

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	nAPP2112353281
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 # (assigned by OCD)
Contact mailing address 104 S. 4th Street, Artesia, NM 88210	

Location of Release Source

Latitude 32.86529 Longitude -103.92736
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Jackson B #33	Site Type Oil Well
Date Release Discovered 04/19/2021	API# (if applicable) 30-015-23807

Unit Letter	Section	Township	Range	County
F	1	17S	30E	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 Unknown historical release, no known volume or date. During P&A activities, stained soil was discovered on the well pad.

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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 & Environmental Sr</u>
Signature: <u></u>	Date: <u>05/03/2021</u>
email: <u>Chase_Settle@eogresources.com</u>	Telephone: <u>575-748-1471</u>
<u>OCD Only</u> Received by: _____ Date: _____	

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Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	>100 (ft bgs)
Did this release impact groundwater or surface water?	<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 type="checkbox"/> Yes <input checked="" 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 type="checkbox"/> Yes <input checked="" 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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" 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.

State of New Mexico
Oil Conservation Division

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Printed Name: Chase Settle Title: Rep Safety & Environmental Sr
Signature:  Date: 08/31/2021
email: Chase_Settle@eogresources.com Telephone: 575-748-1471

OCD Only

Received by: _____ Date: _____

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Remediation Plan


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

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

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

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

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

Printed Name: Chase Settle Title: Rep Safety & Environmental Sr
Signature:  Date: 08/31/2021
email: Chase_Settle@eogresources.com Telephone: 575-748-1471

OCD Only

Received by: _____ Date: _____

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

Signature: _____ Date: _____

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

Our ref: 11228405

August 27, 2021

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

Re: **Site Characterization and Remediation Work Plan**
Jackson B #33 Release Site
EOG Resources Inc.
Incident ID: nAPP2112353281
F-01-17S-30E, Eddy County, New Mexico

To Whom It May Concern:

1. Introduction

GHD Services, Inc. (GHD), on behalf of EOG Resources (EOG), submits this Site Characterization and 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 Jackson B #33 Release Site (Site). The Site is located in Unit Letter F Section 01 of Township 17 South and Range 30 East in Eddy County, New Mexico. The GPS coordinates for the release site are 32.86529 N latitude and 103.92736 W longitude. The release occurred on land managed by the Bureau of Land Management (BLM). Figure 1 depicts the Site location. The EOG production facility and other site details are depicted on Figure 2.

2. Background Information

A C-141 initial report for this release was submitted to the NMOCD on May 3, 2021. 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 oil well appeared to be discolored and after discussions between field personnel and environmental staff – EOG made the decision to go ahead and file a C-141 for this suspect release location.

The Initial Form C-141, Site Assessment/Characterization and Remediation Plan portions of Form C-141 for Incident Number nAPP2112353281 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). The release falls under the jurisdiction of the NMOCD District 2 in Artesia, New Mexico.

On May 18, 2021, Talon LPE (Talon) installed a temporary well, Jackson B #59, at the following GPS Coordinates, 32.85697 N latitude and 103.92703 W longitude to approximately 125 feet below ground surface (bgs.) which is located approximately 0.5 miles from the Site. The Jackson B #59 Temp Well was left open for 72 hours and a water level meter was utilized to determine the presence or absence of groundwater. No groundwater was detected, and the temporary well was plugged and abandoned. Depth to groundwater for this Site is greater than one hundred (100) feet bgs. No other receptors (karst potential areas, water wells, playas, wetlands, waterways, lakebeds or ordinance boundaries) were located within each specific boundaries or distance from the Site. According to the Site characterization evaluation and 19.15.29.12.C(4)(a)(i) the Site is located within an area with depth to groundwater greater than one hundred (100) feet and meets the closure criteria for depth to groundwater greater than one hundred (100) feet in Table 1 in NMAC 19.15.29.12. The Site characterization documentation (Talon's Temporary Well Log, Karst Potential, FEMA, Points of Diversion 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.)
No Receptors Found	>100'

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

Constituent	Limits
Chloride	20,000 mg/kg
TPH (GRO+DRO+MRO)	2,500 mg/kg
TPH (GRO+DRO)	1,000 mg/kg
Benzene	10mg/kg
BTEX	50 mg/kg

4. Initial Soil Delineation Assessment Summary and Findings

On May 3, 2021, GHD Services Inc. (GHD), on behalf of EOG, installed four (4) hand borings within the suspected impacted area. Soil samples were collected at two (2) and four (4) feet bgs. All soil samples were analyzed for BTEX by EPA Method 8021B, TPH by Method 8015B Modified, and chloride by EPA Method 300 by Hall Environmental Analysis Laboratory (HEAL) in Albuquerque, New Mexico. Analytical results indicated HA1, HA2, and HA4 exhibited chloride concentrations above 600 mg/kg in the first four (4) feet and that additional delineation was needed at the Site. None of the samples exhibited benzene, BTEX or TPH above Table 1 closure criteria.

