics (MRO)	530	470		mg/Kg	10	2/28/2022 7:04:55 PM	65777
Surr: DNOP	0	51.1-141	S	%Rec	10	2/28/2022 7:04:55 PM	65777
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/24/2022 11:27:39 PM	65765
Surr: BFB	102	70-130		%Rec	1	2/24/2022 11:27:39 PM	65765
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	2/24/2022 11:27:39 PM	65765
Toluene	ND	0.049		mg/Kg	1	2/24/2022 11:27:39 PM	65765
Ethylbenzene	ND	0.049		mg/Kg	1	2/24/2022 11:27:39 PM	65765
Xylenes, Total	ND	0.098		mg/Kg	1	2/24/2022 11:27:39 PM	65765
Surr: 4-Bromofluorobenzene	96.6	70-130		%Rec	1	2/24/2022 11:27:39 PM	65765

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202A39

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP6-2

Project: Robinson B Federal 1

Collection Date: 2/17/2022 2:50:00 PM

Lab ID: 2202A39-017

Matrix: SOIL

Received Date: 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/1/2022 8:43:54 PM	65877
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	2/26/2022 5:04:33 AM	65777
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/26/2022 5:04:33 AM	65777
Surr: DNOP	109	51.1-141		%Rec	1	2/26/2022 5:04:33 AM	65777
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/24/2022 11:50:59 PM	65765
Surr: BFB	105	70-130		%Rec	1	2/24/2022 11:50:59 PM	65765
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	2/24/2022 11:50:59 PM	65765
Toluene	ND	0.049		mg/Kg	1	2/24/2022 11:50:59 PM	65765
Ethylbenzene	ND	0.049		mg/Kg	1	2/24/2022 11:50:59 PM	65765
Xylenes, Total	ND	0.098		mg/Kg	1	2/24/2022 11:50:59 PM	65765
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	2/24/2022 11:50:59 PM	65765

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202A39

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP6-4

Project: Robinson B Federal 1

Collection Date: 2/17/2022 2:55:00 PM

Lab ID: 2202A39-018

Matrix: SOIL

Received Date: 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	350	60		mg/Kg	20	3/1/2022 8:56:18 PM	65877
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	2/26/2022 5:15:03 AM	65777
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/26/2022 5:15:03 AM	65777
Surr: DNOP	108	51.1-141		%Rec	1	2/26/2022 5:15:03 AM	65777
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/25/2022 12:14:35 AM	65765
Surr: BFB	101	70-130		%Rec	1	2/25/2022 12:14:35 AM	65765
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	2/25/2022 12:14:35 AM	65765
Toluene	ND	0.050		mg/Kg	1	2/25/2022 12:14:35 AM	65765
Ethylbenzene	ND	0.050		mg/Kg	1	2/25/2022 12:14:35 AM	65765
Xylenes, Total	ND	0.10		mg/Kg	1	2/25/2022 12:14:35 AM	65765
Surr: 4-Bromofluorobenzene	96.8	70-130		%Rec	1	2/25/2022 12:14:35 AM	65765

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202A39

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP6-6

Project: Robinson B Federal 1

Collection Date: 2/17/2022 3:00:00 PM

Lab ID: 2202A39-019

Matrix: SOIL

Received Date: 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	460	61		mg/Kg	20	3/1/2022 9:08:43 PM	65877
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	2/26/2022 5:25:32 AM	65777
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/26/2022 5:25:32 AM	65777
Surr: DNOP	117	51.1-141		%Rec	1	2/26/2022 5:25:32 AM	65777
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/25/2022 12:37:51 AM	65765
Surr: BFB	105	70-130		%Rec	1	2/25/2022 12:37:51 AM	65765
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	2/25/2022 12:37:51 AM	65765
Toluene	ND	0.049		mg/Kg	1	2/25/2022 12:37:51 AM	65765
Ethylbenzene	ND	0.049		mg/Kg	1	2/25/2022 12:37:51 AM	65765
Xylenes, Total	ND	0.098		mg/Kg	1	2/25/2022 12:37:51 AM	65765
Surr: 4-Bromofluorobenzene	99.7	70-130		%Rec	1	2/25/2022 12:37:51 AM	65765

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2202A39

08-Mar-22

**Client:** GHD Midland  
**Project:** Robinson B Federal 1

Sample ID: <b>MB-65877</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>65877</b>	RunNo: <b>86175</b>								
Prep Date: <b>3/1/2022</b>	Analysis Date: <b>3/1/2022</b>	SeqNo: <b>3037341</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-65877</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>65877</b>	RunNo: <b>86175</b>								
Prep Date: <b>3/1/2022</b>	Analysis Date: <b>3/1/2022</b>	SeqNo: <b>3037343</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.0	90	110			

Sample ID: <b>MB-65853</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>65853</b>	RunNo: <b>86158</b>								
Prep Date: <b>3/1/2022</b>	Analysis Date: <b>3/1/2022</b>	SeqNo: <b>3037748</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-65853</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>65853</b>	RunNo: <b>86158</b>								
Prep Date: <b>3/1/2022</b>	Analysis Date: <b>3/1/2022</b>	SeqNo: <b>3037749</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	90.8	90	110			

Sample ID: <b>MB-65877</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>65877</b>	RunNo: <b>86214</b>								
Prep Date: <b>3/1/2022</b>	Analysis Date: <b>3/2/2022</b>	SeqNo: <b>3038866</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-65877</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>65877</b>	RunNo: <b>86214</b>								
Prep Date: <b>3/1/2022</b>	Analysis Date: <b>3/2/2022</b>	SeqNo: <b>3038867</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.2	90	110			

**Qualifiers:**

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2202A39

08-Mar-22

**Client:** GHD Midland  
**Project:** Robinson B Federal 1

Sample ID: <b>LCS-65766</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>65766</b>	RunNo: <b>86063</b>								
Prep Date: <b>2/23/2022</b>	Analysis Date: <b>2/24/2022</b>	SeqNo: <b>3033009</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.0	68.9	135			
Surr: DNOP	4.3		5.000		85.4	51.1	141			

Sample ID: <b>MB-65766</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>65766</b>	RunNo: <b>86063</b>								
Prep Date: <b>2/23/2022</b>	Analysis Date: <b>2/24/2022</b>	SeqNo: <b>3033013</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.6		10.00		95.5	51.1	141			

Sample ID: <b>LCS-65777</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>65777</b>	RunNo: <b>86122</b>								
Prep Date: <b>2/24/2022</b>	Analysis Date: <b>2/25/2022</b>	SeqNo: <b>3034562</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	92.6	68.9	135			
Surr: DNOP	4.2		5.000		84.1	51.1	141			

Sample ID: <b>MB-65777</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>65777</b>	RunNo: <b>86122</b>								
Prep Date: <b>2/24/2022</b>	Analysis Date: <b>2/25/2022</b>	SeqNo: <b>3034564</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.9		10.00		98.9	51.1	141			

**Qualifiers:**

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Page 21 of 25



**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2202A39

08-Mar-22

**Client:** GHD Midland  
**Project:** Robinson B Federal 1

Sample ID: <b>mb-65765</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>65765</b>	RunNo: <b>86074</b>								
Prep Date: <b>2/23/2022</b>	Analysis Date: <b>2/24/2022</b>	SeqNo: <b>3032804</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		108	70	130			

Sample ID: <b>lcs-65765</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>65765</b>	RunNo: <b>86074</b>								
Prep Date: <b>2/23/2022</b>	Analysis Date: <b>2/24/2022</b>	SeqNo: <b>3032805</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	78.6	131			
Surr: BFB	1200		1000		119	70	130			

Sample ID: <b>2202a39-014ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>TP5-2</b>	Batch ID: <b>65765</b>	RunNo: <b>86074</b>								
Prep Date: <b>2/23/2022</b>	Analysis Date: <b>2/24/2022</b>	SeqNo: <b>3032807</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	4.8	24.25	0	109	70	130			
Surr: BFB	1200		969.9		119	70	130			

Sample ID: <b>2202a39-014amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>TP5-2</b>	Batch ID: <b>65765</b>	RunNo: <b>86074</b>								
Prep Date: <b>2/23/2022</b>	Analysis Date: <b>2/24/2022</b>	SeqNo: <b>3032808</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	4.9	24.41	0	108	70	130	0.128	20	
Surr: BFB	1200		976.6		118	70	130	0	0	

Sample ID: <b>lcs-65760</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>65760</b>	RunNo: <b>86093</b>								
Prep Date: <b>2/23/2022</b>	Analysis Date: <b>2/24/2022</b>	SeqNo: <b>3033478</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	116	78.6	131			
Surr: BFB	1300		1000		125	70	130			

Sample ID: <b>mb-65760</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>65760</b>	RunNo: <b>86093</b>								
Prep Date: <b>2/23/2022</b>	Analysis Date: <b>2/24/2022</b>	SeqNo: <b>3033479</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

**Qualifiers:**

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT  
Hall Environmental Analysis Laboratory, Inc.

WO#: 2202A39  
08-Mar-22

Client: GHD Midland  
Project: Robinson B Federal 1

Sample ID: mb-65760	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 65760	RunNo: 86093								
Prep Date: 2/23/2022	Analysis Date: 2/24/2022	SeqNo: 3033479	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		107	70	130			

Qualifiers:

- \*

Value exceeds Maximum Contaminant Level.
- D

Sample Diluted Due to Matrix
- H

Holding times for preparation or analysis exceeded
- ND

Not Detected at the Reporting Limit
- PQL

Practical Quantitative Limit
- S

% Recovery outside of range due to dilution or matrix interference
- B

Analyte detected in the associated Method Blank
- E

Estimated value
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2202A39

08-Mar-22

**Client:** GHD Midland  
**Project:** Robinson B Federal 1

Sample ID: <b>mb-65765</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>65765</b>	RunNo: <b>86074</b>								
Prep Date: <b>2/23/2022</b>	Analysis Date: <b>2/24/2022</b>	SeqNo: <b>3032858</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		102	70	130			

Sample ID: <b>LCS-65765</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>65765</b>	RunNo: <b>86074</b>								
Prep Date: <b>2/23/2022</b>	Analysis Date: <b>2/24/2022</b>	SeqNo: <b>3032859</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.85	0.025	1.000	0	85.3	80	120			
Toluene	0.90	0.050	1.000	0	90.5	80	120			
Ethylbenzene	0.92	0.050	1.000	0	91.6	80	120			
Xylenes, Total	2.8	0.10	3.000	0	91.7	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	70	130			

Sample ID: <b>2202a39-015ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>TP5-4</b>	Batch ID: <b>65765</b>	RunNo: <b>86074</b>								
Prep Date: <b>2/23/2022</b>	Analysis Date: <b>2/24/2022</b>	SeqNo: <b>3032862</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.024	0.9597	0	94.2	80	120			
Toluene	0.97	0.048	0.9597	0	101	80	120			
Ethylbenzene	0.99	0.048	0.9597	0.01129	102	80	120			
Xylenes, Total	3.0	0.096	2.879	0	103	80	120			
Surr: 4-Bromofluorobenzene	0.97		0.9597		101	70	130			

Sample ID: <b>2202a39-015amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>TP5-4</b>	Batch ID: <b>65765</b>	RunNo: <b>86074</b>								
Prep Date: <b>2/23/2022</b>	Analysis Date: <b>2/24/2022</b>	SeqNo: <b>3032863</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.83	0.024	0.9643	0	86.1	80	120	8.45	20	
Toluene	0.88	0.048	0.9643	0	91.4	80	120	9.09	20	
Ethylbenzene	0.90	0.048	0.9643	0.01129	92.0	80	120	9.84	20	
Xylenes, Total	2.7	0.096	2.893	0	93.4	80	120	8.96	20	
Surr: 4-Bromofluorobenzene	0.97		0.9643		101	70	130	0	0	

**Qualifiers:**

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2202A39

08-Mar-22

**Client:** GHD Midland  
**Project:** Robinson B Federal 1

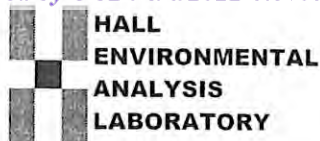
Sample ID: <b>lcs-65760</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>65760</b>		RunNo: <b>86093</b>							
Prep Date: <b>2/23/2022</b>	Analysis Date: <b>2/24/2022</b>		SeqNo: <b>3033667</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	1.000	0	97.0	80	120			
Toluene	0.99	0.050	1.000	0	98.8	80	120			
Ethylbenzene	1.0	0.050	1.000	0	99.7	80	120			
Xylenes, Total	3.0	0.10	3.000	0	99.4	80	120			
Surr: 4-Bromofluorobenzene	0.96		1.000		95.8	70	130			

Sample ID: <b>mb-65760</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>65760</b>		RunNo: <b>86093</b>							
Prep Date: <b>2/23/2022</b>	Analysis Date: <b>2/24/2022</b>		SeqNo: <b>3033669</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.92		1.000		92.2	70	130			

**Qualifiers:**

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		





Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: clients.hallenvironmental.com

## Sample Log-In Check List

Client Name: GHD Midland

Work Order Number: 2202A39

RcptNo: 1

Received By: Cheyenne Cason

2/23/2022 7:45:00 AM

Completed By: Sean Livingston

2/23/2022 8:18:46 AM

Reviewed By: JO

2/23/22

*Chad**Sean Livingston*

### Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

### Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace  $<1/4"$  for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved  
bottles checked  
for pH:

( $<2$  or  $>12$  unless noted)

Adjusted? \_\_\_\_\_

Checked by: KPA 2/23/22

### Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: \_\_\_\_\_

Date: \_\_\_\_\_

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good				
2	2.3	Good				









Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [clients.hallenvironmental.com](http://clients.hallenvironmental.com)

March 08, 2022

Tom Larson  
GHD Midland  
2135 S Loop 250 W  
Midland, TX 79703  
TEL: (432) 686-0086  
FAX

RE: Robinson B Federal 1

OrderNo.: 2202945

Dear Tom Larson:

Hall Environmental Analysis Laboratory received 16 sample(s) on 2/19/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 2202945

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP7-5

Project: Robinson B Federal 1

Collection Date: 2/18/2022 8:55:00 AM

Lab ID: 2202945-001

Matrix: SOIL

Received Date: 2/19/2022 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	3200	150		mg/Kg	50	2/28/2022 3:40:35 PM	65834
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	6700	480		mg/Kg	50	2/23/2022 2:34:42 PM	65707
Motor Oil Range Organics (MRO)	5600	2400		mg/Kg	50	2/23/2022 2:34:42 PM	65707
Surr: DNOP	0	51.1-141	S	%Rec	50	2/23/2022 2:34:42 PM	65707
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	23		mg/Kg	5	2/24/2022 12:33:58 AM	65698
Surr: BFB	103	70-130		%Rec	5	2/24/2022 12:33:58 AM	65698
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.12		mg/Kg	5	2/24/2022 12:33:58 AM	65698
Toluene	ND	0.23		mg/Kg	5	2/24/2022 12:33:58 AM	65698
Ethylbenzene	ND	0.23		mg/Kg	5	2/24/2022 12:33:58 AM	65698
Xylenes, Total	ND	0.46		mg/Kg	5	2/24/2022 12:33:58 AM	65698
Surr: 4-Bromofluorobenzene	93.2	70-130		%Rec	5	2/24/2022 12:33:58 AM	65698

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Page 1 of 22



## Analytical Report

Lab Order 2202945

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP7-2

Project: Robinson B Federal 1

Collection Date: 2/18/2022 9:00:00 AM

Lab ID: 2202945-002

Matrix: SOIL

Received Date: 2/19/2022 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	890	60		mg/Kg	20	2/28/2022 11:07:31 AM	65834
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	2/23/2022 2:56:06 PM	65707
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/23/2022 2:56:06 PM	65707
Surr: DNOP	96.0	51.1-141		%Rec	1	2/23/2022 2:56:06 PM	65707
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/24/2022 12:57:09 AM	65698
Surr: BFB	106	70-130		%Rec	1	2/24/2022 12:57:09 AM	65698
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	2/24/2022 12:57:09 AM	65698
Toluene	ND	0.049		mg/Kg	1	2/24/2022 12:57:09 AM	65698
Ethylbenzene	ND	0.049		mg/Kg	1	2/24/2022 12:57:09 AM	65698
Xylenes, Total	ND	0.099		mg/Kg	1	2/24/2022 12:57:09 AM	65698
Surr: 4-Bromofluorobenzene	98.6	70-130		%Rec	1	2/24/2022 12:57:09 AM	65698

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202945

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP7-4

Project: Robinson B Federal 1

Collection Date: 2/18/2022 9:05:00 AM

Lab ID: 2202945-003

Matrix: SOIL

Received Date: 2/19/2022 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	640	60		mg/Kg	20	2/28/2022 11:19:56 AM	65834
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	2/23/2022 3:06:55 PM	65707
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/23/2022 3:06:55 PM	65707
Surr: DNOP	98.5	51.1-141		%Rec	1	2/23/2022 3:06:55 PM	65707
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/24/2022 1:20:16 AM	65698
Surr: BFB	102	70-130		%Rec	1	2/24/2022 1:20:16 AM	65698
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	2/24/2022 1:20:16 AM	65698
Toluene	ND	0.049		mg/Kg	1	2/24/2022 1:20:16 AM	65698
Ethylbenzene	ND	0.049		mg/Kg	1	2/24/2022 1:20:16 AM	65698
Xylenes, Total	ND	0.098		mg/Kg	1	2/24/2022 1:20:16 AM	65698
Surr: 4-Bromofluorobenzene	96.6	70-130		%Rec	1	2/24/2022 1:20:16 AM	65698

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202945

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP8-2

Project: Robinson B Federal 1

Collection Date: 2/18/2022 9:15:00 AM

Lab ID: 2202945-004

Matrix: SOIL

Received Date: 2/19/2022 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	65	60		mg/Kg	20	2/28/2022 11:32:21 AM	65834
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	2/23/2022 3:17:43 PM	65707
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	2/23/2022 3:17:43 PM	65707
Surr: DNOP	95.3	51.1-141		%Rec	1	2/23/2022 3:17:43 PM	65707
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/24/2022 1:43:21 AM	65698
Surr: BFB	106	70-130		%Rec	1	2/24/2022 1:43:21 AM	65698
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	2/24/2022 1:43:21 AM	65698
Toluene	ND	0.049		mg/Kg	1	2/24/2022 1:43:21 AM	65698
Ethylbenzene	ND	0.049		mg/Kg	1	2/24/2022 1:43:21 AM	65698
Xylenes, Total	ND	0.097		mg/Kg	1	2/24/2022 1:43:21 AM	65698
Surr: 4-Bromofluorobenzene	96.9	70-130		%Rec	1	2/24/2022 1:43:21 AM	65698

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202945

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP8-4

Project: Robinson B Federal 1

Collection Date: 2/18/2022 9:20:00 AM

Lab ID: 2202945-005

Matrix: SOIL

Received Date: 2/19/2022 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	63	60		mg/Kg	20	2/28/2022 11:44:45 AM	65834
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	2/23/2022 3:28:30 PM	65707
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/23/2022 3:28:30 PM	65707
Surr: DNOP	98.7	51.1-141		%Rec	1	2/23/2022 3:28:30 PM	65707
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/24/2022 2:06:24 AM	65698
Surr: BFB	103	70-130		%Rec	1	2/24/2022 2:06:24 AM	65698
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	2/24/2022 2:06:24 AM	65698
Toluene	ND	0.050		mg/Kg	1	2/24/2022 2:06:24 AM	65698
Ethylbenzene	ND	0.050		mg/Kg	1	2/24/2022 2:06:24 AM	65698
Xylenes, Total	ND	0.10		mg/Kg	1	2/24/2022 2:06:24 AM	65698
Surr: 4-Bromofluorobenzene	96.8	70-130		%Rec	1	2/24/2022 2:06:24 AM	65698