On May 24, 2021, GHD Services Inc. (GHD) and EOG's contractor BDS Enterprises, LLC (BDS), on behalf of EOG, installed eight (8) test pits (TP1 through TP8) within the area around the former oil well. The test pit locations were excavated to depths ranging from surface to approximately twenty (20) feet bgs. Soil samples

were collected from varying depths of the test pits and field screened for chloride and hydrocarbons. Select 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. Analytical results indicated test pits TP1, TP3, TP4, TP5, TP6 and TP-7 exhibited TPH and/or chlorides above 100 mg/kg and 600 mg/kg, respectively, in the first four (4) feet and additional delineation was needed at the site. None of the samples exhibited benzene or BTEX above Table 1 closure criteria.

GHD and Culberson Construction Energy Services (CCI) returned to the site on June 28, 2021, to further delineate the site. An additional seven test pits were installed, TP9 through TP15, and additional samples were collected from TP4, TP6, and TP7. The test pit locations were excavated to depths ranging from surface to approximately twelve (12) feet bgs. Soil samples were collected from varying depths of the test pits and field screened for chloride and hydrocarbons. Select 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. Analytical results indicated chloride concentration above 600 mg/kg in the first four (4) feet in test pits TP9 and TP11. None of the samples exhibited benzene, BTEX or TPH above Table 1 closure criteria.

On July 21, 2021, GHD and Talon returned to the site to install a soil boring near TP5 to fully delineate the release to less than 100 mg/kg for TPH concentrations and 600 mg/kg for chloride concentrations. The soil boring was installed to a depth of one hundred (100) feet bgs. Samples were collected every five (5) feet with the exception of at fifty (50) feet because the boring collapsed and had to be cleared out. 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. TPH concentrations were delineated to below 100 mg/kg at eighty-five (85) feet bgs and chloride concentrations were delineated to below 600 mg/kg at ninety (90) feet bgs. The TP-5 Soil Boring Log is provided as Attachment B.

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 C.

5. nAPP112353281 Proposed Work Plan

None of the samples collected exhibited benzene, BTEX, TPH or chloride concentrations above the closure criteria for a depth to groundwater over one hundred (100) feet bgs. The oil well has been plugged and the area is no longer being utilized by operations. There are TPH and chloride concentrations over 100 mg/kg and 600 mg/kg, respectively, within the first four (4) feet in the area shown on Figure 2. In order to comply with NMAC 19.15.29.13(D)(1), areas HA1 through HA4, TP1, TP3, TP5, TP7, TP9, and TP11 will be excavated to four (4) feet bgs. Areas TP4 and TP6 will be excavated to a depth where chlorides are less than 600 mg/kg or four (4) feet bgs.

Composite confirmation samples will be collected from the sidewalls of the excavation from areas representing area no larger than two hundred (200) square feet. Discrete soil samples will be collected from the sidewalls if any staining is observed. No confirmation samples will be collected from the bottom of the excavation as the site is already vertically delineated. 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 2,000 cubic yards. 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. A closure report will be prepared to document remediation activities and submitted to the NMOCD when remediation activities have been completed.