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202945

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP9-5

Project: Robinson B Federal 1

Collection Date: 2/18/2022 9:25:00 AM

Lab ID: 2202945-006

Matrix: SOIL

Received Date: 2/19/2022 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	2700	150		mg/Kg	50	2/28/2022 3:53:00 PM	65834
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	17	9.2		mg/Kg	1	3/1/2022 8:24:17 PM	65707
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/1/2022 8:24:17 PM	65707
Surr: DNOP	73.8	51.1-141		%Rec	1	3/1/2022 8:24:17 PM	65707
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	24		mg/Kg	5	2/24/2022 2:29:28 AM	65698
Surr: BFB	103	70-130		%Rec	5	2/24/2022 2:29:28 AM	65698
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.12		mg/Kg	5	2/24/2022 2:29:28 AM	65698
Toluene	ND	0.24		mg/Kg	5	2/24/2022 2:29:28 AM	65698
Ethylbenzene	ND	0.24		mg/Kg	5	2/24/2022 2:29:28 AM	65698
Xylenes, Total	ND	0.47		mg/Kg	5	2/24/2022 2:29:28 AM	65698
Surr: 4-Bromofluorobenzene	95.0	70-130		%Rec	5	2/24/2022 2:29:28 AM	65698

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202945

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP9-2

Project: Robinson B Federal 1

Collection Date: 2/18/2022 9:35:00 AM

Lab ID: 2202945-007

Matrix: SOIL

Received Date: 2/19/2022 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	140	60		mg/Kg	20	2/28/2022 12:34:24 PM	65834
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	2/23/2022 3:50:17 PM	65707
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/23/2022 3:50:17 PM	65707
Surr: DNOP	100	51.1-141		%Rec	1	2/23/2022 3:50:17 PM	65707
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	2/24/2022 3:15:41 AM	65698
Surr: BFB	101	70-130		%Rec	1	2/24/2022 3:15:41 AM	65698
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	2/24/2022 3:15:41 AM	65698
Toluene	ND	0.046		mg/Kg	1	2/24/2022 3:15:41 AM	65698
Ethylbenzene	ND	0.046		mg/Kg	1	2/24/2022 3:15:41 AM	65698
Xylenes, Total	ND	0.093		mg/Kg	1	2/24/2022 3:15:41 AM	65698
Surr: 4-Bromofluorobenzene	95.6	70-130		%Rec	1	2/24/2022 3:15:41 AM	65698

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202945

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP10-5

Project: Robinson B Federal 1

Collection Date: 2/18/2022 9:40:00 AM

Lab ID: 2202945-008

Matrix: SOIL

Received Date: 2/19/2022 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	2/28/2022 12:46:49 PM	65834
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	3500	460		mg/Kg	50	2/23/2022 4:01:15 PM	65707
Motor Oil Range Organics (MRO)	4600	2300		mg/Kg	50	2/23/2022 4:01:15 PM	65707
Surr: DNOP	0	51.1-141	S	%Rec	50	2/23/2022 4:01:15 PM	65707
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	25		mg/Kg	5	2/24/2022 3:38:46 AM	65698
Surr: BFB	102	70-130		%Rec	5	2/24/2022 3:38:46 AM	65698
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.12		mg/Kg	5	2/24/2022 3:38:46 AM	65698
Toluene	ND	0.25		mg/Kg	5	2/24/2022 3:38:46 AM	65698
Ethylbenzene	ND	0.25		mg/Kg	5	2/24/2022 3:38:46 AM	65698
Xylenes, Total	ND	0.50		mg/Kg	5	2/24/2022 3:38:46 AM	65698
Surr: 4-Bromofluorobenzene	93.6	70-130		%Rec	5	2/24/2022 3:38:46 AM	65698

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202945

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP10-2

Project: Robinson B Federal 1

Collection Date: 2/18/2022 9:55:00 AM

Lab ID: 2202945-009

Matrix: SOIL

Received Date: 2/19/2022 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	2/28/2022 12:59:14 PM	65834
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	2/23/2022 4:12:09 PM	65707
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	2/23/2022 4:12:09 PM	65707
Surr: DNOP	109	51.1-141		%Rec	1	2/23/2022 4:12:09 PM	65707
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	25		mg/Kg	5	2/24/2022 4:01:48 AM	65698
Surr: BFB	103	70-130		%Rec	5	2/24/2022 4:01:48 AM	65698
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.12		mg/Kg	5	2/24/2022 4:01:48 AM	65698
Toluene	ND	0.25		mg/Kg	5	2/24/2022 4:01:48 AM	65698
Ethylbenzene	ND	0.25		mg/Kg	5	2/24/2022 4:01:48 AM	65698
Xylenes, Total	ND	0.49		mg/Kg	5	2/24/2022 4:01:48 AM	65698
Surr: 4-Bromofluorobenzene	95.7	70-130		%Rec	5	2/24/2022 4:01:48 AM	65698

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202945

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP11-5

Project: Robinson B Federal 1

Collection Date: 2/18/2022 10:00:00 AM

Lab ID: 2202945-010

Matrix: SOIL

Received Date: 2/19/2022 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	1500	60		mg/Kg	20	2/28/2022 1:11:38 PM	65834
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	510	180		mg/Kg	20	2/28/2022 3:47:47 PM	65707
Motor Oil Range Organics (MRO)	1400	900		mg/Kg	20	2/28/2022 3:47:47 PM	65707
Surr: DNOP	0	51.1-141	S	%Rec	20	2/28/2022 3:47:47 PM	65707
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	25		mg/Kg	5	2/24/2022 4:24:50 AM	65698
Surr: BFB	102	70-130		%Rec	5	2/24/2022 4:24:50 AM	65698
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.12		mg/Kg	5	2/24/2022 4:24:50 AM	65698
Toluene	ND	0.25		mg/Kg	5	2/24/2022 4:24:50 AM	65698
Ethylbenzene	ND	0.25		mg/Kg	5	2/24/2022 4:24:50 AM	65698
Xylenes, Total	ND	0.50		mg/Kg	5	2/24/2022 4:24:50 AM	65698
Surr: 4-Bromofluorobenzene	94.1	70-130		%Rec	5	2/24/2022 4:24:50 AM	65698

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202945

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP11-2

Project: Robinson B Federal 1

Collection Date: 2/18/2022 10:20:00 AM

Lab ID: 2202945-011

Matrix: SOIL

Received Date: 2/19/2022 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	140	60		mg/Kg	20	2/28/2022 1:24:02 PM	65834
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	550	48		mg/Kg	5	2/25/2022 3:52:03 PM	65707
Motor Oil Range Organics (MRO)	1100	240		mg/Kg	5	2/25/2022 3:52:03 PM	65707
Surr: DNOP	75.9	51.1-141		%Rec	5	2/25/2022 3:52:03 PM	65707
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	24		mg/Kg	5	2/24/2022 4:47:56 AM	65698
Surr: BFB	101	70-130		%Rec	5	2/24/2022 4:47:56 AM	65698
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.12		mg/Kg	5	2/24/2022 4:47:56 AM	65698
Toluene	ND	0.24		mg/Kg	5	2/24/2022 4:47:56 AM	65698
Ethylbenzene	ND	0.24		mg/Kg	5	2/24/2022 4:47:56 AM	65698
Xylenes, Total	ND	0.49		mg/Kg	5	2/24/2022 4:47:56 AM	65698
Surr: 4-Bromofluorobenzene	95.0	70-130		%Rec	5	2/24/2022 4:47:56 AM	65698

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202945

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP11-4

Project: Robinson B Federal 1

Collection Date: 2/18/2022 10:25:00 AM

Lab ID: 2202945-012

Matrix: SOIL

Received Date: 2/19/2022 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	140	60		mg/Kg	20	2/28/2022 1:36:26 PM	65834
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	840	47		mg/Kg	5	2/25/2022 4:45:29 PM	65729
Motor Oil Range Organics (MRO)	990	240		mg/Kg	5	2/25/2022 4:45:29 PM	65729
Surr: DNOP	105	51.1-141		%Rec	5	2/25/2022 4:45:29 PM	65729
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	25		mg/Kg	5	2/22/2022 3:09:09 PM	65708
Surr: BFB	111	70-130		%Rec	5	2/22/2022 3:09:09 PM	65708
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.12		mg/Kg	5	2/22/2022 3:09:09 PM	65708
Toluene	ND	0.25		mg/Kg	5	2/22/2022 3:09:09 PM	65708
Ethylbenzene	ND	0.25		mg/Kg	5	2/22/2022 3:09:09 PM	65708
Xylenes, Total	ND	0.50		mg/Kg	5	2/22/2022 3:09:09 PM	65708
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	5	2/22/2022 3:09:09 PM	65708

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202945

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP12-5

Project: Robinson B Federal 1

Collection Date: 2/18/2022 11:20:00 AM

Lab ID: 2202945-013

Matrix: SOIL

Received Date: 2/19/2022 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	2/28/2022 1:48:51 PM	65834
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	460	190		mg/Kg	20	2/25/2022 2:47:28 PM	65729
Motor Oil Range Organics (MRO)	1400	960		mg/Kg	20	2/25/2022 2:47:28 PM	65729
Surr: DNOP	0	51.1-141	S	%Rec	20	2/25/2022 2:47:28 PM	65729
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	24		mg/Kg	5	2/22/2022 4:19:46 PM	65708
Surr: BFB	112	70-130		%Rec	5	2/22/2022 4:19:46 PM	65708
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.12		mg/Kg	5	2/22/2022 4:19:46 PM	65708
Toluene	ND	0.24		mg/Kg	5	2/22/2022 4:19:46 PM	65708
Ethylbenzene	ND	0.24		mg/Kg	5	2/22/2022 4:19:46 PM	65708
Xylenes, Total	ND	0.48		mg/Kg	5	2/22/2022 4:19:46 PM	65708
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	5	2/22/2022 4:19:46 PM	65708

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

## Analytical Report

Lab Order 2202945

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP12-4

Project: Robinson B Federal 1

Collection Date: 2/18/2022 11:25:00 AM

Lab ID: 2202945-014

Matrix: SOIL

Received Date: 2/19/2022 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	2/28/2022 2:01:16 PM	65834
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	1300	190		mg/Kg	20	2/28/2022 1:05:37 PM	65729
Motor Oil Range Organics (MRO)	1400	970		mg/Kg	20	2/28/2022 1:05:37 PM	65729
Surr: DNOP	0	51.1-141	S	%Rec	20	2/28/2022 1:05:37 PM	65729
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	24		mg/Kg	5	2/22/2022 5:31:01 PM	65708
Surr: BFB	109	70-130		%Rec	5	2/22/2022 5:31:01 PM	65708
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.12		mg/Kg	5	2/22/2022 5:31:01 PM	65708
Toluene	ND	0.24		mg/Kg	5	2/22/2022 5:31:01 PM	65708
Ethylbenzene	ND	0.24		mg/Kg	5	2/22/2022 5:31:01 PM	65708
Xylenes, Total	ND	0.48		mg/Kg	5	2/22/2022 5:31:01 PM	65708
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	5	2/22/2022 5:31:01 PM	65708

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202945

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP12-6

Project: Robinson B Federal 1

Collection Date: 2/18/2022 11:30:00 AM

Lab ID: 2202945-015

Matrix: SOIL

Received Date: 2/19/2022 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	2/28/2022 2:13:41 PM	65834
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	73	9.7		mg/Kg	1	2/25/2022 3:19:51 PM	65729
Motor Oil Range Organics (MRO)	160	48		mg/Kg	1	2/25/2022 3:19:51 PM	65729
Surr: DNOP	100	51.1-141		%Rec	1	2/25/2022 3:19:51 PM	65729
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	25		mg/Kg	5	2/22/2022 5:54:42 PM	65708
Surr: BFB	110	70-130		%Rec	5	2/22/2022 5:54:42 PM	65708
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.12		mg/Kg	5	2/22/2022 5:54:42 PM	65708
Toluene	ND	0.25		mg/Kg	5	2/22/2022 5:54:42 PM	65708
Ethylbenzene	ND	0.25		mg/Kg	5	2/22/2022 5:54:42 PM	65708
Xylenes, Total	ND	0.49		mg/Kg	5	2/22/2022 5:54:42 PM	65708
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	5	2/22/2022 5:54:42 PM	65708

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202945

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP8-5

Project: Robinson B Federal 1

Collection Date: 2/18/2022 9:15:00 AM

Lab ID: 2202945-016

Matrix: SOIL

Received Date: 2/19/2022 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	1500	60		mg/Kg	20	2/28/2022 4:04:24 PM	65839
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	62	46		mg/Kg	5	2/25/2022 3:41:17 PM	65729
Motor Oil Range Organics (MRO)	310	230		mg/Kg	5	2/25/2022 3:41:17 PM	65729
Surr: DNOP	71.8	51.1-141		%Rec	5	2/25/2022 3:41:17 PM	65729
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	24		mg/Kg	5	2/22/2022 6:18:19 PM	65708
Surr: BFB	110	70-130		%Rec	5	2/22/2022 6:18:19 PM	65708
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.12		mg/Kg	5	2/22/2022 6:18:19 PM	65708
Toluene	ND	0.24		mg/Kg	5	2/22/2022 6:18:19 PM	65708
Ethylbenzene	ND	0.24		mg/Kg	5	2/22/2022 6:18:19 PM	65708
Xylenes, Total	ND	0.48		mg/Kg	5	2/22/2022 6:18:19 PM	65708
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	5	2/22/2022 6:18:19 PM	65708

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2202945

08-Mar-22

**Client:** GHD Midland  
**Project:** Robinson B Federal 1

Sample ID: <b>MB-65839</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>65839</b>	RunNo: <b>86138</b>								
Prep Date: <b>2/28/2022</b>	Analysis Date: <b>2/28/2022</b>	SeqNo: <b>3036222</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-65839</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>65839</b>	RunNo: <b>86138</b>								
Prep Date: <b>2/28/2022</b>	Analysis Date: <b>2/28/2022</b>	SeqNo: <b>3036223</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.6	90	110			

Sample ID: <b>MB-65834</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>65834</b>	RunNo: <b>86137</b>								
Prep Date: <b>2/28/2022</b>	Analysis Date: <b>2/28/2022</b>	SeqNo: <b>3036314</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-65834</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>65834</b>	RunNo: <b>86137</b>								
Prep Date: <b>2/28/2022</b>	Analysis Date: <b>2/28/2022</b>	SeqNo: <b>3036315</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.0	90	110			

**Qualifiers:**

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2202945

08-Mar-22

**Client:** GHD Midland  
**Project:** Robinson B Federal 1

Sample ID: <b>LCS-65707</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>65707</b>			RunNo: <b>86029</b>						
Prep Date: <b>2/22/2022</b>	Analysis Date: <b>2/23/2022</b>			SeqNo: <b>3032026</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	60	10	50.00	0	119	68.9	135			
Surr: DNOP	5.0		5.000		99.2	51.1	141			

Sample ID: <b>LCS-65729</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>65729</b>			RunNo: <b>86029</b>						
Prep Date: <b>2/22/2022</b>	Analysis Date: <b>2/23/2022</b>			SeqNo: <b>3032027</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	91.1	68.9	135			
Surr: DNOP	4.5		5.000		89.2	51.1	141			

Sample ID: <b>MB-65707</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>65707</b>			RunNo: <b>86029</b>						
Prep Date: <b>2/22/2022</b>	Analysis Date: <b>2/23/2022</b>			SeqNo: <b>3032029</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.8		10.00		97.7	51.1	141			

Sample ID: <b>MB-65729</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>65729</b>			RunNo: <b>86029</b>						
Prep Date: <b>2/22/2022</b>	Analysis Date: <b>2/23/2022</b>			SeqNo: <b>3032030</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.4		10.00		93.9	51.1	141			

**Qualifiers:**

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2202945

08-Mar-22

**Client:** GHD Midland  
**Project:** Robinson B Federal 1

Sample ID: <b>mb-65708</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>65708</b>	RunNo: <b>85980</b>								
Prep Date: <b>2/21/2022</b>	Analysis Date: <b>2/22/2022</b>	SeqNo: <b>3029874</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		107	70	130			

Sample ID: <b>lcs-65708</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>65708</b>	RunNo: <b>85980</b>								
Prep Date: <b>2/21/2022</b>	Analysis Date: <b>2/22/2022</b>	SeqNo: <b>3029875</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	109	78.6	131			
Surr: BFB	1200		1000		119	70	130			

Sample ID: <b>2202945-012ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>TP11-4</b>	Batch ID: <b>65708</b>	RunNo: <b>85980</b>								
Prep Date: <b>2/21/2022</b>	Analysis Date: <b>2/22/2022</b>	SeqNo: <b>3029877</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	31	25	24.85	0	123	70	130			
Surr: BFB	5700		4970		114	70	130			

Sample ID: <b>2202945-012amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>TP11-4</b>	Batch ID: <b>65708</b>	RunNo: <b>85980</b>								
Prep Date: <b>2/21/2022</b>	Analysis Date: <b>2/22/2022</b>	SeqNo: <b>3029878</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	32	25	24.90	0	129	70	130	5.27	20	
Surr: BFB	5700		4980		114	70	130	0	0	

Sample ID: <b>mb-65698</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>65698</b>	RunNo: <b>86042</b>								
Prep Date: <b>2/21/2022</b>	Analysis Date: <b>2/23/2022</b>	SeqNo: <b>3031479</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		109	70	130			

Sample ID: <b>lcs-65698</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>65698</b>	RunNo: <b>86042</b>								
Prep Date: <b>2/21/2022</b>	Analysis Date: <b>2/23/2022</b>	SeqNo: <b>3031480</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

**Qualifiers:**

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT  
Hall Environmental Analysis Laboratory, Inc.

WO#: 2202945  
08-Mar-22

Client: GHD Midland  
Project: Robinson B Federal 1

Sample ID: <b>Ics-65698</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>65698</b>	RunNo: <b>86042</b>								
Prep Date: <b>2/21/2022</b>	Analysis Date: <b>2/23/2022</b>	SeqNo: <b>3031480</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	106	78.6	131			
Surr: BFB	1200		1000		123	70	130			

Qualifiers:

- \*

Value exceeds Maximum Contaminant Level.
- D

Sample Diluted Due to Matrix
- H

Holding times for preparation or analysis exceeded
- ND

Not Detected at the Reporting Limit
- PQL

Practical Quantitative Limit
- S

% Recovery outside of range due to dilution or matrix interference
- B

Analyte detected in the associated Method Blank
- E

Estimated value
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2202945

08-Mar-22

**Client:** GHD Midland  
**Project:** Robinson B Federal 1

Sample ID: <b>mb-65708</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>65708</b>	RunNo: <b>85980</b>								
Prep Date: <b>2/21/2022</b>	Analysis Date: <b>2/22/2022</b>	SeqNo: <b>3029919</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		99.8	70	130			

Sample ID: <b>LCS-65708</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>65708</b>	RunNo: <b>85980</b>								
Prep Date: <b>2/21/2022</b>	Analysis Date: <b>2/22/2022</b>	SeqNo: <b>3029921</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	96.1	80	120			
Toluene	1.0	0.050	1.000	0	100	80	120			
Ethylbenzene	1.0	0.050	1.000	0	101	80	120			
Xylenes, Total	3.1	0.10	3.000	0	102	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	70	130			

Sample ID: <b>2202945-013ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>TP12-5</b>	Batch ID: <b>65708</b>	RunNo: <b>85980</b>								
Prep Date: <b>2/21/2022</b>	Analysis Date: <b>2/22/2022</b>	SeqNo: <b>3029924</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.78	0.12	0.9615	0	81.1	80	120			
Toluene	0.84	0.24	0.9615	0	87.0	80	120			
Ethylbenzene	0.85	0.24	0.9615	0	88.2	80	120			
Xylenes, Total	2.6	0.48	2.885	0	88.6	80	120			
Surr: 4-Bromofluorobenzene	5.0		4.808		103	70	130			

Sample ID: <b>2202945-013amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>TP12-5</b>	Batch ID: <b>65708</b>	RunNo: <b>85980</b>								
Prep Date: <b>2/21/2022</b>	Analysis Date: <b>2/22/2022</b>	SeqNo: <b>3029925</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.12	0.9579	0	92.0	80	120	12.2	20	
Toluene	0.95	0.24	0.9579	0	99.0	80	120	12.5	20	
Ethylbenzene	0.97	0.24	0.9579	0	101	80	120	13.4	20	
Xylenes, Total	2.9	0.48	2.874	0	101	80	120	12.7	20	
Surr: 4-Bromofluorobenzene	4.8		4.789		101	70	130	0	0	

**Qualifiers:**

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2202945

08-Mar-22

**Client:** GHD Midland  
**Project:** Robinson B Federal 1

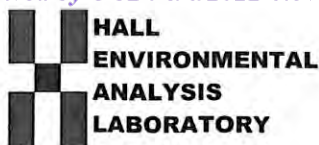
Sample ID: <b>mb-65698</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>65698</b>	RunNo: <b>86042</b>								
Prep Date: <b>2/21/2022</b>	Analysis Date: <b>2/23/2022</b>	SeqNo: <b>3031526</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		100	70	130			

Sample ID: <b>LCS-65698</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>65698</b>	RunNo: <b>86042</b>								
Prep Date: <b>2/21/2022</b>	Analysis Date: <b>2/23/2022</b>	SeqNo: <b>3031527</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	93.0	80	120			
Toluene	0.97	0.050	1.000	0	97.3	80	120			
Ethylbenzene	0.98	0.050	1.000	0	98.2	80	120			
Xylenes, Total	3.0	0.10	3.000	0	100	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		105	70	130			

**Qualifiers:**

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix	E Estimated value
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL Practical Quantitative Limit	RL Reporting Limit
S % Recovery outside of range due to dilution or matrix interference	





Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: clients.hallenvironmental.com

## Sample Log-In Check List

Client Name: GHD Midland

Work Order Number: 2202945

RcptNo: 1

Received By: Juan Rojas 2/19/2022 8:20:00 AM

Completed By: Kasandra Payan 2/19/2022 9:35:17 AM

Reviewed By: *KPH* 2/19/22*[Signature]**[Signature]*

### Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

### Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace  $<1/4$ " for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved  
bottles checked  
for pH:

( $<2$  or  $>12$  unless noted)

Adjusted?