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

Sincerely,

GHD



Becky Haskell
Senior Project Manager



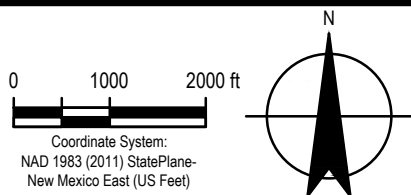
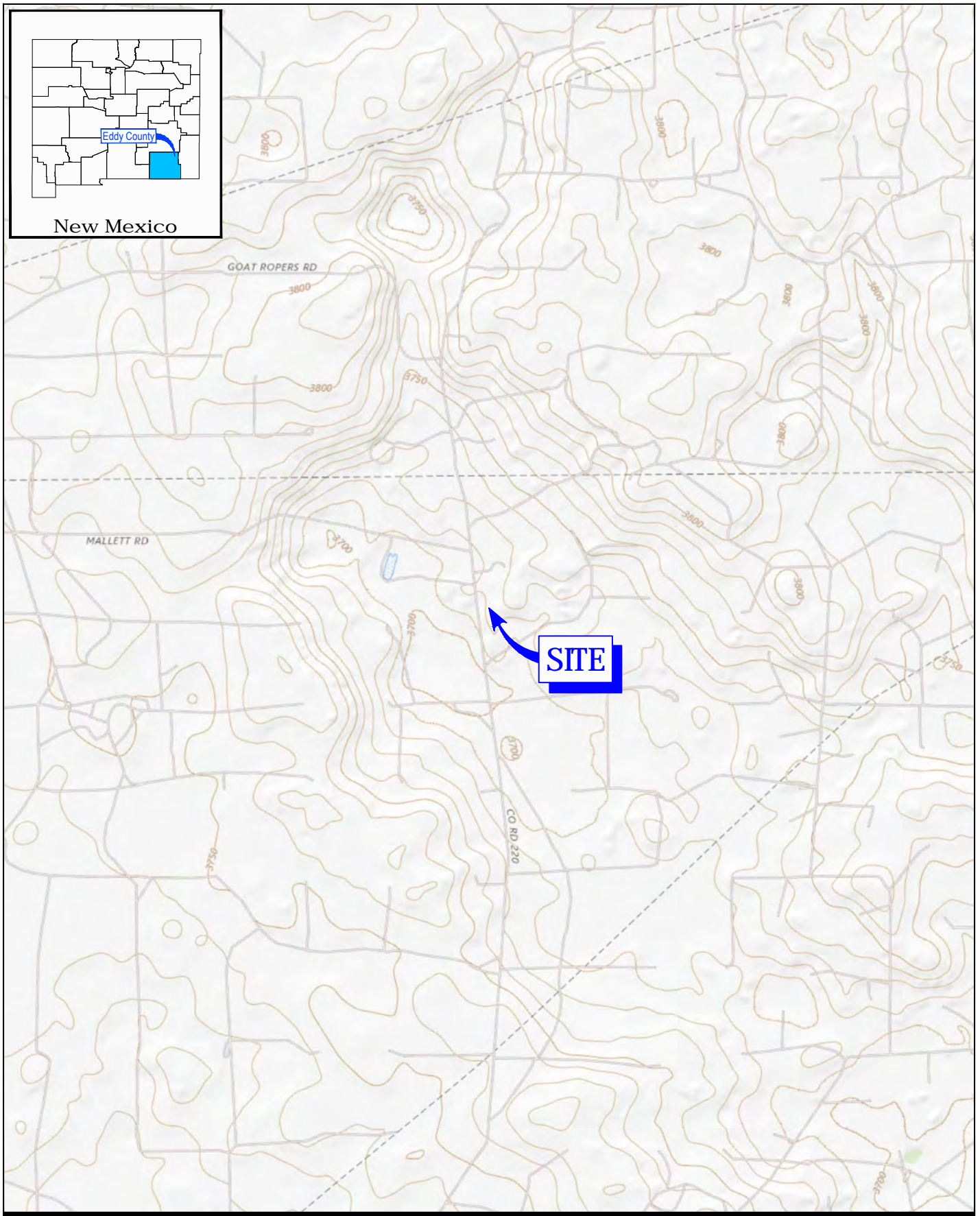
Thomas C. Larson, M.S.
Midland Operation Manager

BH/tl/1

Encl. Figure 1 – Site Location Map
 Figure 2 – Site Assessment Soil Analytical Results Map
 Table 1 – Summary of Soil Analytical Data
 Attachment A – Site Characterization Documentation
 Attachment B – TP-5 Soil Boring Log
 Attachment C – Laboratory Analytical Reports and Chain-of-Custody Documentation

cc: Chase Settle

Figures

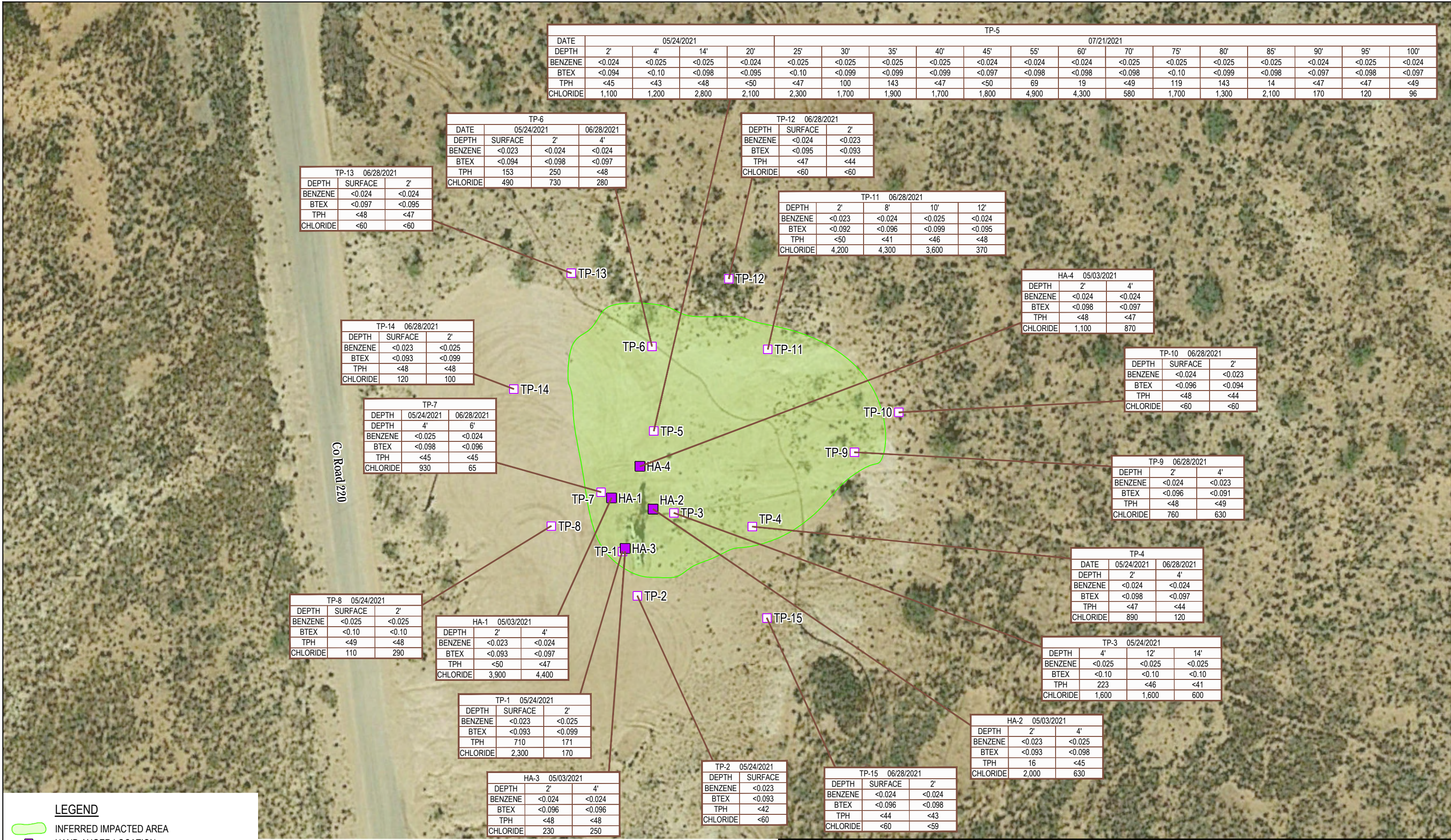


EOG RESOURCES
EDDY COUNTY, NEW MEXICO
JACKSON B #33

Project No. 11228405
Date August 2021

SITE LOCATION MAP

FIGURE 1



Tables

Table 1
Summary of Soil Analytical Data
Jackson B #33
EOG Resources
Eddy County, New Mexico

Sample ID	Sample Date	Depth (feet 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)	(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	1,000 mg/Kg		---	2,500 mg/Kg	20,000 mg/Kg			
Initial Assessment Samples												
HA1-2	5/3/21	2'	<0.023	<0.047	<0.047	<0.093	<0.093	<4.7	<10	<50	<50	3,900
HA1-4	5/3/21	4'	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	<9.3	<47	<47	4,400
HA2-2	5/3/21	2'	<0.023	<0.046	<0.046	<0.093	<0.093	<4.6	16	<49	16	2,000
HA2-4	5/3/21	4'	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	<9.0	<45	<45	630
HA3-2	5/3/21	2'	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<9.5	<48	<48	230
HA3-4	5/3/21	4'	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<9.6	<48	<48	250
HA4-2	5/3/21	2'	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	<9.6	<48	<48	1,100
HA4-4	5/3/21	4'	<0.024	<0.048	<0.048	<0.097	<0.097	<4.8	<9.5	<47	<47	870
Test Pit Samples												
TP1-S	5/24/21	Surface	<0.023	<0.047	<0.047	<0.093	<0.093	<4.7	210	500	710	2,300
TP1-2	5/24/21	2'	<0.025	<0.050	<0.050	<0.099	<0.099	<5.0	51	120	171	170
TP2-S	5/24/21	Surface	<0.023	<0.047	<0.047	<0.093	<0.093	<4.7	<8.5	<42	<42	<60
TP3-4	5/24/21	4'	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	93	130	223	1,600
TP3-12	5/24/21	12'	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<9.3	<46	<46	1,600
TP3-14	5/24/21	14'	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<8.3	<41	<41	600
TP4-2	5/24/21	2'	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	<9.5	<47	<47	890
TP4-4	6/28/21	4'	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	<8.9	<44	<44	120
TP5-2	5/24/21	2'	<0.024	<0.047	<0.047	<0.094	<0.094	<4.7	<9.0	<45	<45	1,100
TP5-4	5/24/21	4'	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<8.6	<43	<43	1,200
TP5-14	5/24/21	14'	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	<9.5	<48	<48	2,800
TP5-20	5/24/21	20'	<0.024	<0.047	<0.047	<0.095	<0.095	<4.7	<9.9	<50	<50	2,100
TP5-25	7/21/21	25'	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<9.4	<47	<47	2,300
TP5-30	7/21/21	30'	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	27	73	100	1,700
TP5-35	7/21/21	35'	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	61	82	143	1,900
TP5-40	7/21/21	40'	<0.025	<0.050	<0.050	<0.099	<0.099	<5.0	<9.3	<47	<47	1,700
TP5-45	7/21/21	45'	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	<9.9	<50	<50	1,800
TP5-55	7/21/21	55'	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	21	48	69	4,900
TP5-60	7/21/21	60'	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	19	<50	19	4,300
TP5-70	7/21/21	70'	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	<9.8	<49	<49	580
TP5-75	7/21/21	75'	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	21	98	119	1,700