Checked by: *jn 2/19/22*

### Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: \_\_\_\_\_

Date: \_\_\_\_\_

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

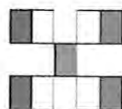
16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.7	Good				
2	2.0	Good				

<b>Chain-of-Custody Record</b>			
Client: GHD			
Mailing Address:			
2135 S. Loop 250 W. Midland, TX 79703			
Phone #: (432) 686-0086			
email or Fax#: <a href="mailto:Becky.Haskell@ghd.com">Becky.Haskell@ghd.com</a>			
QA/QC Package:			
<input type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)			
Accreditation: <input type="checkbox"/> Az Compliance <input type="checkbox"/> NELAC <input type="checkbox"/> Other _____			
<input type="checkbox"/> EDD (Type) _____			
Turn-Around Time:		<input checked="" type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush	
Project Name: Robinson B Federal #1			
Project #: 12574110			
Project Manager: Becky Haskell			
Tom Larson			
Sampler: Heath Boyd		On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
# of Coolers: 2			
Cooler Temp (including CF): 1.8-0.1-1.7			
Date	Time	Matrix	Sample Name
2/18/22	855	S	TP7-S
	900		TP7-Z
	905		TP7-4
	915		TP8-Z
	920		TP8-4
	925		TP9-S
	935		TP9-Z
	940		TP10-S
	955		TP10-Z
	1000		TP11-S
	1020		TP11-Z
X	1025	X	TP11-4
Date: 2/18/22		Time: 1500	
Relinquished by: <i>[Signature]</i>		Relinquished by: <i>[Signature]</i>	
Date: 2/18/22		Time: 1900	
Received by: <i>[Signature]</i>		Received by: <i>[Signature]</i>	
Date: 2/18/22		Time: 1500	
Received by: <i>[Signature]</i>		Received by: <i>[Signature]</i>	
Date: 2/19/22		Time: 8:20	

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



**HALL ENVIRONMENTAL  
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

## Analysis Request

[illegible]

Remarks: Please email: Chase\_Settle@eogresources.com;  
Tom.Larson@ghd.com; Zach.Comino@ghd.com;  
Heath.Boyd@ghd.com Along with Becky Haskell listed  
above.

## Direct Bill to EOG Chase Settle







Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [clients.hallenvironmental.com](http://clients.hallenvironmental.com)

March 08, 2022

Tom Larson  
GHD Midland  
2135 S Loop 250 W  
Midland, TX 79703  
TEL: (432) 686-0086  
FAX:

RE: Robinson B Federal 1

OrderNo.: 2202A50

Dear Tom Larson:

Hall Environmental Analysis Laboratory received 10 sample(s) on 2/23/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 2202A50

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP13-S

Project: Robinson B Federal 1

Collection Date: 2/21/2022 9:00:00 AM

Lab ID: 2202A50-001

Matrix: SOIL

Received Date: 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	560	60		mg/Kg	20	3/2/2022 3:58:07 AM	65883
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	9.7	8.5		mg/Kg	1	2/28/2022 8:24:06 PM	65780
Motor Oil Range Organics (MRO)	ND	42		mg/Kg	1	2/28/2022 8:24:06 PM	65780
Surr: DNOP	96.3	51.1-141		%Rec	1	2/28/2022 8:24:06 PM	65780
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/25/2022 10:24:17 PM	65768
Surr: BFB	108	70-130		%Rec	1	2/25/2022 10:24:17 PM	65768
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	ND	0.023		mg/Kg	1	2/25/2022 10:24:17 PM	65768
Toluene	ND	0.047		mg/Kg	1	2/25/2022 10:24:17 PM	65768
Ethylbenzene	ND	0.047		mg/Kg	1	2/25/2022 10:24:17 PM	65768
Xylenes, Total	ND	0.093		mg/Kg	1	2/25/2022 10:24:17 PM	65768
Surr: 4-Bromofluorobenzene	99.7	70-130		%Rec	1	2/25/2022 10:24:17 PM	65768

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Page 1 of 14

## Analytical Report

Lab Order 2202A50

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP13-2

Project: Robinson B Federal 1

Collection Date: 2/21/2022 9:05:00 AM

Lab ID: 2202A50-002

Matrix: SOIL

Received Date: 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	160	60		mg/Kg	20	3/2/2022 4:10:31 AM	65883
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	2/26/2022 1:25:46 AM	65780
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/26/2022 1:25:46 AM	65780
Surr: DNOP	105	51.1-141		%Rec	1	2/26/2022 1:25:46 AM	65780
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/25/2022 10:47:51 PM	65768
Surr: BFB	107	70-130		%Rec	1	2/25/2022 10:47:51 PM	65768
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	2/25/2022 10:47:51 PM	65768
Toluene	ND	0.050		mg/Kg	1	2/25/2022 10:47:51 PM	65768
Ethylbenzene	ND	0.050		mg/Kg	1	2/25/2022 10:47:51 PM	65768
Xylenes, Total	ND	0.10		mg/Kg	1	2/25/2022 10:47:51 PM	65768
Surr: 4-Bromofluorobenzene	99.2	70-130		%Rec	1	2/25/2022 10:47:51 PM	65768

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202A50

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP13-4

Project: Robinson B Federal 1

Collection Date: 2/21/2022 9:10:00 AM

Lab ID: 2202A50-003

Matrix: SOIL

Received Date: 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	140	60		mg/Kg	20	3/2/2022 4:22:56 AM	65883
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	2/26/2022 1:36:18 AM	65780
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/26/2022 1:36:18 AM	65780
Surr: DNOP	98.9	51.1-141		%Rec	1	2/26/2022 1:36:18 AM	65780
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/25/2022 11:11:20 PM	65768
Surr: BFB	108	70-130		%Rec	1	2/25/2022 11:11:20 PM	65768
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	2/25/2022 11:11:20 PM	65768
Toluene	ND	0.050		mg/Kg	1	2/25/2022 11:11:20 PM	65768
Ethylbenzene	ND	0.050		mg/Kg	1	2/25/2022 11:11:20 PM	65768
Xylenes, Total	ND	0.10		mg/Kg	1	2/25/2022 11:11:20 PM	65768
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	2/25/2022 11:11:20 PM	65768

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202A50

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP14-S

Project: Robinson B Federal 1

Collection Date: 2/21/2022 9:30:00 AM

Lab ID: 2202A50-004

Matrix: SOIL

Received Date: 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	94	60		mg/Kg	20	3/2/2022 4:35:20 AM	65883
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	2/26/2022 1:46:46 AM	65780
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	2/26/2022 1:46:46 AM	65780
Surr: DNOP	98.8	51.1-141		%Rec	1	2/26/2022 1:46:46 AM	65780
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	2/25/2022 11:34:50 PM	65768
Surr: BFB	108	70-130		%Rec	1	2/25/2022 11:34:50 PM	65768
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	ND	0.023		mg/Kg	1	2/25/2022 11:34:50 PM	65768
Toluene	ND	0.046		mg/Kg	1	2/25/2022 11:34:50 PM	65768
Ethylbenzene	ND	0.046		mg/Kg	1	2/25/2022 11:34:50 PM	65768
Xylenes, Total	ND	0.092		mg/Kg	1	2/25/2022 11:34:50 PM	65768
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	2/25/2022 11:34:50 PM	65768

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202A50

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP14-2

Project: Robinson B Federal 1

Collection Date: 2/21/2022 9:35:00 AM

Lab ID: 2202A50-005

Matrix: SOIL

Received Date: 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/2/2022 4:47:44 AM	65883
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	70	9.4		mg/Kg	1	3/2/2022 12:29:30 AM	65780
Motor Oil Range Organics (MRO)	250	47		mg/Kg	1	3/2/2022 12:29:30 AM	65780
Surr: DNOP	105	51.1-141		%Rec	1	3/2/2022 12:29:30 AM	65780
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/25/2022 11:58:14 PM	65768
Surr: BFB	108	70-130		%Rec	1	2/25/2022 11:58:14 PM	65768
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	2/25/2022 11:58:14 PM	65768
Toluene	ND	0.048		mg/Kg	1	2/25/2022 11:58:14 PM	65768
Ethylbenzene	ND	0.048		mg/Kg	1	2/25/2022 11:58:14 PM	65768
Xylenes, Total	ND	0.097		mg/Kg	1	2/25/2022 11:58:14 PM	65768
Surr: 4-Bromofluorobenzene	98.9	70-130		%Rec	1	2/25/2022 11:58:14 PM	65768

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202A50

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP14-4

Project: Robinson B Federal 1

Collection Date: 2/21/2022 9:40:00 AM

Lab ID: 2202A50-006

Matrix: SOIL

Received Date: 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	69	60		mg/Kg	20	3/2/2022 10:07:41 AM	65892
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	2/26/2022 2:07:40 AM	65780
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/26/2022 2:07:40 AM	65780
Surr: DNOP	116	51.1-141		%Rec	1	2/26/2022 2:07:40 AM	65780
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/26/2022 12:21:43 AM	65768
Surr: BFB	105	70-130		%Rec	1	2/26/2022 12:21:43 AM	65768
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	2/26/2022 12:21:43 AM	65768
Toluene	ND	0.047		mg/Kg	1	2/26/2022 12:21:43 AM	65768
Ethylbenzene	ND	0.047		mg/Kg	1	2/26/2022 12:21:43 AM	65768
Xylenes, Total	ND	0.095		mg/Kg	1	2/26/2022 12:21:43 AM	65768
Surr: 4-Bromofluorobenzene	98.1	70-130		%Rec	1	2/26/2022 12:21:43 AM	65768

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202A50

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP15-S

Project: Robinson B Federal 1

Collection Date: 2/21/2022 10:20:00 AM

Lab ID: 2202A50-007

Matrix: SOIL

Received Date: 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/2/2022 10:20:06 AM	65892
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	250	91		mg/Kg	10	3/2/2022 12:50:42 AM	65780
Motor Oil Range Organics (MRO)	1000	460		mg/Kg	10	3/2/2022 12:50:42 AM	65780
Surr: DNOP	0	51.1-141	S	%Rec	10	3/2/2022 12:50:42 AM	65780
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	25		mg/Kg	5	2/26/2022 12:45:09 AM	65768
Surr: BFB	105	70-130		%Rec	5	2/26/2022 12:45:09 AM	65768
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	ND	0.12		mg/Kg	5	2/26/2022 12:45:09 AM	65768
Toluene	ND	0.25		mg/Kg	5	2/26/2022 12:45:09 AM	65768
Ethylbenzene	ND	0.25		mg/Kg	5	2/26/2022 12:45:09 AM	65768
Xylenes, Total	ND	0.50		mg/Kg	5	2/26/2022 12:45:09 AM	65768
Surr: 4-Bromofluorobenzene	98.4	70-130		%Rec	5	2/26/2022 12:45:09 AM	65768

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202A50

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP15-4

Project: Robinson B Federal 1

Collection Date: 2/21/2022 10:25:00 AM

Lab ID: 2202A50-008

Matrix: SOIL

Received Date: 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/2/2022 10:32:30 AM	65892
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	1100	200		mg/Kg	20	3/2/2022 1:11:56 AM	65780
Motor Oil Range Organics (MRO)	2800	1000		mg/Kg	20	3/2/2022 1:11:56 AM	65780
Surr: DNOP	0	51.1-141	S	%Rec	20	3/2/2022 1:11:56 AM	65780
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	24		mg/Kg	5	2/26/2022 1:08:35 AM	65768
Surr: BFB	105	70-130		%Rec	5	2/26/2022 1:08:35 AM	65768
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	ND	0.12		mg/Kg	5	2/26/2022 1:08:35 AM	65768
Toluene	ND	0.24		mg/Kg	5	2/26/2022 1:08:35 AM	65768
Ethylbenzene	ND	0.24		mg/Kg	5	2/26/2022 1:08:35 AM	65768
Xylenes, Total	ND	0.48		mg/Kg	5	2/26/2022 1:08:35 AM	65768
Surr: 4-Bromofluorobenzene	96.8	70-130		%Rec	5	2/26/2022 1:08:35 AM	65768

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202A50

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP15-8

Project: Robinson B Federal 1

Collection Date: 2/21/2022 10:30:00 AM

Lab ID: 2202A50-009

Matrix: SOIL

Received Date: 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/2/2022 10:44:55 AM	65892
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	630	190		mg/Kg	20	3/2/2022 1:33:03 AM	65780
Motor Oil Range Organics (MRO)	2400	930		mg/Kg	20	3/2/2022 1:33:03 AM	65780
Surr: DNOP	0	51.1-141	S	%Rec	20	3/2/2022 1:33:03 AM	65780
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	24		mg/Kg	5	2/26/2022 1:31:57 AM	65768
Surr: BFB	103	70-130		%Rec	5	2/26/2022 1:31:57 AM	65768
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	ND	0.12		mg/Kg	5	2/26/2022 1:31:57 AM	65768
Toluene	ND	0.24		mg/Kg	5	2/26/2022 1:31:57 AM	65768
Ethylbenzene	ND	0.24		mg/Kg	5	2/26/2022 1:31:57 AM	65768
Xylenes, Total	ND	0.48		mg/Kg	5	2/26/2022 1:31:57 AM	65768
Surr: 4-Bromofluorobenzene	96.1	70-130		%Rec	5	2/26/2022 1:31:57 AM	65768

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2202A50

Date Reported: 3/8/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP15-12

Project: Robinson B Federal 1

Collection Date: 2/21/2022 10:35:00 AM

Lab ID: 2202A50-010

Matrix: SOIL

Received Date: 2/23/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	97	60		mg/Kg	20	3/2/2022 10:57:19 AM	65892
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	66	9.7		mg/Kg	1	3/2/2022 12:47:29 PM	65780
Motor Oil Range Organics (MRO)	240	48		mg/Kg	1	3/2/2022 12:47:29 PM	65780
Surr: DNOP	102	51.1-141		%Rec	1	3/2/2022 12:47:29 PM	65780
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/26/2022 3:05:27 AM	65768
Surr: BFB	104	70-130		%Rec	1	2/26/2022 3:05:27 AM	65768
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	2/26/2022 3:05:27 AM	65768
Toluene	ND	0.050		mg/Kg	1	2/26/2022 3:05:27 AM	65768
Ethylbenzene	ND	0.050		mg/Kg	1	2/26/2022 3:05:27 AM	65768
Xylenes, Total	ND	0.10		mg/Kg	1	2/26/2022 3:05:27 AM	65768
Surr: 4-Bromofluorobenzene	97.9	70-130		%Rec	1	2/26/2022 3:05:27 AM	65768

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2202A50

08-Mar-22

**Client:** GHD Midland  
**Project:** Robinson B Federal 1

Sample ID: <b>MB-65883</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>65883</b>	RunNo: <b>86175</b>								
Prep Date: <b>3/1/2022</b>	Analysis Date: <b>3/1/2022</b>	SeqNo: <b>3037392</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-65883</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>65883</b>	RunNo: <b>86175</b>								
Prep Date: <b>3/1/2022</b>	Analysis Date: <b>3/1/2022</b>	SeqNo: <b>3037393</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.0	90	110			

Sample ID: <b>MB-65892</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>65892</b>	RunNo: <b>86196</b>								
Prep Date: <b>3/2/2022</b>	Analysis Date: <b>3/2/2022</b>	SeqNo: <b>3038465</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-65892</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>65892</b>	RunNo: <b>86196</b>								
Prep Date: <b>3/2/2022</b>	Analysis Date: <b>3/2/2022</b>	SeqNo: <b>3038466</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.0	90	110			

**Qualifiers:**

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2202A50

08-Mar-22

**Client:** GHD Midland  
**Project:** Robinson B Federal 1

Sample ID: <b>LCS-65780</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>65780</b>			RunNo: <b>86122</b>						
Prep Date: <b>2/24/2022</b>	Analysis Date: <b>2/25/2022</b>			SeqNo: <b>3034563</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	97.2	68.9	135			
Surr: DNOP	4.0		5.000		80.6	51.1	141			

Sample ID: <b>MB-65780</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>65780</b>			RunNo: <b>86122</b>						
Prep Date: <b>2/24/2022</b>	Analysis Date: <b>2/25/2022</b>			SeqNo: <b>3034565</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.8		10.00		87.9	51.1	141			

**Qualifiers:**

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2202A50

08-Mar-22

**Client:** GHD Midland  
**Project:** Robinson B Federal 1

Sample ID: <b>lcs-65768</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>65768</b>		RunNo: <b>86121</b>							
Prep Date: <b>2/23/2022</b>	Analysis Date: <b>2/25/2022</b>		SeqNo: <b>3034389</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	106	78.6	131			
Surr: BFB	1200		1000		122	70	130			

Sample ID: <b>mb-65768</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>65768</b>		RunNo: <b>86121</b>							
Prep Date: <b>2/23/2022</b>	Analysis Date: <b>2/25/2022</b>		SeqNo: <b>3034391</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		111	70	130			

**Qualifiers:**

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		



**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2202A50

08-Mar-22

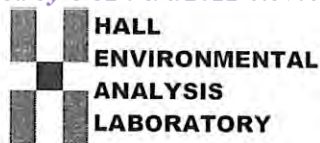
**Client:** GHD Midland  
**Project:** Robinson B Federal 1

Sample ID: <b>LCS-65768</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>65768</b>	RunNo: <b>86121</b>								
Prep Date: <b>2/23/2022</b>	Analysis Date: <b>2/25/2022</b>	SeqNo: <b>3034455</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	92.1	80	120			
Toluene	0.96	0.050	1.000	0	96.4	80	120			
Ethylbenzene	0.98	0.050	1.000	0	98.2	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.8	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	70	130			

Sample ID: <b>mb-65768</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>65768</b>	RunNo: <b>86121</b>								
Prep Date: <b>2/23/2022</b>	Analysis Date: <b>2/25/2022</b>	SeqNo: <b>3034457</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		101	70	130			

**Qualifiers:**

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: clients.hallenvironmental.com

## Sample Log-In Check List

Client Name: GHD Midland

Work Order Number: 2202A50

RcptNo: 1

Received By: Cheyenne Cason 2/23/2022 7:45:00 AM

Completed By: Sean Livingston 2/23/2022 9:06:20 AM

Reviewed By:

IO

2/23/22

Cason

Sean Livingston

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace  $<1/4"$  for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved  
bottles checked  
for pH:

( $\leq 2$  or  $>12$  unless noted)

Adjusted?

Checked by: KPG 2/23/22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date:

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good				
2	2.3	Good				

## Chain-of-Custody Record

Client: GHD

Mailing Address:

2135 S. Loop 250 W. Midland, TX 79703

Phone #: (432) 686-0086

email or Fax#: Becky.Haskell@ghd.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)Accreditation: ☐ Az Compliance☐ NELAC ☐ Other☐ EDD (Type)

Turn-Around Time:

☒ Standard

Project Name:

Robinson B Federal #1

Project #:

12574110

Project Manager:

Becky Haskell

Tom Larson

Sampler: Heath Boyd

On Ice: ☒ Yes ☐ No

# of Coolers: 2 6.7-0.26.7 CMC

Cooler Temp (including CFI): 6.7-0.26.7 CMC

Container Type and #

Preservative Type

HEAL No.

2202ASO

24oz. Jar / 1 N/A

001

002

003

004

005

006

007

008

009

010

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

Relinquished by:

2/21/22 1600

Relinquished by:

2/21/22 1900

Received by:

Via:

Date:

Time:

Via:

Date:

Time:

Date:

Time:

Date:

Time:

Date:

Time:

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Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

April 14, 2022

Tom Larson  
GHD Midland  
2135 S Loop 250 W  
Midland, TX 79703  
TEL: (432) 686-0086  
FAX:

RE: Robinson B Federal 1

OrderNo.: 2203D53

Dear Tom Larson:

Hall Environmental Analysis Laboratory received 26 sample(s) on 3/25/2022 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued April 06, 2022.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 2203D53

Date Reported: 4/14/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP3-8

Project: Robinson B Federal 1

Collection Date: 3/23/2022 7:45:00 AM

Lab ID: 2203D53-001

Matrix: SOIL

Received Date: 3/25/2022 7:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/31/2022 1:58:44 PM	66517
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	1000	180		mg/Kg	20	3/30/2022 9:13:20 PM	66452
Motor Oil Range Organics (MRO)	1300	920		mg/Kg	20	3/30/2022 9:13:20 PM	66452
Surr: DNOP	0	51.1-141	S	%Rec	20	3/30/2022 9:13:20 PM	66452
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/28/2022 10:11:00 PM	66412
Surr: BFB	112	37.7-212		%Rec	1	3/28/2022 10:11:00 PM	66412
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	3/28/2022 10:11:00 PM	66412
Toluene	ND	0.049		mg/Kg	1	3/28/2022 10:11:00 PM	66412
Ethylbenzene	ND	0.049		mg/Kg	1	3/28/2022 10:11:00 PM	66412
Xylenes, Total	ND	0.098		mg/Kg	1	3/28/2022 10:11:00 PM	66412
Surr: 4-Bromofluorobenzene	86.1	70-130		%Rec	1	3/28/2022 10:11:00 PM	66412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2203D53

Date Reported: 4/14/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP3-12

Project: Robinson B Federal 1

Collection Date: 3/23/2022 7:55:00 AM

Lab ID: 2203D53-002

Matrix: SOIL

Received Date: 3/25/2022 7:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	89	60		mg/Kg	20	3/31/2022 2:11:06 PM	66517
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	26000	480		mg/Kg	50	3/30/2022 8:41:37 PM	66452
Motor Oil Range Organics (MRO)	9300	2400		mg/Kg	50	3/30/2022 8:41:37 PM	66452
Surr: DNOP	0	51.1-141	S	%Rec	50	3/30/2022 8:41:37 PM	66452
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: BRM
Gasoline Range Organics (GRO)	5300	100		mg/Kg	20	3/28/2022 11:10:00 PM	66412
Surr: BFB	609	37.7-212	S	%Rec	20	3/28/2022 11:10:00 PM	66412
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: BRM
Benzene	37	0.50		mg/Kg	20	3/28/2022 11:10:00 PM	66412
Toluene	240	10		mg/Kg	200	3/29/2022 2:03:00 PM	66412
Ethylbenzene	220	10		mg/Kg	200	3/29/2022 2:03:00 PM	66412
Xylenes, Total	260	2.0		mg/Kg	20	3/28/2022 11:10:00 PM	66412
Surr: 4-Bromofluorobenzene	269	70-130	S	%Rec	20	3/28/2022 11:10:00 PM	66412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2203D53

Date Reported: 4/14/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP3-16

Project: Robinson B Federal 1

Collection Date: 3/23/2022 8:10:00 AM

Lab ID: 2203D53-003

Matrix: SOIL

Received Date: 3/25/2022 7:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	200	60		mg/Kg	20	3/31/2022 2:23:27 PM	66517
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	5400	190		mg/Kg	20	3/30/2022 9:34:32 PM	66452
Motor Oil Range Organics (MRO)	2000	970		mg/Kg	20	3/30/2022 9:34:32 PM	66452
Surr: DNOP	0	51.1-141	S	%Rec	20	3/30/2022 9:34:32 PM	66452
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: BRM
Gasoline Range Organics (GRO)	1100	98		mg/Kg	20	3/28/2022 11:29:00 PM	66412
Surr: BFB	350	37.7-212	S	%Rec	20	3/28/2022 11:29:00 PM	66412
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: BRM
Benzene	3.1	0.49		mg/Kg	20	3/28/2022 11:29:00 PM	66412
Toluene	18	0.98		mg/Kg	20	3/28/2022 11:29:00 PM	66412
Ethylbenzene	37	0.98		mg/Kg	20	3/28/2022 11:29:00 PM	66412
Xylenes, Total	46	2.0		mg/Kg	20	3/28/2022 11:29:00 PM	66412
Surr: 4-Bromofluorobenzene	132	70-130	S	%Rec	20	3/28/2022 11:29:00 PM	66412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2203D53

Date Reported: 4/14/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP3-19

Project: Robinson B Federal 1

Collection Date: 3/23/2022 8:35:00 AM

Lab ID: 2203D53-004

Matrix: MEOH (SOIL)

Received Date: 3/25/2022 7:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	190	60		mg/Kg	20	3/25/2022 4:47:33 PM	66406
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	1200	45		mg/Kg	5	3/28/2022 7:48:02 PM	66403
Motor Oil Range Organics (MRO)	580	220		mg/Kg	5	3/28/2022 7:48:02 PM	66403
Surr: DNOP	68.9	51.1-141		%Rec	5	3/28/2022 7:48:02 PM	66403
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: BRM
Gasoline Range Organics (GRO)	270	62		mg/Kg	20	3/25/2022 5:37:00 PM	C86769
Surr: BFB	205	37.7-212		%Rec	20	3/25/2022 5:37:00 PM	C86769
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: BRM
Benzene	0.87	0.31		mg/Kg	20	3/25/2022 5:37:00 PM	D86769
Toluene	3.6	0.62		mg/Kg	20	3/25/2022 5:37:00 PM	D86769
Ethylbenzene	7.9	0.62		mg/Kg	20	3/25/2022 5:37:00 PM	D86769
Xylenes, Total	9.4	1.2		mg/Kg	20	3/25/2022 5:37:00 PM	D86769
Surr: 4-Bromofluorobenzene	108	70-130		%Rec	20	3/25/2022 5:37:00 PM	D86769

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2203D53

Date Reported: 4/14/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP5-8

Project: Robinson B Federal 1

Collection Date: 3/23/2022 9:00:00 AM

Lab ID: 2203D53-005

Matrix: SOIL

Received Date: 3/25/2022 7:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/31/2022 2:35:47 PM	66517
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	91	50		mg/Kg	5	3/31/2022 2:02:01 PM	66452
Motor Oil Range Organics (MRO)	330	250		mg/Kg	5	3/31/2022 2:02:01 PM	66452
Surr: DNOP	66.1	51.1-141		%Rec	5	3/31/2022 2:02:01 PM	66452
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/28/2022 11:49:00 PM	66412
Surr: BFB	103	37.7-212		%Rec	1	3/28/2022 11:49:00 PM	66412
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	3/28/2022 11:49:00 PM	66412
Toluene	ND	0.049		mg/Kg	1	3/28/2022 11:49:00 PM	66412
Ethylbenzene	ND	0.049		mg/Kg	1	3/28/2022 11:49:00 PM	66412
Xylenes, Total	ND	0.098		mg/Kg	1	3/28/2022 11:49:00 PM	66412
Surr: 4-Bromofluorobenzene	81.2	70-130		%Rec	1	3/28/2022 11:49:00 PM	66412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2203D53

Date Reported: 4/14/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP5-12

Project: Robinson B Federal 1

Collection Date: 3/23/2022 9:05:00 AM

Lab ID: 2203D53-006

Matrix: SOIL

Received Date: 3/25/2022 7:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	ND	60		mg/Kg	20	4/7/2022 10:29:41 PM	66705
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	4/8/2022 1:18:22 PM	66670
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	4/8/2022 1:18:22 PM	66670
Surr: DNOP	94.8	51.1-141		%Rec	1	4/8/2022 1:18:22 PM	66670
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0	H	mg/Kg	1	4/7/2022 12:28:00 PM	66675
Surr: BFB	100	37.7-212	H	%Rec	1	4/7/2022 12:28:00 PM	66675
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: BRM
Benzene	ND	0.025	H	mg/Kg	1	4/7/2022 12:28:00 PM	66675
Toluene	ND	0.050	H	mg/Kg	1	4/7/2022 12:28:00 PM	66675
Ethylbenzene	ND	0.050	H	mg/Kg	1	4/7/2022 12:28:00 PM	66675
Xylenes, Total	ND	0.10	H	mg/Kg	1	4/7/2022 12:28:00 PM	66675
Surr: 4-Bromofluorobenzene	85.9	70-130	H	%Rec	1	4/7/2022 12:28:00 PM	66675

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2203D53

Date Reported: 4/14/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP2-14

Project: Robinson B Federal 1

Collection Date: 3/23/2022 9:45:00 AM

Lab ID: 2203D53-007

Matrix: SOIL

Received Date: 3/25/2022 7:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	500	60		mg/Kg	20	3/31/2022 3:37:30 PM	66517
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	610	48		mg/Kg	5	3/31/2022 2:23:22 PM	66452
Motor Oil Range Organics (MRO)	690	240		mg/Kg	5	3/31/2022 2:23:22 PM	66452
Surr: DNOP	88.8	51.1-141		%Rec	5	3/31/2022 2:23:22 PM	66452
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/29/2022 12:09:00 AM	66412
Surr: BFB	98.4	37.7-212		%Rec	1	3/29/2022 12:09:00 AM	66412
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	3/29/2022 12:09:00 AM	66412
Toluene	ND	0.049		mg/Kg	1	3/29/2022 12:09:00 AM	66412
Ethylbenzene	ND	0.049		mg/Kg	1	3/29/2022 12:09:00 AM	66412
Xylenes, Total	ND	0.099		mg/Kg	1	3/29/2022 12:09:00 AM	66412
Surr: 4-Bromofluorobenzene	81.1	70-130		%Rec	1	3/29/2022 12:09:00 AM	66412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2203D53

Date Reported: 4/14/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP2-16

Project: Robinson B Federal 1

Collection Date: 3/23/2022 9:55:00 AM

Lab ID: 2203D53-008

Matrix: SOIL

Received Date: 3/25/2022 7:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	130	60		mg/Kg	20	3/31/2022 3:49:52 PM	66517
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	3/29/2022 11:10:13 PM	66452
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/29/2022 11:10:13 PM	66452
Surr: DNOP	73.7	51.1-141		%Rec	1	3/29/2022 11:10:13 PM	66452
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/29/2022 12:28:00 AM	66412
Surr: BFB	101	37.7-212		%Rec	1	3/29/2022 12:28:00 AM	66412
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	3/29/2022 12:28:00 AM	66412
Toluene	ND	0.050		mg/Kg	1	3/29/2022 12:28:00 AM	66412
Ethylbenzene	ND	0.050		mg/Kg	1	3/29/2022 12:28:00 AM	66412
Xylenes, Total	ND	0.099		mg/Kg	1	3/29/2022 12:28:00 AM	66412
Surr: 4-Bromofluorobenzene	83.0	70-130		%Rec	1	3/29/2022 12:28:00 AM	66412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2203D53

Date Reported: 4/14/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP2-20

Project: Robinson B Federal 1

Collection Date: 3/23/2022 10:15:00 AM

Lab ID: 2203D53-009

Matrix: MEOH (SOIL)

Received Date: 3/25/2022 7:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	710	60		mg/Kg	20	3/25/2022 4:59:54 PM	66406
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/25/2022 12:36:57 PM	66403
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/25/2022 12:36:57 PM	66403
Surr: DNOP	103	51.1-141		%Rec	1	3/25/2022 12:36:57 PM	66403
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: BRM
Gasoline Range Organics (GRO)	ND	3.2		mg/Kg	1	3/25/2022 6:36:00 PM	C86769
Surr: BFB	102	37.7-212		%Rec	1	3/25/2022 6:36:00 PM	C86769
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: BRM
Benzene	ND	0.016		mg/Kg	1	3/25/2022 6:36:00 PM	D86769
Toluene	ND	0.032		mg/Kg	1	3/25/2022 6:36:00 PM	D86769
Ethylbenzene	ND	0.032		mg/Kg	1	3/25/2022 6:36:00 PM	D86769
Xylenes, Total	ND	0.064		mg/Kg	1	3/25/2022 6:36:00 PM	D86769
Surr: 4-Bromofluorobenzene	84.4	70-130		%Rec	1	3/25/2022 6:36:00 PM	D86769

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2203D53

Date Reported: 4/14/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP7-6

Project: Robinson B Federal 1

Collection Date: 3/23/2022 10:35:00 AM

Lab ID: 2203D53-010

Matrix: SOIL

Received Date: 3/25/2022 7:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	92	60		mg/Kg	20	3/31/2022 4:02:13 PM	66517
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	3/29/2022 11:20:46 PM	66452
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/29/2022 11:20:46 PM	66452
Surr: DNOP	75.2	51.1-141		%Rec	1	3/29/2022 11:20:46 PM	66452
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/29/2022 12:48:00 AM	66412
Surr: BFB	102	37.7-212		%Rec	1	3/29/2022 12:48:00 AM	66412
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	3/29/2022 12:48:00 AM	66412
Toluene	ND	0.050		mg/Kg	1	3/29/2022 12:48:00 AM	66412
Ethylbenzene	ND	0.050		mg/Kg	1	3/29/2022 12:48:00 AM	66412
Xylenes, Total	ND	0.099		mg/Kg	1	3/29/2022 12:48:00 AM	66412
Surr: 4-Bromofluorobenzene	82.6	70-130		%Rec	1	3/29/2022 12:48:00 AM	66412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2203D53

Date Reported: 4/14/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP11-8

Project: Robinson B Federal 1

Collection Date: 3/23/2022 11:00:00 AM

Lab ID: 2203D53-012

Matrix: SOIL

Received Date: 3/25/2022 7:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	130	60		mg/Kg	20	3/31/2022 4:14:33 PM	66517
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	3/29/2022 11:31:19 PM	66452
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/29/2022 11:31:19 PM	66452
Surr: DNOP	84.2	51.1-141		%Rec	1	3/29/2022 11:31:19 PM	66452
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/29/2022 1:08:00 AM	66412
Surr: BFB	99.2	37.7-212		%Rec	1	3/29/2022 1:08:00 AM	66412
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	3/29/2022 1:08:00 AM	66412
Toluene	ND	0.049		mg/Kg	1	3/29/2022 1:08:00 AM	66412
Ethylbenzene	ND	0.049		mg/Kg	1	3/29/2022 1:08:00 AM	66412
Xylenes, Total	ND	0.098		mg/Kg	1	3/29/2022 1:08:00 AM	66412
Surr: 4-Bromofluorobenzene	84.0	70-130		%Rec	1	3/29/2022 1:08:00 AM	66412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2203D53

Date Reported: 4/14/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP12-8

Project: Robinson B Federal 1

Collection Date: 3/23/2022 11:30:00 AM

Lab ID: 2203D53-014

Matrix: SOIL

Received Date: 3/25/2022 7:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/31/2022 4:26:54 PM	66517
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	520	48		mg/Kg	5	3/31/2022 2:44:47 PM	66452
Motor Oil Range Organics (MRO)	980	240		mg/Kg	5	3/31/2022 2:44:47 PM	66452
Surr: DNOP	93.5	51.1-141		%Rec	5	3/31/2022 2:44:47 PM	66452
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/29/2022 1:27:00 AM	66412
Surr: BFB	104	37.7-212		%Rec	1	3/29/2022 1:27:00 AM	66412
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	3/29/2022 1:27:00 AM	66412
Toluene	ND	0.049		mg/Kg	1	3/29/2022 1:27:00 AM	66412
Ethylbenzene	ND	0.049		mg/Kg	1	3/29/2022 1:27:00 AM	66412
Xylenes, Total	ND	0.097		mg/Kg	1	3/29/2022 1:27:00 AM	66412
Surr: 4-Bromofluorobenzene	85.2	70-130		%Rec	1	3/29/2022 1:27:00 AM	66412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2203D53

Date Reported: 4/14/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP12-12

Project: Robinson B Federal 1

Collection Date: 3/23/2022 11:40:00 AM

Lab ID: 2203D53-015

Matrix: SOIL

Received Date: 3/25/2022 7:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	240	60		mg/Kg	20	3/31/2022 4:39:15 PM	66517
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: JME
Diesel Range Organics (DRO)	46	9.9		mg/Kg	1	4/1/2022 11:42:50 AM	66452
Motor Oil Range Organics (MRO)	190	50		mg/Kg	1	4/1/2022 11:42:50 AM	66452
Surr: DNOP	100	51.1-141		%Rec	1	4/1/2022 11:42:50 AM	66452
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/29/2022 1:47:00 AM	66412
Surr: BFB	100	37.7-212		%Rec	1	3/29/2022 1:47:00 AM	66412
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	3/29/2022 1:47:00 AM	66412
Toluene	ND	0.049		mg/Kg	1	3/29/2022 1:47:00 AM	66412
Ethylbenzene	ND	0.049		mg/Kg	1	3/29/2022 1:47:00 AM	66412
Xylenes, Total	ND	0.099		mg/Kg	1	3/29/2022 1:47:00 AM	66412
Surr: 4-Bromofluorobenzene	84.8	70-130		%Rec	1	3/29/2022 1:47:00 AM	66412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2203D53

Date Reported: 4/14/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP12-14

Project: Robinson B Federal 1

Collection Date: 3/23/2022 11:45:00 AM

Lab ID: 2203D53-016

Matrix: SOIL

Received Date: 3/25/2022 7:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CAS</b>
Chloride	ND	61		mg/Kg	20	4/7/2022 10:42:01 PM	66705
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	11	9.8		mg/Kg	1	4/8/2022 1:39:31 PM	66670
Motor Oil Range Organics (MRO)	52	49		mg/Kg	1	4/8/2022 1:39:31 PM	66670
Surr: DNOP	93.3	51.1-141		%Rec	1	4/8/2022 1:39:31 PM	66670
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>BRM</b>
Gasoline Range Organics (GRO)	ND	5.0	H	mg/Kg	1	4/7/2022 12:48:00 PM	66675
Surr: BFB	94.8	37.7-212	H	%Rec	1	4/7/2022 12:48:00 PM	66675
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>BRM</b>
Benzene	ND	0.025	H	mg/Kg	1	4/7/2022 12:48:00 PM	66675
Toluene	ND	0.050	H	mg/Kg	1	4/7/2022 12:48:00 PM	66675
Ethylbenzene	ND	0.050	H	mg/Kg	1	4/7/2022 12:48:00 PM	66675
Xylenes, Total	ND	0.10	H	mg/Kg	1	4/7/2022 12:48:00 PM	66675
Surr: 4-Bromofluorobenzene	80.8	70-130	H	%Rec	1	4/7/2022 12:48:00 PM	66675

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		



## Analytical Report

Lab Order 2203D53

Date Reported: 4/14/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP15-14

Project: Robinson B Federal 1

Collection Date: 3/23/2022 1:20:00 PM

Lab ID: 2203D53-017

Matrix: SOIL

Received Date: 3/25/2022 7:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	150	60		mg/Kg	20	3/31/2022 7:33:31 PM	66531
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: JME
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	4/1/2022 12:14:20 PM	66452
Motor Oil Range Organics (MRO)	76	49		mg/Kg	1	4/1/2022 12:14:20 PM	66452
Surr: DNOP	119	51.1-141		%Rec	1	4/1/2022 12:14:20 PM	66452
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/29/2022 2:07:00 AM	66412
Surr: BFB	100	37.7-212		%Rec	1	3/29/2022 2:07:00 AM	66412
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	3/29/2022 2:07:00 AM	66412
Toluene	ND	0.048		mg/Kg	1	3/29/2022 2:07:00 AM	66412
Ethylbenzene	ND	0.048		mg/Kg	1	3/29/2022 2:07:00 AM	66412
Xylenes, Total	ND	0.095		mg/Kg	1	3/29/2022 2:07:00 AM	66412
Surr: 4-Bromofluorobenzene	84.9	70-130		%Rec	1	3/29/2022 2:07:00 AM	66412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

## Analytical Report

Lab Order 2203D53

Date Reported: 4/14/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP16-S

Project: Robinson B Federal 1

Collection Date: 3/23/2022 1:40:00 PM

Lab ID: 2203D53-019

Matrix: SOIL

Received Date: 3/25/2022 7:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	ND	61		mg/Kg	20	3/31/2022 7:45:56 PM	66531
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: SB
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	3/30/2022 10:31:11 AM	66452
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/30/2022 10:31:11 AM	66452
Surr: DNOP	92.5	51.1-141		%Rec	1	3/30/2022 10:31:11 AM	66452
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/29/2022 4:05:00 AM	66412
Surr: BFB	98.8	37.7-212		%Rec	1	3/29/2022 4:05:00 AM	66412
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	3/29/2022 4:05:00 AM	66412
Toluene	ND	0.049		mg/Kg	1	3/29/2022 4:05:00 AM	66412
Ethylbenzene	ND	0.049		mg/Kg	1	3/29/2022 4:05:00 AM	66412
Xylenes, Total	ND	0.099		mg/Kg	1	3/29/2022 4:05:00 AM	66412
Surr: 4-Bromofluorobenzene	83.7	70-130		%Rec	1	3/29/2022 4:05:00 AM	66412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2203D53

Date Reported: 4/14/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP16-2

Project: Robinson B Federal 1

Collection Date: 3/23/2022 1:50:00 PM

Lab ID: 2203D53-020

Matrix: SOIL

Received Date: 3/25/2022 7:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	3/31/2022 7:58:21 PM	66531
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	3/29/2022 11:41:51 PM	66452
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/29/2022 11:41:51 PM	66452
Surr: DNOP	77.4	51.1-141		%Rec	1	3/29/2022 11:41:51 PM	66452
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>BRM</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/29/2022 4:25:00 AM	66412
Surr: BFB	103	37.7-212		%Rec	1	3/29/2022 4:25:00 AM	66412
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>BRM</b>
Benzene	ND	0.025		mg/Kg	1	3/29/2022 4:25:00 AM	66412
Toluene	ND	0.050		mg/Kg	1	3/29/2022 4:25:00 AM	66412
Ethylbenzene	ND	0.050		mg/Kg	1	3/29/2022 4:25:00 AM	66412
Xylenes, Total	ND	0.10		mg/Kg	1	3/29/2022 4:25:00 AM	66412
Surr: 4-Bromofluorobenzene	85.5	70-130		%Rec	1	3/29/2022 4:25:00 AM	66412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2203D53

Date Reported: 4/14/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP17-2

Project: Robinson B Federal 1

Collection Date: 3/23/2022 2:00:00 PM

Lab ID: 2203D53-021

Matrix: SOIL

Received Date: 3/25/2022 7:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	3/31/2022 8:10:46 PM	66531
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	680	99		mg/Kg	10	3/31/2022 3:49:12 PM	66452
Motor Oil Range Organics (MRO)	1200	490		mg/Kg	10	3/31/2022 3:49:12 PM	66452
Surr: DNOP	0	51.1-141	S	%Rec	10	3/31/2022 3:49:12 PM	66452
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>BRM</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/29/2022 4:45:00 AM	66412
Surr: BFB	102	37.7-212		%Rec	1	3/29/2022 4:45:00 AM	66412
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>BRM</b>
Benzene	ND	0.025		mg/Kg	1	3/29/2022 4:45:00 AM	66412
Toluene	ND	0.050		mg/Kg	1	3/29/2022 4:45:00 AM	66412
Ethylbenzene	ND	0.050		mg/Kg	1	3/29/2022 4:45:00 AM	66412
Xylenes, Total	ND	0.099		mg/Kg	1	3/29/2022 4:45:00 AM	66412
Surr: 4-Bromofluorobenzene	85.4	70-130		%Rec	1	3/29/2022 4:45:00 AM	66412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2203D53

Date Reported: 4/14/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP17-4

Project: Robinson B Federal 1

Collection Date: 3/23/2022 2:10:00 PM

Lab ID: 2203D53-022

Matrix: SOIL

Received Date: 3/25/2022 7:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	3/31/2022 8:23:11 PM	66531
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	2400	480		mg/Kg	50	3/30/2022 7:59:16 PM	66452
Motor Oil Range Organics (MRO)	3800	2400		mg/Kg	50	3/30/2022 7:59:16 PM	66452
Surr: DNOP	0	51.1-141	S	%Rec	50	3/30/2022 7:59:16 PM	66452
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>BRM</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/29/2022 5:04:00 AM	66412
Surr: BFB	96.9	37.7-212		%Rec	1	3/29/2022 5:04:00 AM	66412
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>BRM</b>
Benzene	ND	0.025		mg/Kg	1	3/29/2022 5:04:00 AM	66412
Toluene	ND	0.050		mg/Kg	1	3/29/2022 5:04:00 AM	66412
Ethylbenzene	ND	0.050		mg/Kg	1	3/29/2022 5:04:00 AM	66412
Xylenes, Total	ND	0.10		mg/Kg	1	3/29/2022 5:04:00 AM	66412
Surr: 4-Bromofluorobenzene	80.4	70-130		%Rec	1	3/29/2022 5:04:00 AM	66412

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

## Analytical Report

Lab Order 2203D53

Date Reported: 4/14/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP17-8

Project: Robinson B Federal 1

Collection Date: 3/23/2022 2:20:00 PM

Lab ID: 2203D53-023

Matrix: SOIL

Received Date: 3/25/2022 7:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	ND	60		mg/Kg	20	3/31/2022 9:00:25 PM	66531
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: ED
Diesel Range Organics (DRO)	310	9.9		mg/Kg	1	3/31/2022 9:16:15 PM	66474
Motor Oil Range Organics (MRO)	800	49		mg/Kg	1	3/31/2022 9:16:15 PM	66474
Surr: DNOP	111	51.1-141		%Rec	1	3/31/2022 9:16:15 PM	66474
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/29/2022 8:02:07 AM	66414
Surr: BFB	95.1	37.7-212		%Rec	1	3/29/2022 8:02:07 AM	66414
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	3/29/2022 8:02:07 AM	66414
Toluene	ND	0.049		mg/Kg	1	3/29/2022 8:02:07 AM	66414
Ethylbenzene	ND	0.049		mg/Kg	1	3/29/2022 8:02:07 AM	66414
Xylenes, Total	ND	0.098		mg/Kg	1	3/29/2022 8:02:07 AM	66414
Surr: 4-Bromofluorobenzene	96.0	70-130		%Rec	1	3/29/2022 8:02:07 AM	66414

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2203D53

Date Reported: 4/14/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP17-10

Project: Robinson B Federal 1

Collection Date: 3/23/2022 2:30:00 PM

Lab ID: 2203D53-024

Matrix: SOIL

Received Date: 3/25/2022 7:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	ND	61		mg/Kg	20	3/31/2022 9:37:38 PM	66531
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: ED
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/30/2022 12:03:44 PM	66474
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/30/2022 12:03:44 PM	66474
Surr: DNOP	118	51.1-141		%Rec	1	3/30/2022 12:03:44 PM	66474
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/29/2022 9:12:51 AM	66414
Surr: BFB	95.2	37.7-212		%Rec	1	3/29/2022 9:12:51 AM	66414
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/29/2022 9:12:51 AM	66414
Toluene	ND	0.048		mg/Kg	1	3/29/2022 9:12:51 AM	66414
Ethylbenzene	ND	0.048		mg/Kg	1	3/29/2022 9:12:51 AM	66414
Xylenes, Total	ND	0.096		mg/Kg	1	3/29/2022 9:12:51 AM	66414
Surr: 4-Bromofluorobenzene	96.9	70-130		%Rec	1	3/29/2022 9:12:51 AM	66414

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2203D53

Date Reported: 4/14/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP18-S

Project: Robinson B Federal 1

Collection Date: 3/23/2022 2:40:00 PM

Lab ID: 2203D53-025

Matrix: SOIL

Received Date: 3/25/2022 7:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	ND	60		mg/Kg	20	3/31/2022 9:50:02 PM	66531
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: ED
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	4/1/2022 12:54:22 AM	66474
Motor Oil Range Organics (MRO)	90	50		mg/Kg	1	4/1/2022 12:54:22 AM	66474
Surr: DNOP	77.1	51.1-141		%Rec	1	4/1/2022 12:54:22 AM	66474
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/29/2022 10:23:20 AM	66414
Surr: BFB	99.1	37.7-212		%Rec	1	3/29/2022 10:23:20 AM	66414
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	0.051	0.025		mg/Kg	1	3/29/2022 10:23:20 AM	66414
Toluene	ND	0.050		mg/Kg	1	3/29/2022 10:23:20 AM	66414
Ethylbenzene	ND	0.050		mg/Kg	1	3/29/2022 10:23:20 AM	66414
Xylenes, Total	ND	0.099		mg/Kg	1	3/29/2022 10:23:20 AM	66414
Surr: 4-Bromofluorobenzene	98.7	70-130		%Rec	1	3/29/2022 10:23:20 AM	66414

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

## Analytical Report

Lab Order 2203D53

Date Reported: 4/14/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP18-2

Project: Robinson B Federal 1

Collection Date: 3/23/2022 2:50:00 PM

Lab ID: 2203D53-026

Matrix: SOIL

Received Date: 3/25/2022 7:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	ND	60		mg/Kg	20	3/31/2022 10:02:27 PM	66531
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: ED
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	3/30/2022 12:52:24 PM	66474
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/30/2022 12:52:24 PM	66474
Surr: DNOP	92.4	51.1-141		%Rec	1	3/30/2022 12:52:24 PM	66474
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/29/2022 10:46:45 AM	66414
Surr: BFB	97.5	37.7-212		%Rec	1	3/29/2022 10:46:45 AM	66414
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/29/2022 10:46:45 AM	66414
Toluene	ND	0.049		mg/Kg	1	3/29/2022 10:46:45 AM	66414
Ethylbenzene	ND	0.049		mg/Kg	1	3/29/2022 10:46:45 AM	66414
Xylenes, Total	ND	0.097		mg/Kg	1	3/29/2022 10:46:45 AM	66414
Surr: 4-Bromofluorobenzene	99.6	70-130		%Rec	1	3/29/2022 10:46:45 AM	66414

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2203D53

14-Apr-22

**Client:** GHD Midland  
**Project:** Robinson B Federal 1

Sample ID: <b>MB-66406</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>66406</b>	RunNo: <b>86792</b>								
Prep Date: <b>3/25/2022</b>	Analysis Date: <b>3/25/2022</b>	SeqNo: <b>3065727</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-66406</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>66406</b>	RunNo: <b>86792</b>								
Prep Date: <b>3/25/2022</b>	Analysis Date: <b>3/25/2022</b>	SeqNo: <b>3065735</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	90.1	90	110			

Sample ID: <b>MB-66517</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>66517</b>	RunNo: <b>86869</b>								
Prep Date: <b>3/30/2022</b>	Analysis Date: <b>3/30/2022</b>	SeqNo: <b>3068868</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-66517</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>66517</b>	RunNo: <b>86869</b>								
Prep Date: <b>3/30/2022</b>	Analysis Date: <b>3/30/2022</b>	SeqNo: <b>3068869</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.6	90	110			

Sample ID: <b>MB-66531</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>66531</b>	RunNo: <b>86885</b>								
Prep Date: <b>3/31/2022</b>	Analysis Date: <b>3/31/2022</b>	SeqNo: <b>3070543</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-66531</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>66531</b>	RunNo: <b>86885</b>								
Prep Date: <b>3/31/2022</b>	Analysis Date: <b>3/31/2022</b>	SeqNo: <b>3070544</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.7	90	110			

**Qualifiers:**

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2203D53

14-Apr-22

**Client:** GHD Midland  
**Project:** Robinson B Federal 1

Sample ID: <b>MB-66705</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>66705</b>	RunNo: <b>87092</b>								
Prep Date: <b>4/7/2022</b>	Analysis Date: <b>4/7/2022</b>	SeqNo: <b>3078859</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-66705</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>66705</b>	RunNo: <b>87092</b>								
Prep Date: <b>4/7/2022</b>	Analysis Date: <b>4/7/2022</b>	SeqNo: <b>3078860</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.0	90	110			

### Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2203D53

14-Apr-22

**Client:** GHD Midland  
**Project:** Robinson B Federal 1

Sample ID: <b>LCS-66403</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>66403</b>	RunNo: <b>86774</b>								
Prep Date: <b>3/25/2022</b>	Analysis Date: <b>3/25/2022</b>	SeqNo: <b>3064237</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	87.4	68.9	135			
Surr: DNOP	3.9		5.000		77.9	51.1	141			

Sample ID: <b>MB-66403</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>66403</b>	RunNo: <b>86774</b>								
Prep Date: <b>3/25/2022</b>	Analysis Date: <b>3/25/2022</b>	SeqNo: <b>3064239</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.9		10.00		88.6	51.1	141			

Sample ID: <b>2203D53-004AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>TP3-19</b>	Batch ID: <b>66403</b>	RunNo: <b>86781</b>								
Prep Date: <b>3/25/2022</b>	Analysis Date: <b>3/28/2022</b>	SeqNo: <b>3065103</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	1300	43	42.66	1194	315	36.1	154			S
Surr: DNOP	0.63		4.266		14.7	51.1	141			S

Sample ID: <b>2203D53-004AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>TP3-19</b>	Batch ID: <b>66403</b>	RunNo: <b>86781</b>								
Prep Date: <b>3/25/2022</b>	Analysis Date: <b>3/28/2022</b>	SeqNo: <b>3065104</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	1400	50	49.75	1194	321	36.1	154	1.87	33.9	S
Surr: DNOP	3.7		4.975		75.3	51.1	141	0	0	

Sample ID: <b>LCS-66443</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>66443</b>	RunNo: <b>86803</b>								
Prep Date: <b>3/28/2022</b>	Analysis Date: <b>3/29/2022</b>	SeqNo: <b>3066791</b>	Units: <b>%Rec</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.0		5.000		101	51.1	141			

Sample ID: <b>LCS-66452</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>66452</b>	RunNo: <b>86803</b>								
Prep Date: <b>3/28/2022</b>	Analysis Date: <b>3/29/2022</b>	SeqNo: <b>3066792</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

**Qualifiers:**

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		



**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2203D53

14-Apr-22

**Client:** GHD Midland  
**Project:** Robinson B Federal 1

Sample ID: <b>LCS-66452</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>66452</b>	RunNo: <b>86803</b>								
Prep Date: <b>3/28/2022</b>	Analysis Date: <b>3/29/2022</b>	SeqNo: <b>3066792</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	92.0	68.9	135			
Surr: DNOP	4.6		5.000		91.8	51.1	141			

Sample ID: <b>MB-66443</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>66443</b>	RunNo: <b>86803</b>								
Prep Date: <b>3/28/2022</b>	Analysis Date: <b>3/29/2022</b>	SeqNo: <b>3066795</b> Units: <b>%Rec</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		99.6	51.1	141			

Sample ID: <b>MB-66452</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>66452</b>	RunNo: <b>86803</b>								
Prep Date: <b>3/28/2022</b>	Analysis Date: <b>3/29/2022</b>	SeqNo: <b>3066796</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		117	51.1	141			

Sample ID: <b>LCS-66474</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>66474</b>	RunNo: <b>86875</b>								
Prep Date: <b>3/29/2022</b>	Analysis Date: <b>3/30/2022</b>	SeqNo: <b>3069217</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	10	50.00	0	83.9	68.9	135			
Surr: DNOP	4.1		5.000		81.3	51.1	141			

Sample ID: <b>MB-66474</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>66474</b>	RunNo: <b>86875</b>								
Prep Date: <b>3/29/2022</b>	Analysis Date: <b>3/30/2022</b>	SeqNo: <b>3069218</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.7		10.00		97.2	51.1	141			

**Qualifiers:**

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2203D53

14-Apr-22

**Client:** GHD Midland  
**Project:** Robinson B Federal 1

Sample ID: <b>LCS-66507</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>66507</b>		RunNo: <b>86887</b>							
Prep Date: <b>3/30/2022</b>	Analysis Date: <b>3/31/2022</b>		SeqNo: <b>3069715</b>		Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.8		5.000		75.1	51.1	141			

Sample ID: <b>MB-66507</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>66507</b>		RunNo: <b>86887</b>							
Prep Date: <b>3/30/2022</b>	Analysis Date: <b>3/31/2022</b>		SeqNo: <b>3069718</b>		Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.9		10.00		88.8	51.1	141			

Sample ID: <b>2203D53-023AMS</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>TP17-8</b>	Batch ID: <b>66474</b>		RunNo: <b>86904</b>							
Prep Date: <b>3/29/2022</b>	Analysis Date: <b>3/31/2022</b>		SeqNo: <b>3070210</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	320	9.7	48.45	314.6	17.4	36.1	154			S
Surr: DNOP	5.1		4.845		105	51.1	141			

Sample ID: <b>2203D53-023AMSD</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>TP17-8</b>	Batch ID: <b>66474</b>		RunNo: <b>86904</b>							
Prep Date: <b>3/29/2022</b>	Analysis Date: <b>3/31/2022</b>		SeqNo: <b>3070211</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	310	9.9	49.31	314.6	-8.27	36.1	154	3.95	33.9	S
Surr: DNOP	5.2		4.931		105	51.1	141	0	0	

Sample ID: <b>LCS-66670</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>66670</b>		RunNo: <b>87064</b>							
Prep Date: <b>4/6/2022</b>	Analysis Date: <b>4/7/2022</b>		SeqNo: <b>3078634</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.0	68.9	135			
Surr: DNOP	5.1		5.000		101	51.1	141			

Sample ID: <b>MB-66670</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>66670</b>		RunNo: <b>87064</b>							
Prep Date: <b>4/6/2022</b>	Analysis Date: <b>4/7/2022</b>		SeqNo: <b>3078637</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								

**Qualifiers:**

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix	E Estimated value
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL Practical Quantitative Limit	RL Reporting Limit
S % Recovery outside of range due to dilution or matrix interference	

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2203D53

14-Apr-22

**Client:** GHD Midland  
**Project:** Robinson B Federal 1

Sample ID: <b>MB-66670</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>66670</b>		RunNo: <b>87064</b>							
Prep Date: <b>4/6/2022</b>	Analysis Date: <b>4/7/2022</b>		SeqNo: <b>3078637</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.7		10.00		87.2	51.1	141			

Sample ID: <b>MB-66715</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>66715</b>		RunNo: <b>87125</b>							
Prep Date: <b>4/7/2022</b>	Analysis Date: <b>4/8/2022</b>		SeqNo: <b>3080356</b>		Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		110	51.1	141			

Sample ID: <b>LCS-66715</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>66715</b>		RunNo: <b>87125</b>							
Prep Date: <b>4/7/2022</b>	Analysis Date: <b>4/8/2022</b>		SeqNo: <b>3080358</b>		Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.000		93.1	51.1	141			

**Qualifiers:**

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2203D53

14-Apr-22

**Client:** GHD Midland  
**Project:** Robinson B Federal 1

Sample ID: <b>2.5ug gro lcs</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>C86769</b>		RunNo: <b>86769</b>							
Prep Date:	Analysis Date: <b>3/25/2022</b>		SeqNo: <b>3064025</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	106	72.3	137			
Surr: BFB	2100		1000		215	37.7	212			S

Sample ID: <b>mb</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>C86769</b>		RunNo: <b>86769</b>							
Prep Date:	Analysis Date: <b>3/25/2022</b>		SeqNo: <b>3064026</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		101	37.7	212			

Sample ID: <b>lcs-66412</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>66412</b>		RunNo: <b>86795</b>							
Prep Date: <b>3/25/2022</b>	Analysis Date: <b>3/28/2022</b>		SeqNo: <b>3065000</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	31	5.0	25.00	0	124	72.3	137			
Surr: BFB	2300		1000		231	37.7	212			S

Sample ID: <b>mb-66412</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>66412</b>		RunNo: <b>86795</b>							
Prep Date: <b>3/25/2022</b>	Analysis Date: <b>3/28/2022</b>		SeqNo: <b>3065001</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		109	37.7	212			

Sample ID: <b>lcs-66421</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>66421</b>		RunNo: <b>86795</b>							
Prep Date: <b>3/27/2022</b>	Analysis Date: <b>3/28/2022</b>		SeqNo: <b>3065002</b>		Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	2300		1000		227	37.7	212			S

Sample ID: <b>mb-66421</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>66421</b>		RunNo: <b>86795</b>							
Prep Date: <b>3/27/2022</b>	Analysis Date: <b>3/28/2022</b>		SeqNo: <b>3065003</b>		Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		105	37.7	212			

**Qualifiers:**

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2203D53

14-Apr-22

**Client:** GHD Midland  
**Project:** Robinson B Federal 1

Sample ID: <b>mb-66414</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>66414</b>	RunNo: <b>86824</b>								
Prep Date: <b>3/25/2022</b>	Analysis Date: <b>3/29/2022</b>	SeqNo: <b>3066190</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	990		1000		99.4	37.7	212			

Sample ID: <b>lcs-66414</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>66414</b>	RunNo: <b>86824</b>								
Prep Date: <b>3/25/2022</b>	Analysis Date: <b>3/29/2022</b>	SeqNo: <b>3066191</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	104	72.3	137			
Surr: BFB	2000		1000		204	37.7	212			

Sample ID: <b>2203d53-023ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>TP17-8</b>	Batch ID: <b>66414</b>	RunNo: <b>86824</b>								
Prep Date: <b>3/25/2022</b>	Analysis Date: <b>3/29/2022</b>	SeqNo: <b>3066193</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	24.80	0	107	70	130			
Surr: BFB	2000		992.1		199	37.7	212			

Sample ID: <b>2203d53-023amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>TP17-8</b>	Batch ID: <b>66414</b>	RunNo: <b>86824</b>								
Prep Date: <b>3/25/2022</b>	Analysis Date: <b>3/29/2022</b>	SeqNo: <b>3066194</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	24.90	0	101	70	130	4.60	20	
Surr: BFB	2000		996.0		198	37.7	212	0	0	

Sample ID: <b>lcs-66420</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>66420</b>	RunNo: <b>86835</b>								
Prep Date: <b>3/27/2022</b>	Analysis Date: <b>3/29/2022</b>	SeqNo: <b>3067119</b>			Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	2300		1000		234	37.7	212			S

Sample ID: <b>mb-66420</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>66420</b>	RunNo: <b>86835</b>								
Prep Date: <b>3/27/2022</b>	Analysis Date: <b>3/29/2022</b>	SeqNo: <b>3067120</b>			Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	980		1000		97.9	37.7	212			

**Qualifiers:**

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2203D53

14-Apr-22

**Client:** GHD Midland  
**Project:** Robinson B Federal 1

Sample ID: <b>lcs-66675</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>66675</b>			RunNo: <b>87084</b>						
Prep Date: <b>4/6/2022</b>	Analysis Date: <b>4/7/2022</b>			SeqNo: <b>3078370</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	113	72.3	137			
Surr: BFB	2200		1000		219	37.7	212			S

Sample ID: <b>mb-66675</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>PBS</b>	Batch ID: <b>66675</b>			RunNo: <b>87084</b>						
Prep Date: <b>4/6/2022</b>	Analysis Date: <b>4/7/2022</b>			SeqNo: <b>3078371</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		109	37.7	212			

**Qualifiers:**

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		



**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2203D53

14-Apr-22

**Client:** GHD Midland  
**Project:** Robinson B Federal 1

Sample ID: <b>100ng btex lcs</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>D86769</b>	RunNo: <b>86769</b>								
Prep Date:	Analysis Date: <b>3/25/2022</b>	SeqNo: <b>3064035</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	1.000	0	88.6	80	120			
Toluene	0.91	0.050	1.000	0	90.6	80	120			
Ethylbenzene	0.92	0.050	1.000	0	91.8	80	120			
Xylenes, Total	2.8	0.10	3.000	0	91.9	80	120			
Surr: 4-Bromofluorobenzene	0.88		1.000		88.3	70	130			

Sample ID: <b>mb</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>D86769</b>	RunNo: <b>86769</b>								
Prep Date:	Analysis Date: <b>3/25/2022</b>	SeqNo: <b>3064036</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.86		1.000		86.1	70	130			

Sample ID: <b>2203d53-004a ms</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>TP3-19</b>	Batch ID: <b>D86769</b>	RunNo: <b>86769</b>								
Prep Date:	Analysis Date: <b>3/25/2022</b>	SeqNo: <b>3064040</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	12	0.31	12.35	0.8743	86.9	68.8	120			
Toluene	15	0.62	12.35	3.616	89.9	73.6	124			
Ethylbenzene	19	0.62	12.35	7.903	92.0	72.7	129			
Xylenes, Total	43	1.2	37.04	9.417	89.6	75.7	126			
Surr: 4-Bromofluorobenzene	13		12.35		103	70	130			

Sample ID: <b>2203D53-004A MSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>TP3-19</b>	Batch ID: <b>D86769</b>	RunNo: <b>86769</b>								
Prep Date:	Analysis Date: <b>3/25/2022</b>	SeqNo: <b>3064041</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	11	0.31	12.35	0.8743	82.6	68.8	120	4.72	20	
Toluene	14	0.62	12.35	3.616	84.3	73.6	124	4.81	20	
Ethylbenzene	18	0.62	12.35	7.903	83.6	72.7	129	5.54	20	
Xylenes, Total	41	1.2	37.04	9.417	84.8	75.7	126	4.31	20	
Surr: 4-Bromofluorobenzene	12		12.35		99.8	70	130	0	0	

**Qualifiers:**

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix	E Estimated value
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL Practical Quantitative Limit	RL Reporting Limit
S % Recovery outside of range due to dilution or matrix interference	

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2203D53

14-Apr-22

**Client:** GHD Midland  
**Project:** Robinson B Federal 1

Sample ID: <b>ics-66412</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>66412</b>			RunNo: <b>86795</b>						
Prep Date: <b>3/25/2022</b>	Analysis Date: <b>3/28/2022</b>			SeqNo: <b>3065042</b>			Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.85	0.025	1.000	0	85.3	80	120			
Toluene	0.89	0.050	1.000	0	88.9	80	120			
Ethylbenzene	0.90	0.050	1.000	0	89.9	80	120			
Xylenes, Total	2.7	0.10	3.000	0	89.6	80	120			
Surr: 4-Bromofluorobenzene	0.86		1.000		85.8	70	130			

Sample ID: <b>mb-66412</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>PBS</b>	Batch ID: <b>66412</b>			RunNo: <b>86795</b>						
Prep Date: <b>3/25/2022</b>	Analysis Date: <b>3/28/2022</b>			SeqNo: <b>3065043</b>			Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.87		1.000		86.9	70	130			

Sample ID: <b>ics-66421</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>66421</b>			RunNo: <b>86795</b>						
Prep Date: <b>3/27/2022</b>	Analysis Date: <b>3/28/2022</b>			SeqNo: <b>3065044</b>			Units: <b>%Rec</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.88		1.000		88.0	70	130			

Sample ID: <b>mb-66421</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>PBS</b>	Batch ID: <b>66421</b>			RunNo: <b>86795</b>						
Prep Date: <b>3/27/2022</b>	Analysis Date: <b>3/28/2022</b>			SeqNo: <b>3065045</b>			Units: <b>%Rec</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.88		1.000		87.6	70	130			

Sample ID: <b>mb-66414</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>PBS</b>	Batch ID: <b>66414</b>			RunNo: <b>86824</b>						
Prep Date: <b>3/25/2022</b>	Analysis Date: <b>3/29/2022</b>			SeqNo: <b>3066238</b>			Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								

**Qualifiers:**

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2203D53

14-Apr-22

**Client:** GHD Midland  
**Project:** Robinson B Federal 1

Sample ID: <b>mb-66414</b>	SampType: <b>MBLK</b>				TestCode: <b>EPA Method 8021B: Volatiles</b>					
Client ID: <b>PBS</b>	Batch ID: <b>66414</b>				RunNo: <b>86824</b>					
Prep Date: <b>3/25/2022</b>	Analysis Date: <b>3/29/2022</b>				SeqNo: <b>3066238</b>	Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.99		1.000		98.8	70	130			

Sample ID: <b>LCS-66414</b>	SampType: <b>LCS</b>				TestCode: <b>EPA Method 8021B: Volatiles</b>					
Client ID: <b>LCSS</b>	Batch ID: <b>66414</b>				RunNo: <b>86824</b>					
Prep Date: <b>3/25/2022</b>	Analysis Date: <b>3/29/2022</b>				SeqNo: <b>3066239</b>	Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.81	0.025	1.000	0	81.2	80	120			
Toluene	0.84	0.050	1.000	0	84.1	80	120			
Ethylbenzene	0.86	0.050	1.000	0	86.1	80	120			
Xylenes, Total	2.6	0.10	3.000	0	86.3	80	120			
Surr: 4-Bromofluorobenzene	0.99		1.000		99.0	70	130			

Sample ID: <b>2203d53-024ams</b>	SampType: <b>MS</b>				TestCode: <b>EPA Method 8021B: Volatiles</b>					
Client ID: <b>TP17-10</b>	Batch ID: <b>66414</b>				RunNo: <b>86824</b>					
Prep Date: <b>3/25/2022</b>	Analysis Date: <b>3/29/2022</b>				SeqNo: <b>3066242</b>	Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.79	0.024	0.9756	0	81.2	68.8	120			
Toluene	0.83	0.049	0.9756	0	85.6	73.6	124			
Ethylbenzene	0.85	0.049	0.9756	0.01077	85.7	72.7	129			
Xylenes, Total	2.6	0.098	2.927	0	87.4	75.7	126			
Surr: 4-Bromofluorobenzene	0.99		0.9756		101	70	130			

Sample ID: <b>2203d53-024amsd</b>	SampType: <b>MSD</b>				TestCode: <b>EPA Method 8021B: Volatiles</b>					
Client ID: <b>TP17-10</b>	Batch ID: <b>66414</b>				RunNo: <b>86824</b>					
Prep Date: <b>3/25/2022</b>	Analysis Date: <b>3/29/2022</b>				SeqNo: <b>3066243</b>	Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.78	0.024	0.9653	0	80.6	68.8	120	1.72	20	
Toluene	0.81	0.048	0.9653	0	84.2	73.6	124	2.72	20	
Ethylbenzene	0.83	0.048	0.9653	0.01077	85.3	72.7	129	1.53	20	
Xylenes, Total	2.5	0.097	2.896	0	86.6	75.7	126	2.00	20	
Surr: 4-Bromofluorobenzene	0.98		0.9653		101	70	130	0	0	

Sample ID: <b>lcs-66420</b>	SampType: <b>LCS</b>				TestCode: <b>EPA Method 8021B: Volatiles</b>					
Client ID: <b>LCSS</b>	Batch ID: <b>66420</b>				RunNo: <b>86835</b>					
Prep Date: <b>3/27/2022</b>	Analysis Date: <b>3/29/2022</b>				SeqNo: <b>3067166</b>	Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix interference

B Analyte detected in the associated Method Blank  
E Estimated value  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2203D53

14-Apr-22

**Client:** GHD Midland  
**Project:** Robinson B Federal 1

Sample ID: <b>ics-66420</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>66420</b>		RunNo: <b>86835</b>							
Prep Date: <b>3/27/2022</b>	Analysis Date: <b>3/29/2022</b>		SeqNo: <b>3067166</b>		Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.81		1.000		81.3	70	130			

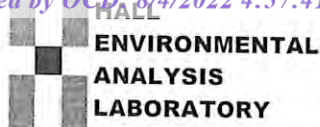
Sample ID: <b>mb-66420</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>66420</b>		RunNo: <b>86835</b>							
Prep Date: <b>3/27/2022</b>	Analysis Date: <b>3/29/2022</b>		SeqNo: <b>3067167</b>		Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.82		1.000		81.7	70	130			

Sample ID: <b>ics-66675</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>66675</b>		RunNo: <b>87084</b>							
Prep Date: <b>4/6/2022</b>	Analysis Date: <b>4/7/2022</b>		SeqNo: <b>3078399</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	1.000	0	87.6	80	120			
Toluene	0.88	0.050	1.000	0	88.1	80	120			
Ethylbenzene	0.89	0.050	1.000	0	89.0	80	120			
Xylenes, Total	2.7	0.10	3.000	0	88.9	80	120			
Surr: 4-Bromofluorobenzene	0.89		1.000		89.4	70	130			

Sample ID: <b>mb-66675</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>66675</b>		RunNo: <b>87084</b>							
Prep Date: <b>4/6/2022</b>	Analysis Date: <b>4/7/2022</b>		SeqNo: <b>3078400</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.91		1.000		91.2	70	130			

**Qualifiers:**

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: clients.hallenvironmental.com

## Sample Log-In Check List

Client Name: GHD Midland

Work Order Number: 2203D53

RcptNo: 1

Received By: Cheyenne Cason 3/25/2022 7:23:00 AM

Completed By: Cheyenne Cason 3/25/2022 7:56:38 AM

Reviewed By: *su 3/25/22*Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐  
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐  
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐  
5. Sample(s) in proper container(s)? Yes ☒ No ☐  
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐  
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐  
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐  
9. Received at least 1 vial with headspace  $<1/4$ " for AQ VOA? Yes ☐ No ☐ NA ☒  
10. Were any sample containers received broken? Yes ☐ No ☒  
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐  
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐  
13. Is it clear what analyses were requested? Yes ☒ No ☐  
14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐  
# of preserved bottles checked for pH:   
( $<2$  or  $>12$  unless noted) Adjusted?   
Checked by: *su 3/25/22*

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: \_\_\_\_\_

Date: \_\_\_\_\_

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.9	Good	Not Present			
2	1.6	Good	Not Present			
3	2.8	Good	Not Present			











## Chain-of-Custody Record

Client: GHD

Mailing Address:

324 W. Main St. Suite 108, Artesia NM 88210

Phone #: (505)377-4218

email or Fax#: Becky.Haskell@ghd.com

QA/QC Package:

☐ Standard☐ Level 4 (Full Validation)Accreditation: ☐ Az Compliance☐ NELAC☐ Other☐ EDD (Type)

Turn-Around Time:

☒ Standard☒ Rush

Project Name:

Project #:

Project Manager:

Becky Haskell

Tom Larson

Sampler:

Zach Comino

On Ice:

☒ Yes☐ No

# of Coolers: 3

Cooler Temp (including CF):

See last page

Container Type and #

Preservative Type

HEAL No.

Date Time Matrix Sample Name

03/23/22 1440 S

TPB-S

Jan

2203053

025

026

Date:

03/24/22 0800

Relinquished by:

Becky Haskell

Received by:

Via:

Date

Time

Date:

3/24/22 1900

Relinquished by:

Becky Haskell

Received by:

Via:

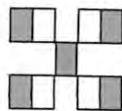
Date

Time

One can 3/25/22 0723

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Direct Bill to EOG-Chase Settle



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

## Analysis Request

BTEX / MTBE / TMB's (8021) ☒

TPH:8015D(GRO / DRO / MRO) ☒

8081 Pesticides/8082 PCB's ☐

EDB (Method 504.1) ☐

PAHs by 8310 or 8270SIMS ☐

RCRA 8 Metals ☐

Cl, F, Br, NO<sub>3</sub>, NO<sub>2</sub>, PO<sub>4</sub>, SO<sub>4</sub> ☐

8260 (VOA) ☐

8270 (Semi-VOA) ☐

Total Coliform (Present/Absent) ☐

Chloride Method 300 ☒

Remarks: Please email: Chase\_Settle@eogresources.com;

Tom.Larson@ghd.com; Zach.Comino@ghd.com

Matthew.Laughlin@ghd.com;

Amber\_Griffin@eogresources.com: Along with Becky

Haskell listed above.



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

April 05, 2022

Becky Haskell  
GHD Midland  
2135 S Loop 250 W  
Midland, TX 79703  
TEL: (432) 686-0086  
FAX

RE: Robinson B Federal 1

OrderNo.: 2203D57

Dear Becky Haskell:

Hall Environmental Analysis Laboratory received 10 sample(s) on 3/25/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 2203D57

Date Reported: 4/5/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP19-S

Project: Robinson B Federal 1

Collection Date: 3/24/2022 7:30:00 AM

Lab ID: 2203D57-001

Matrix: SOIL

Received Date: 3/25/2022 7:23:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	ND	60		mg/Kg	20	4/1/2022 12:19:00 AM	66531
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: ED
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/30/2022 4:04:56 PM	66474
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/30/2022 4:04:56 PM	66474
Surr: DNOP	119	51.1-141		%Rec	1	3/30/2022 4:04:56 PM	66474
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/29/2022 2:26:34 PM	66414
Surr: BFB	94.9	37.7-212		%Rec	1	3/29/2022 2:26:34 PM	66414
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/29/2022 2:26:34 PM	66414
Toluene	ND	0.048		mg/Kg	1	3/29/2022 2:26:34 PM	66414
Ethylbenzene	ND	0.048		mg/Kg	1	3/29/2022 2:26:34 PM	66414
Xylenes, Total	ND	0.097		mg/Kg	1	3/29/2022 2:26:34 PM	66414
Surr: 4-Bromofluorobenzene	94.7	70-130		%Rec	1	3/29/2022 2:26:34 PM	66414

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Page 1 of 14

## Analytical Report

Lab Order 2203D57

Date Reported: 4/5/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP19-2

Project: Robinson B Federal 1

Collection Date: 3/24/2022 7:35:00 AM

Lab ID: 2203D57-002

Matrix: SOIL

Received Date: 3/25/2022 7:23:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	ND	60		mg/Kg	20	4/1/2022 12:31:24 AM	66531
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: ED
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	3/30/2022 4:29:17 PM	66474
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/30/2022 4:29:17 PM	66474
Surr: DNOP	111	51.1-141		%Rec	1	3/30/2022 4:29:17 PM	66474
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/29/2022 2:50:05 PM	66414
Surr: BFB	97.3	37.7-212		%Rec	1	3/29/2022 2:50:05 PM	66414
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/29/2022 2:50:05 PM	66414
Toluene	ND	0.047		mg/Kg	1	3/29/2022 2:50:05 PM	66414
Ethylbenzene	ND	0.047		mg/Kg	1	3/29/2022 2:50:05 PM	66414
Xylenes, Total	ND	0.095		mg/Kg	1	3/29/2022 2:50:05 PM	66414
Surr: 4-Bromofluorobenzene	96.7	70-130		%Rec	1	3/29/2022 2:50:05 PM	66414

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2203D57

Date Reported: 4/5/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP20-S

Project: Robinson B Federal 1

Collection Date: 3/24/2022 7:50:00 AM

Lab ID: 2203D57-003

Matrix: SOIL

Received Date: 3/25/2022 7:23:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	ND	60		mg/Kg	20	4/1/2022 12:43:49 AM	66531
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: ED
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/30/2022 5:17:53 PM	66474
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/30/2022 5:17:53 PM	66474
Surr: DNOP	92.1	51.1-141		%Rec	1	3/30/2022 5:17:53 PM	66474
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/29/2022 3:13:36 PM	66414
Surr: BFB	95.9	37.7-212		%Rec	1	3/29/2022 3:13:36 PM	66414
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/29/2022 3:13:36 PM	66414
Toluene	ND	0.049		mg/Kg	1	3/29/2022 3:13:36 PM	66414
Ethylbenzene	ND	0.049		mg/Kg	1	3/29/2022 3:13:36 PM	66414
Xylenes, Total	ND	0.097		mg/Kg	1	3/29/2022 3:13:36 PM	66414
Surr: 4-Bromofluorobenzene	97.6	70-130		%Rec	1	3/29/2022 3:13:36 PM	66414

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2203D57

Date Reported: 4/5/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP20-2

Project: Robinson B Federal 1

Collection Date: 3/24/2022 8:00:00 AM

Lab ID: 2203D57-004

Matrix: SOIL

Received Date: 3/25/2022 7:23:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	ND	60		mg/Kg	20	4/1/2022 12:56:13 AM	66531
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: ED
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/30/2022 5:42:17 PM	66474
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/30/2022 5:42:17 PM	66474
Surr: DNOP	108	51.1-141		%Rec	1	3/30/2022 5:42:17 PM	66474
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/29/2022 3:36:56 PM	66414
Surr: BFB	99.3	37.7-212		%Rec	1	3/29/2022 3:36:56 PM	66414
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/29/2022 3:36:56 PM	66414
Toluene	ND	0.048		mg/Kg	1	3/29/2022 3:36:56 PM	66414
Ethylbenzene	ND	0.048		mg/Kg	1	3/29/2022 3:36:56 PM	66414
Xylenes, Total	ND	0.096		mg/Kg	1	3/29/2022 3:36:56 PM	66414
Surr: 4-Bromofluorobenzene	98.8	70-130		%Rec	1	3/29/2022 3:36:56 PM	66414

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2203D57

Date Reported: 4/5/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP21-S

Project: Robinson B Federal 1

Collection Date: 3/24/2022 8:10:00 AM

Lab ID: 2203D57-005

Matrix: SOIL

Received Date: 3/25/2022 7:23:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	ND	60		mg/Kg	20	4/1/2022 1:08:38 AM	66531
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: ED
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/30/2022 6:06:44 PM	66474
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/30/2022 6:06:44 PM	66474
Surr: DNOP	119	51.1-141		%Rec	1	3/30/2022 6:06:44 PM	66474
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/29/2022 4:00:22 PM	66414
Surr: BFB	98.1	37.7-212		%Rec	1	3/29/2022 4:00:22 PM	66414
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	3/29/2022 4:00:22 PM	66414
Toluene	ND	0.047		mg/Kg	1	3/29/2022 4:00:22 PM	66414
Ethylbenzene	ND	0.047		mg/Kg	1	3/29/2022 4:00:22 PM	66414
Xylenes, Total	ND	0.094		mg/Kg	1	3/29/2022 4:00:22 PM	66414
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	3/29/2022 4:00:22 PM	66414

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2203D57

Date Reported: 4/5/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP21-2

Project: Robinson B Federal 1

Collection Date: 3/24/2022 8:20:00 AM

Lab ID: 2203D57-006

Matrix: SOIL

Received Date: 3/25/2022 7:23:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	59		mg/Kg	20	3/31/2022 11:51:23 PM	66549
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: ED
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	3/30/2022 6:31:05 PM	66474
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/30/2022 6:31:05 PM	66474
Surr: DNOP	141	51.1-141		%Rec	1	3/30/2022 6:31:05 PM	66474
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/29/2022 4:23:56 PM	66414
Surr: BFB	98.4	37.7-212		%Rec	1	3/29/2022 4:23:56 PM	66414
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/29/2022 4:23:56 PM	66414
Toluene	ND	0.049		mg/Kg	1	3/29/2022 4:23:56 PM	66414
Ethylbenzene	ND	0.049		mg/Kg	1	3/29/2022 4:23:56 PM	66414
Xylenes, Total	ND	0.098		mg/Kg	1	3/29/2022 4:23:56 PM	66414
Surr: 4-Bromofluorobenzene	97.8	70-130		%Rec	1	3/29/2022 4:23:56 PM	66414

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2203D57

Date Reported: 4/5/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP22-S

Project: Robinson B Federal 1

Collection Date: 3/24/2022 8:30:00 AM

Lab ID: 2203D57-007

Matrix: SOIL

Received Date: 3/25/2022 7:23:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	4/1/2022 12:03:44 AM	66549
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: ED
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/30/2022 6:55:35 PM	66474
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/30/2022 6:55:35 PM	66474
Surr: DNOP	134	51.1-141		%Rec	1	3/30/2022 6:55:35 PM	66474
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/29/2022 4:47:35 PM	66414
Surr: BFB	99.9	37.7-212		%Rec	1	3/29/2022 4:47:35 PM	66414
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	3/29/2022 4:47:35 PM	66414
Toluene	ND	0.049		mg/Kg	1	3/29/2022 4:47:35 PM	66414
Ethylbenzene	ND	0.049		mg/Kg	1	3/29/2022 4:47:35 PM	66414
Xylenes, Total	ND	0.099		mg/Kg	1	3/29/2022 4:47:35 PM	66414
Surr: 4-Bromofluorobenzene	97.9	70-130		%Rec	1	3/29/2022 4:47:35 PM	66414

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2203D57

Date Reported: 4/5/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP22-2

Project: Robinson B Federal 1

Collection Date: 3/24/2022 8:40:00 AM

Lab ID: 2203D57-008

Matrix: SOIL

Received Date: 3/25/2022 7:23:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	4/1/2022 12:16:05 AM	66549
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: ED
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	3/30/2022 7:20:02 PM	66474
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/30/2022 7:20:02 PM	66474
Surr: DNOP	125	51.1-141		%Rec	1	3/30/2022 7:20:02 PM	66474
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/29/2022 5:11:10 PM	66414
Surr: BFB	96.9	37.7-212		%Rec	1	3/29/2022 5:11:10 PM	66414
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/29/2022 5:11:10 PM	66414
Toluene	ND	0.049		mg/Kg	1	3/29/2022 5:11:10 PM	66414
Ethylbenzene	ND	0.049		mg/Kg	1	3/29/2022 5:11:10 PM	66414
Xylenes, Total	ND	0.097		mg/Kg	1	3/29/2022 5:11:10 PM	66414
Surr: 4-Bromofluorobenzene	97.0	70-130		%Rec	1	3/29/2022 5:11:10 PM	66414

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2203D57

Date Reported: 4/5/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP23-S

Project: Robinson B Federal 1

Collection Date: 3/24/2022 8:50:00 AM

Lab ID: 2203D57-009

Matrix: SOIL

Received Date: 3/25/2022 7:23:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	4/1/2022 12:28:26 AM	66549
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: ED
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	3/30/2022 7:44:22 PM	66474
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/30/2022 7:44:22 PM	66474
Surr: DNOP	80.7	51.1-141		%Rec	1	3/30/2022 7:44:22 PM	66474
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/29/2022 5:34:34 PM	66414
Surr: BFB	96.6	37.7-212		%Rec	1	3/29/2022 5:34:34 PM	66414
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	3/29/2022 5:34:34 PM	66414
Toluene	ND	0.049		mg/Kg	1	3/29/2022 5:34:34 PM	66414
Ethylbenzene	ND	0.049		mg/Kg	1	3/29/2022 5:34:34 PM	66414
Xylenes, Total	ND	0.098		mg/Kg	1	3/29/2022 5:34:34 PM	66414
Surr: 4-Bromofluorobenzene	98.8	70-130		%Rec	1	3/29/2022 5:34:34 PM	66414

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2203D57

Date Reported: 4/5/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP23-2

Project: Robinson B Federal 1

Collection Date: 3/24/2022 9:00:00 AM

Lab ID: 2203D57-010

Matrix: SOIL

Received Date: 3/25/2022 7:23:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	4/1/2022 12:40:46 AM	66549
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: ED
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	3/30/2022 8:08:41 PM	66474
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/30/2022 8:08:41 PM	66474
Surr: DNOP	112	51.1-141		%Rec	1	3/30/2022 8:08:41 PM	66474
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	3/29/2022 5:57:58 PM	66414
Surr: BFB	99.3	37.7-212		%Rec	1	3/29/2022 5:57:58 PM	66414
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	3/29/2022 5:57:58 PM	66414
Toluene	ND	0.046		mg/Kg	1	3/29/2022 5:57:58 PM	66414
Ethylbenzene	ND	0.046		mg/Kg	1	3/29/2022 5:57:58 PM	66414
Xylenes, Total	ND	0.093		mg/Kg	1	3/29/2022 5:57:58 PM	66414
Surr: 4-Bromofluorobenzene	97.4	70-130		%Rec	1	3/29/2022 5:57:58 PM	66414

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2203D57

05-Apr-22

**Client:** GHD Midland  
**Project:** Robinson B Federal 1

Sample ID: <b>MB-66549</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>66549</b>	RunNo: <b>86884</b>								
Prep Date: <b>3/31/2022</b>	Analysis Date: <b>3/31/2022</b>	SeqNo: <b>3070434</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-66549</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>66549</b>	RunNo: <b>86884</b>								
Prep Date: <b>3/31/2022</b>	Analysis Date: <b>3/31/2022</b>	SeqNo: <b>3070435</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.7	90	110			

Sample ID: <b>LCS-66531</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>66531</b>	RunNo: <b>86885</b>								
Prep Date: <b>3/31/2022</b>	Analysis Date: <b>3/31/2022</b>	SeqNo: <b>3070544</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.7	90	110			

**Qualifiers:**

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2203D57

05-Apr-22

**Client:** GHD Midland  
**Project:** Robinson B Federal 1

Sample ID: <b>LCS-66474</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>66474</b>	RunNo: <b>86875</b>								
Prep Date: <b>3/29/2022</b>	Analysis Date: <b>3/30/2022</b>	SeqNo: <b>3069217</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	10	50.00	0	83.9	68.9	135			
Surr: DNOP	4.1		5.000		81.3	51.1	141			

Sample ID: <b>MB-66474</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>66474</b>	RunNo: <b>86875</b>								
Prep Date: <b>3/29/2022</b>	Analysis Date: <b>3/30/2022</b>	SeqNo: <b>3069218</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.7		10.00		97.2	51.1	141			

**Qualifiers:**

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2203D57

05-Apr-22

**Client:** GHD Midland  
**Project:** Robinson B Federal 1

Sample ID: <b>mb-66414</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>66414</b>	RunNo: <b>86824</b>								
Prep Date: <b>3/25/2022</b>	Analysis Date: <b>3/29/2022</b>	SeqNo: <b>3066190</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	990		1000		99.4	37.7	212			

Sample ID: <b>lcs-66414</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>66414</b>	RunNo: <b>86824</b>								
Prep Date: <b>3/25/2022</b>	Analysis Date: <b>3/29/2022</b>	SeqNo: <b>3066191</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	104	72.3	137			
Surr: BFB	2000		1000		204	37.7	212			

**Qualifiers:**

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2203D57

05-Apr-22

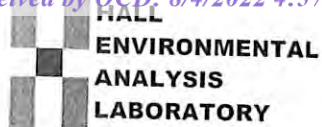
**Client:** GHD Midland  
**Project:** Robinson B Federal 1

Sample ID: <b>mb-66414</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>66414</b>	RunNo: <b>86824</b>								
Prep Date: <b>3/25/2022</b>	Analysis Date: <b>3/29/2022</b>	SeqNo: <b>3066238</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.99		1.000		98.8	70	130			

Sample ID: <b>LCS-66414</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>66414</b>	RunNo: <b>86824</b>								
Prep Date: <b>3/25/2022</b>	Analysis Date: <b>3/29/2022</b>	SeqNo: <b>3066239</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.81	0.025	1.000	0	81.2	80	120			
Toluene	0.84	0.050	1.000	0	84.1	80	120			
Ethylbenzene	0.86	0.050	1.000	0	86.1	80	120			
Xylenes, Total	2.6	0.10	3.000	0	86.3	80	120			
Surr: 4-Bromofluorobenzene	0.99		1.000		99.0	70	130			

**Qualifiers:**

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: clients.hallenvironmental.com

## Sample Log-In Check List

Client Name: GHD Midland

Work Order Number: 2203D57

RcptNo: 1

Received By: Cheyenne Cason

3/25/2022 7:23:00 AM

*CC*

Completed By: Desiree Dominguez

3/25/2022 8:19:23 AM

*DD*Reviewed By: *SC 3/25/22*

### Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

### Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace  $<1/4"$  for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐
- # of preserved bottles checked for pH:   
(<2 or >12 unless noted)   
Adjusted?   
Checked by: *JA 3/25/22*

### Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: \_\_\_\_\_

Date: \_\_\_\_\_

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.9	Good				
2	1.6	Good				
3	2.8	Good				







Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

May 12, 2022

Becky Haskell  
GHD Midland  
2135 S Loop 250 W  
Midland, TX 79703  
TEL: (432) 686-0086  
FAX:

RE: Robinson B Federal

OrderNo.: 2204D47

Dear Becky Haskell:

Hall Environmental Analysis Laboratory received 13 sample(s) on 4/30/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 2204D47

Date Reported: 5/12/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: SB-1 (5')

Project: Robinson B Federal

Collection Date: 4/27/2022 10:30:00 AM

Lab ID: 2204D47-001

Matrix: SOIL

Received Date: 4/30/2022 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	5/4/2022 12:12:08 AM	67234
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>ED</b>
Diesel Range Organics (DRO)	2300	200		mg/Kg	20	5/4/2022 11:06:59 AM	67221
Motor Oil Range Organics (MRO)	1300	1000		mg/Kg	20	5/4/2022 11:06:59 AM	67221
Surr: DNOP	0	51.1-141	S	%Rec	20	5/4/2022 11:06:59 AM	67221
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>BRM</b>
Gasoline Range Organics (GRO)	660	50		mg/Kg	10	5/3/2022 9:33:00 PM	67192
Surr: BFB	313	37.7-212	S	%Rec	10	5/3/2022 9:33:00 PM	67192
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>BRM</b>
Benzene	1.4	0.25		mg/Kg	10	5/3/2022 9:33:00 PM	67192
Toluene	ND	0.50		mg/Kg	10	5/3/2022 9:33:00 PM	67192
Ethylbenzene	16	0.50		mg/Kg	10	5/3/2022 9:33:00 PM	67192
Xylenes, Total	9.5	1.0		mg/Kg	10	5/3/2022 9:33:00 PM	67192
Surr: 4-Bromofluorobenzene	151	70-130	S	%Rec	10	5/3/2022 9:33:00 PM	67192

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2204D47

Date Reported: 5/12/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: SB-1 (10')

Project: Robinson B Federal

Collection Date: 4/27/2022 10:35:00 AM

Lab ID: 2204D47-002

Matrix: SOIL

Received Date: 4/30/2022 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>NAI</b>
Chloride	ND	61		mg/Kg	20	5/4/2022 12:49:10 AM	67235
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>ED</b>
Diesel Range Organics (DRO)	1000	94		mg/Kg	10	5/4/2022 11:36:25 AM	67221
Motor Oil Range Organics (MRO)	690	470		mg/Kg	10	5/4/2022 11:36:25 AM	67221
Surr: DNOP	0	51.1-141	S	%Rec	10	5/4/2022 11:36:25 AM	67221
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>BRM</b>
Gasoline Range Organics (GRO)	120	23		mg/Kg	5	5/3/2022 9:53:00 PM	67192
Surr: BFB	304	37.7-212	S	%Rec	5	5/3/2022 9:53:00 PM	67192
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>BRM</b>
Benzene	ND	0.12		mg/Kg	5	5/3/2022 9:53:00 PM	67192
Toluene	ND	0.23		mg/Kg	5	5/3/2022 9:53:00 PM	67192
Ethylbenzene	3.1	0.23		mg/Kg	5	5/3/2022 9:53:00 PM	67192
Xylenes, Total	3.5	0.47		mg/Kg	5	5/3/2022 9:53:00 PM	67192
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	5	5/3/2022 9:53:00 PM	67192

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2204D47

Date Reported: 5/12/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: SB-1 (15')

Project: Robinson B Federal

Collection Date: 4/27/2022 10:40:00 AM

Lab ID: 2204D47-003

Matrix: SOIL

Received Date: 4/30/2022 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>NAI</b>
Chloride	67	60		mg/Kg	20	5/4/2022 1:01:30 AM	67235
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>ED</b>
Diesel Range Organics (DRO)	6500	200		mg/Kg	20	5/3/2022 7:32:10 PM	67221
Motor Oil Range Organics (MRO)	2400	990		mg/Kg	20	5/3/2022 7:32:10 PM	67221
Surr: DNOP	0	51.1-141	S	%Rec	20	5/3/2022 7:32:10 PM	67221
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>BRM</b>
Gasoline Range Organics (GRO)	2200	98		mg/Kg	20	5/3/2022 11:41:00 AM	67192
Surr: BFB	343	37.7-212	S	%Rec	20	5/3/2022 11:41:00 AM	67192
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>BRM</b>
Benzene	19	0.49		mg/Kg	20	5/4/2022 11:01:00 PM	67192
Toluene	73	0.98		mg/Kg	20	5/4/2022 11:01:00 PM	67192
Ethylbenzene	79	0.98		mg/Kg	20	5/4/2022 11:01:00 PM	67192
Xylenes, Total	95	2.0		mg/Kg	20	5/4/2022 11:01:00 PM	67192
Surr: 4-Bromofluorobenzene	171	70-130	S	%Rec	20	5/4/2022 11:01:00 PM	67192

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2204D47

Date Reported: 5/12/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: SB-1 (20')

Project: Robinson B Federal

Collection Date: 4/27/2022 10:45:00 AM

Lab ID: 2204D47-004

Matrix: SOIL

Received Date: 4/30/2022 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>NAI</b>
Chloride	140	60		mg/Kg	20	5/4/2022 1:13:52 AM	67235
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>ED</b>
Diesel Range Organics (DRO)	1000	49		mg/Kg	5	5/10/2022 1:09:48 PM	67221
Motor Oil Range Organics (MRO)	410	240		mg/Kg	5	5/10/2022 1:09:48 PM	67221
Surr: DNOP	101	51.1-141		%Rec	5	5/10/2022 1:09:48 PM	67221
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>BRM</b>
Gasoline Range Organics (GRO)	110	25		mg/Kg	5	5/3/2022 12:01:00 PM	67192
Surr: BFB	256	37.7-212	S	%Rec	5	5/3/2022 12:01:00 PM	67192
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>BRM</b>
Benzene	ND	0.12		mg/Kg	5	5/4/2022 11:21:00 PM	67192
Toluene	0.53	0.25		mg/Kg	5	5/4/2022 11:21:00 PM	67192
Ethylbenzene	2.8	0.25		mg/Kg	5	5/4/2022 11:21:00 PM	67192
Xylenes, Total	3.6	0.50		mg/Kg	5	5/4/2022 11:21:00 PM	67192
Surr: 4-Bromofluorobenzene	112	70-130		%Rec	5	5/4/2022 11:21:00 PM	67192

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2204D47

Date Reported: 5/12/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: SB-1 (25')

Project: Robinson B Federal

Collection Date: 4/27/2022 10:55:00 AM

Lab ID: 2204D47-005

Matrix: SOIL

Received Date: 4/30/2022 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>NAI</b>
Chloride	230	60		mg/Kg	20	5/4/2022 1:26:12 AM	67235
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	5/3/2022 2:22:23 PM	67217
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/3/2022 2:22:23 PM	67217
Surr: DNOP	82.6	51.1-141		%Rec	1	5/3/2022 2:22:23 PM	67217
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	25		mg/Kg	5	5/3/2022 12:44:05 PM	67198
Surr: BFB	109	37.7-212		%Rec	5	5/3/2022 12:44:05 PM	67198
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.12		mg/Kg	5	5/3/2022 12:44:05 PM	67198
Toluene	ND	0.25		mg/Kg	5	5/3/2022 12:44:05 PM	67198
Ethylbenzene	ND	0.25		mg/Kg	5	5/3/2022 12:44:05 PM	67198
Xylenes, Total	ND	0.49		mg/Kg	5	5/3/2022 12:44:05 PM	67198
Surr: 4-Bromofluorobenzene	108	70-130		%Rec	5	5/3/2022 12:44:05 PM	67198

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2204D47

Date Reported: 5/12/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: SB-1 (30')

Project: Robinson B Federal

Collection Date: 4/27/2022 11:05:00 AM

Lab ID: 2204D47-006

Matrix: SOIL

Received Date: 4/30/2022 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>NAI</b>
Chloride	150	60		mg/Kg	20	5/4/2022 1:38:34 AM	67235
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/3/2022 2:46:13 PM	67217
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/3/2022 2:46:13 PM	67217
Surr: DNOP	85.2	51.1-141		%Rec	1	5/3/2022 2:46:13 PM	67217
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/3/2022 1:54:23 PM	67198
Surr: BFB	110	37.7-212		%Rec	1	5/3/2022 1:54:23 PM	67198
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	5/3/2022 1:54:23 PM	67198
Toluene	ND	0.048		mg/Kg	1	5/3/2022 1:54:23 PM	67198
Ethylbenzene	ND	0.048		mg/Kg	1	5/3/2022 1:54:23 PM	67198
Xylenes, Total	ND	0.096		mg/Kg	1	5/3/2022 1:54:23 PM	67198
Surr: 4-Bromofluorobenzene	108	70-130		%Rec	1	5/3/2022 1:54:23 PM	67198

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2204D47

Date Reported: 5/12/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: SB-1 (35')

Project: Robinson B Federal

Collection Date: 4/27/2022 11:10:00 AM

Lab ID: 2204D47-007

Matrix: SOIL

Received Date: 4/30/2022 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	5/4/2022 2:15:36 AM	67235
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	5/3/2022 3:10:13 PM	67217
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/3/2022 3:10:13 PM	67217
Surr: DNOP	88.9	51.1-141		%Rec	1	5/3/2022 3:10:13 PM	67217
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/3/2022 3:04:57 PM	67198
Surr: BFB	111	37.7-212		%Rec	1	5/3/2022 3:04:57 PM	67198
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	5/3/2022 3:04:57 PM	67198
Toluene	ND	0.048		mg/Kg	1	5/3/2022 3:04:57 PM	67198
Ethylbenzene	ND	0.048		mg/Kg	1	5/3/2022 3:04:57 PM	67198
Xylenes, Total	ND	0.096		mg/Kg	1	5/3/2022 3:04:57 PM	67198
Surr: 4-Bromofluorobenzene	110	70-130		%Rec	1	5/3/2022 3:04:57 PM	67198

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2204D47

Date Reported: 5/12/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: SB-2 (5')

Project: Robinson B Federal

Collection Date: 4/27/2022 11:30:00 AM

Lab ID: 2204D47-008

Matrix: SOIL

Received Date: 4/30/2022 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>NAI</b>
Chloride	130	60		mg/Kg	20	5/4/2022 2:27:58 AM	67235
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/3/2022 3:34:06 PM	67217
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/3/2022 3:34:06 PM	67217
Surr: DNOP	92.1	51.1-141		%Rec	1	5/3/2022 3:34:06 PM	67217
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/3/2022 3:28:25 PM	67198
Surr: BFB	112	37.7-212		%Rec	1	5/3/2022 3:28:25 PM	67198
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	5/3/2022 3:28:25 PM	67198
Toluene	ND	0.048		mg/Kg	1	5/3/2022 3:28:25 PM	67198
Ethylbenzene	ND	0.048		mg/Kg	1	5/3/2022 3:28:25 PM	67198
Xylenes, Total	ND	0.095		mg/Kg	1	5/3/2022 3:28:25 PM	67198
Surr: 4-Bromofluorobenzene	110	70-130		%Rec	1	5/3/2022 3:28:25 PM	67198

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2204D47

Date Reported: 5/12/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: SB-2 (10')

Project: Robinson B Federal

Collection Date: 4/27/2022 11:40:00 AM

Lab ID: 2204D47-009

Matrix: SOIL

Received Date: 4/30/2022 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>NAI</b>
Chloride	280	60		mg/Kg	20	5/4/2022 2:40:19 AM	67235
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	5/3/2022 3:57:57 PM	67217
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/3/2022 3:57:57 PM	67217
Surr: DNOP	88.5	51.1-141		%Rec	1	5/3/2022 3:57:57 PM	67217
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/3/2022 3:51:56 PM	67198
Surr: BFB	112	37.7-212		%Rec	1	5/3/2022 3:51:56 PM	67198
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	5/3/2022 3:51:56 PM	67198
Toluene	ND	0.049		mg/Kg	1	5/3/2022 3:51:56 PM	67198
Ethylbenzene	ND	0.049		mg/Kg	1	5/3/2022 3:51:56 PM	67198
Xylenes, Total	ND	0.099		mg/Kg	1	5/3/2022 3:51:56 PM	67198
Surr: 4-Bromofluorobenzene	108	70-130		%Rec	1	5/3/2022 3:51:56 PM	67198

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2204D47

Date Reported: 5/12/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: SB-2 (15')

Project: Robinson B Federal

Collection Date: 4/27/2022 11:45:00 AM

Lab ID: 2204D47-010

Matrix: SOIL

Received Date: 4/30/2022 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>NAI</b>
Chloride	170	60		mg/Kg	20	5/4/2022 2:52:40 AM	67235
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/3/2022 4:21:50 PM	67217
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/3/2022 4:21:50 PM	67217
Surr: DNOP	81.2	51.1-141		%Rec	1	5/3/2022 4:21:50 PM	67217
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/3/2022 4:15:30 PM	67198
Surr: BFB	112	37.7-212		%Rec	1	5/3/2022 4:15:30 PM	67198
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	5/3/2022 4:15:30 PM	67198
Toluene	ND	0.048		mg/Kg	1	5/3/2022 4:15:30 PM	67198
Ethylbenzene	ND	0.048		mg/Kg	1	5/3/2022 4:15:30 PM	67198
Xylenes, Total	ND	0.096		mg/Kg	1	5/3/2022 4:15:30 PM	67198
Surr: 4-Bromofluorobenzene	111	70-130		%Rec	1	5/3/2022 4:15:30 PM	67198

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2204D47

Date Reported: 5/12/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: SB-2 (20')

Project: Robinson B Federal

Collection Date: 4/27/2022 11:50:00 AM

Lab ID: 2204D47-011

Matrix: SOIL

Received Date: 4/30/2022 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: LRN
Chloride	2800	150		mg/Kg	50	5/4/2022 6:51:59 PM	67235
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: ED
Diesel Range Organics (DRO)	210	9.3		mg/Kg	1	5/4/2022 10:40:08 AM	67217
Motor Oil Range Organics (MRO)	200	47		mg/Kg	1	5/4/2022 10:40:08 AM	67217
Surr: DNOP	94.9	51.1-141		%Rec	1	5/4/2022 10:40:08 AM	67217
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	23		mg/Kg	5	5/3/2022 4:38:59 PM	67198
Surr: BFB	113	37.7-212		%Rec	5	5/3/2022 4:38:59 PM	67198
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.12		mg/Kg	5	5/3/2022 4:38:59 PM	67198
Toluene	ND	0.23		mg/Kg	5	5/3/2022 4:38:59 PM	67198
Ethylbenzene	ND	0.23		mg/Kg	5	5/3/2022 4:38:59 PM	67198
Xylenes, Total	ND	0.47		mg/Kg	5	5/3/2022 4:38:59 PM	67198
Surr: 4-Bromofluorobenzene	110	70-130		%Rec	5	5/3/2022 4:38:59 PM	67198

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2204D47

Date Reported: 5/12/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: SB-2 (25')

Project: Robinson B Federal

Collection Date: 4/27/2022 12:05:00 PM

Lab ID: 2204D47-012

Matrix: SOIL

Received Date: 4/30/2022 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>NAI</b>
Chloride	320	60		mg/Kg	20	5/4/2022 3:17:21 AM	67235
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	15	9.8		mg/Kg	1	5/3/2022 5:09:36 PM	67217
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/3/2022 5:09:36 PM	67217
Surr: DNOP	100	51.1-141		%Rec	1	5/3/2022 5:09:36 PM	67217
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/3/2022 6:12:54 PM	67198
Surr: BFB	98.8	37.7-212		%Rec	1	5/3/2022 6:12:54 PM	67198
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	5/3/2022 6:12:54 PM	67198
Toluene	ND	0.048		mg/Kg	1	5/3/2022 6:12:54 PM	67198
Ethylbenzene	ND	0.048		mg/Kg	1	5/3/2022 6:12:54 PM	67198
Xylenes, Total	ND	0.096		mg/Kg	1	5/3/2022 6:12:54 PM	67198
Surr: 4-Bromofluorobenzene	99.6	70-130		%Rec	1	5/3/2022 6:12:54 PM	67198

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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## Analytical Report

Lab Order 2204D47

Date Reported: 5/12/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: SB-2 (30')

Project: Robinson B Federal

Collection Date: 4/27/2022 12:10:00 PM

Lab ID: 2204D47-013

Matrix: SOIL

Received Date: 4/30/2022 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>NAI</b>
Chloride	ND	61		mg/Kg	20	5/4/2022 3:29:42 AM	67235
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/3/2022 5:33:29 PM	67217
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/3/2022 5:33:29 PM	67217
Surr: DNOP	99.0	51.1-141		%Rec	1	5/3/2022 5:33:29 PM	67217
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/3/2022 6:36:22 PM	67198
Surr: BFB	107	37.7-212		%Rec	1	5/3/2022 6:36:22 PM	67198
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	5/3/2022 6:36:22 PM	67198
Toluene	ND	0.048		mg/Kg	1	5/3/2022 6:36:22 PM	67198
Ethylbenzene	ND	0.048		mg/Kg	1	5/3/2022 6:36:22 PM	67198
Xylenes, Total	ND	0.096		mg/Kg	1	5/3/2022 6:36:22 PM	67198
Surr: 4-Bromofluorobenzene	107	70-130		%Rec	1	5/3/2022 6:36:22 PM	67198

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**WO#: **2204D47****12-May-22**

**Client:** GHD Midland  
**Project:** Robinson B Federal

Sample ID: <b>MB-67234</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>67234</b>	RunNo: <b>87695</b>								
Prep Date: <b>5/3/2022</b>	Analysis Date: <b>5/3/2022</b>	SeqNo: <b>3106818</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-67234</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>67234</b>	RunNo: <b>87695</b>								
Prep Date: <b>5/3/2022</b>	Analysis Date: <b>5/3/2022</b>	SeqNo: <b>3106819</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.8	90	110			

Sample ID: <b>MB-67235</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>67235</b>	RunNo: <b>87695</b>								
Prep Date: <b>5/3/2022</b>	Analysis Date: <b>5/4/2022</b>	SeqNo: <b>3106851</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-67235</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>67235</b>	RunNo: <b>87695</b>								
Prep Date: <b>5/3/2022</b>	Analysis Date: <b>5/4/2022</b>	SeqNo: <b>3106852</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.4	90	110			

**Qualifiers:**

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2204D47

12-May-22

**Client:** GHD Midland  
**Project:** Robinson B Federal

Sample ID: <b>MB-67217</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>67217</b>	RunNo: <b>87671</b>								
Prep Date: <b>5/3/2022</b>	Analysis Date: <b>5/3/2022</b>	SeqNo: <b>3104862</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	5.3		10.00		52.7	51.1	141			

Sample ID: <b>LCS-67217</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>67217</b>	RunNo: <b>87694</b>								
Prep Date: <b>5/3/2022</b>	Analysis Date: <b>5/3/2022</b>	SeqNo: <b>3105649</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	97.8	68.9	135			
Surr: DNOP	3.8		5.000		75.1	51.1	141			

Sample ID: <b>LCS-67221</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>67221</b>	RunNo: <b>87713</b>								
Prep Date: <b>5/3/2022</b>	Analysis Date: <b>5/3/2022</b>	SeqNo: <b>3105915</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	87.3	68.9	135			
Surr: DNOP	4.6		5.000		92.5	51.1	141			

Sample ID: <b>MB-67221</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>67221</b>	RunNo: <b>87713</b>								
Prep Date: <b>5/3/2022</b>	Analysis Date: <b>5/3/2022</b>	SeqNo: <b>3105920</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.7		10.00		97.3	51.1	141			

Sample ID: <b>MB-67314</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>67314</b>	RunNo: <b>87864</b>								
Prep Date: <b>5/6/2022</b>	Analysis Date: <b>5/10/2022</b>	SeqNo: <b>3116791</b> Units: <b>%Rec</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		102	51.1	141			

**Qualifiers:**

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT  
Hall Environmental Analysis Laboratory, Inc.

WO#: 2204D47  
12-May-22

Client: GHD Midland  
Project: Robinson B Federal

Sample ID: LCS-67314	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 67314	RunNo: 87864								
Prep Date: 5/6/2022	Analysis Date: 5/10/2022	SeqNo: 3116792		Units: %Rec						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.9		5.000		98.0	51.1	141			

Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix interference

B Analyte detected in the associated Method Blank  
E Estimated value  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit



**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2204D47

12-May-22

**Client:** GHD Midland  
**Project:** Robinson B Federal

Sample ID: <b>mb-67198</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>67198</b>	RunNo: <b>87675</b>								
Prep Date: <b>5/2/2022</b>	Analysis Date: <b>5/3/2022</b>	SeqNo: <b>3105102</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		106	37.7	212			

Sample ID: <b>lcs-67198</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>67198</b>	RunNo: <b>87675</b>								
Prep Date: <b>5/2/2022</b>	Analysis Date: <b>5/3/2022</b>	SeqNo: <b>3105103</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	112	72.3	137			
Surr: BFB	2300		1000		229	37.7	212			S

Sample ID: <b>2204d47-005ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>SB-1 (25')</b>	Batch ID: <b>67198</b>	RunNo: <b>87675</b>								
Prep Date: <b>5/2/2022</b>	Analysis Date: <b>5/3/2022</b>	SeqNo: <b>3105105</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	25	24.98	0	104	70	130			
Surr: BFB	6600		4995		133	37.7	212			

Sample ID: <b>2204d47-005amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>SB-1 (25')</b>	Batch ID: <b>67198</b>	RunNo: <b>87675</b>								
Prep Date: <b>5/2/2022</b>	Analysis Date: <b>5/3/2022</b>	SeqNo: <b>3105106</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	25	25.00	0	103	70	130	0.480	20	
Surr: BFB	6500		5000		130	37.7	212	0	0	

Sample ID: <b>lcs-67192</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>67192</b>	RunNo: <b>87706</b>								
Prep Date: <b>5/2/2022</b>	Analysis Date: <b>5/3/2022</b>	SeqNo: <b>3105549</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	113	72.3	137			
Surr: BFB	2200		1000		224	37.7	212			S

Sample ID: <b>mb-67192</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>67192</b>	RunNo: <b>87706</b>								
Prep Date: <b>5/2/2022</b>	Analysis Date: <b>5/3/2022</b>	SeqNo: <b>3105550</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

**Qualifiers:**

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

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QC SUMMARY REPORT  
Hall Environmental Analysis Laboratory, Inc.

WO#: 2204D47  
12-May-22

Client: GHD Midland  
Project: Robinson B Federal

Sample ID: mb-67192	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 67192	RunNo: 87706								
Prep Date: 5/2/2022	Analysis Date: 5/3/2022	SeqNo: 3105550		Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		99.8	37.7	212			

- Qualifiers:
- \* Value exceeds Maximum Contaminant Level.
  - D Sample Diluted Due to Matrix
  - H Holding times for preparation or analysis exceeded
  - ND Not Detected at the Reporting Limit
  - PQL Practical Quantitative Limit
  - S % Recovery outside of range due to dilution or matrix interference

- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2204D47

12-May-22

**Client:** GHD Midland  
**Project:** Robinson B Federal

Sample ID: <b>mb-67198</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>67198</b>	RunNo: <b>87675</b>								
Prep Date: <b>5/2/2022</b>	Analysis Date: <b>5/3/2022</b>	SeqNo: <b>3105148</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		107	70	130			

Sample ID: <b>LCS-67198</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>67198</b>	RunNo: <b>87675</b>								
Prep Date: <b>5/2/2022</b>	Analysis Date: <b>5/3/2022</b>	SeqNo: <b>3105149</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	93.4	80	120			
Toluene	0.98	0.050	1.000	0	97.5	80	120			
Ethylbenzene	0.98	0.050	1.000	0	98.4	80	120			
Xylenes, Total	2.9	0.10	3.000	0	98.1	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		108	70	130			

Sample ID: <b>2204d47-006ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>SB-1 (30')</b>	Batch ID: <b>67198</b>	RunNo: <b>87675</b>								
Prep Date: <b>5/2/2022</b>	Analysis Date: <b>5/3/2022</b>	SeqNo: <b>3105152</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	0.9843	0	99.5	68.8	120			
Toluene	1.0	0.049	0.9843	0	105	73.6	124			
Ethylbenzene	1.1	0.049	0.9843	0	108	72.7	129			
Xylenes, Total	3.2	0.098	2.953	0	108	75.7	126			
Surr: 4-Bromofluorobenzene	1.1		0.9843		108	70	130			

Sample ID: <b>2204d47-006amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>SB-1 (30')</b>	Batch ID: <b>67198</b>	RunNo: <b>87675</b>								
Prep Date: <b>5/2/2022</b>	Analysis Date: <b>5/3/2022</b>	SeqNo: <b>3105153</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	0.9823	0	98.2	68.8	120	1.49	20	
Toluene	1.0	0.049	0.9823	0	104	73.6	124	1.02	20	
Ethylbenzene	1.1	0.049	0.9823	0	107	72.7	129	1.05	20	
Xylenes, Total	3.2	0.098	2.947	0	107	75.7	126	1.37	20	
Surr: 4-Bromofluorobenzene	1.1		0.9823		108	70	130	0	0	

**Qualifiers:**

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix	E Estimated value
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL Practical Quantitative Limit	RL Reporting Limit
S % Recovery outside of range due to dilution or matrix interference	

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2204D47

12-May-22

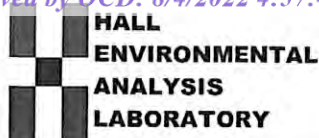
**Client:** GHD Midland  
**Project:** Robinson B Federal

Sample ID: <b>ics-67192</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>67192</b>		RunNo: <b>87721</b>							
Prep Date: <b>5/2/2022</b>	Analysis Date: <b>5/4/2022</b>		SeqNo: <b>3107578</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	1.000	0	88.3	80	120			
Toluene	0.90	0.050	1.000	0	89.5	80	120			
Ethylbenzene	0.90	0.050	1.000	0	89.8	80	120			
Xylenes, Total	2.7	0.10	3.000	0	89.9	80	120			
Surr: 4-Bromofluorobenzene	0.84		1.000		83.6	70	130			

Sample ID: <b>mb-67192</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>67192</b>		RunNo: <b>87721</b>							
Prep Date: <b>5/2/2022</b>	Analysis Date: <b>5/4/2022</b>		SeqNo: <b>3107579</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.80		1.000		80.1	70	130			

**Qualifiers:**

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name: GHD Midland

Work Order Number: 2204D47

RcptNo: 1

Received By: Juan Rojas

4/30/2022 8:30:00 AM

*Juan Rojas*

Completed By: Juan Rojas

4/30/2022 9:41:48 AM

*Juan Rojas*

Reviewed By: KPG 5-2-22

### Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

### Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace  $<1/4"$  for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved  
bottles checked  
for pH:

( $<2$  or  $>12$  unless noted)

Adjusted? \_\_\_\_\_

Checked by: *my 4/30/22*

### Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: \_\_\_\_\_

Date: \_\_\_\_\_

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

16. Additional remarks: *Sample 002, Have water in them - KPG 5-2-22*

### 17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.1	Good				



05/18/

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.





## **Attachment C**

### **Soil Boring Logs**



# STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

Page 1 of 1

PROJECT NAME: Robinson B Federal #1

HOLE DESIGNATION: SB-1

PROJECT NUMBER: 12574110

DATE COMPLETED: 27 April 2022

CLIENT: EOG Resources

DRILLING METHOD: Air Rotary/Split Spoons and Cuttings

LOCATION: Eddy County, New Mexico

FIELD PERSONNEL: L. Mullins

DRILLING CONTRACTOR: HCI Drilling

DRILLER: K. Cooper

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH BGS	Borehole	SAMPLE				
				NUMBER	INTERVAL	REC (%)	CHLORIDE (mg/kg)	TOTAL TPH (mg/kg)
2	SP-SAND, fine to medium grained sand, light brown to brown, dry							
4	- black, very moist, odor at 3.00ft BGS			5'			<60	4260
6	- with clay, light brown at 5.00ft BGS							
8				10'			<61	1810
10								
12								
14	CL-SANDY CLAY, brown to dark brown, moist, odor	13.00		15'			67	11100
16								
18				20'			140	3810
20								
22								
24				25'			230	<49
26								
28	SP-SAND, fine to medium grained sand, light brown to red, dry	28.00		30'			150	<50
30								
32								
34				35'			<60	<47
36	END OF BOREHOLE @ 35.00ft BGS	35.00						
38								
40								
42								
44								
46								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS





# STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

Page 1 of 1

PROJECT NAME: Robinson B Federal #1

HOLE DESIGNATION: SB-2

PROJECT NUMBER: 12574110

DATE COMPLETED: 27 April 2022

CLIENT: EOG Resources

DRILLING METHOD: Air Rotary/Split Spoons and Cuttings

LOCATION: Eddy County, New Mexico

FIELD PERSONNEL: L. Mullins

DRILLING CONTRACTOR: HCI Drilling

DRILLER: K. Cooper

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH BGS	Borehole	SAMPLE				
				NUMBER	INTERVAL	REC (%)	CHLORIDE (mg/kg)	TOTAL TPH (mg/kg)
2	SP-SAND, light brown to brown, dry			5		100	130	<48
4								
6								
8								
10	- with clay, reddish light brown at 9.00ft BGS			10'		100	280	<47
12								
14	- light brown to brown at 13.00ft BGS			15'		100	170	<50
16	CL-SANDY CLAY, brown to red, dry	15.00	Cement					
18				20'		100	3000	410
20								
22								
24				25'		100	1700	15
26								
28	SP-SAND, fine to medium grained sand, light brown to red, dry	28.00		30'		100	<61	<50
30	END OF BOREHOLE @ 30.00ft BGS	30.00						
32								
34								
36								
38								
40								
42								
44								
46								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



**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 131737

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 131737
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Remediation Plan Approved.	9/20/2022