Table 1
Summary of Soil Analytical Data
Jackson B #33
EOG Resources
Eddy County, New Mexico

Sample ID	Sample Date	Depth (feet 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	1,000 mg/Kg		---	2,500 mg/Kg	20,000 mg/Kg
TP5-80	7/21/21	80'	<0.025	<0.050	<0.050	<0.099	<0.099	<5.0	33	110	143	1,300
TP5-85	7/21/21	85'	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	14	<48	14	2,100
TP5-90	7/21/21	90'	<0.024	<0.048	<0.048	<0.097	<0.097	<4.8	<9.3	<47	<47	170
TP5-95	7/21/21	95'	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	<9.4	<47	<47	120
TP5-100	7/21/21	100'	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	<9.9	<49	<49	96
TP6-S	5/24/21	Surface	<0.023	<0.047	<0.047	<0.094	<0.094	<4.7	13	140	153	490
TP6-2	5/24/21	2'	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	30	220	250	730
TP6-4	6/28/21	4'	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	<9.6	<48	<48	280
TP7-4	5/24/21	4'	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	<9.0	<45	<45	930
TP7-6	6/28/21	6'	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<8.9	<45	<45	65
TP8-S	5/24/21	Surface	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<9.9	<49	<49	110
TP8-2	5/24/21	2'	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<9.6	<48	<48	290
TP9-2	6/28/21	2'	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<9.6	<48	<48	760
TP9-4	6/28/21	4'	<0.023	<0.046	<0.046	<0.091	<0.091	<4.6	<9.7	<49	<49	630
TP10-S	6/28/21	Surface	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<9.7	<48	<48	<60
TP10-2	6/28/21	2'	<0.023	<0.047	<0.047	<0.094	<0.094	<4.7	<8.9	<44	<44	<60
TP11-2	6/28/21	2'	<0.023	<0.046	<0.046	<0.092	<0.092	<4.6	<9.9	<50	<50	4,200
TP11-8	6/28/21	8'	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<8.2	<41	<41	4,300
TP11-10	6/28/21	10'	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	<9.2	<46	<46	3,600
TP11-12	6/28/21	12'	<0.024	<0.048	<0.048	<0.095	<0.095	<4.8	<9.7	<48	<48	370
TP12-S	6/28/21	Surface	<0.024	<0.048	<0.048	<0.095	<0.095	<4.8	<9.5	<47	<47	<60
TP12-2	6/28/21	2'	<0.023	<0.047	<0.047	<0.093	<0.093	<4.7	<8.7	<44	<44	<60
TP13-S	6/28/21	Surface	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	<9.6	<48	<48	<60
TP13-2	6/28/21	2'	<0.024	<0.048	<0.048	<0.095	<0.095	<4.8	<9.4	<47	<47	<60
TP14-S	6/28/21	Surface	<0.023	<0.046	<0.046	<0.093	<0.093	<4.6	<9.6	<48	<48	120
TP14-2	6/28/21	2'	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	<9.7	<48	<48	100
TP15-S	6/28/21	Surface	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<8.8	<44	<44	<60
TP15-2	6/28/21	2'	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	<8.6	<43	<43	<59

Notes:

Table 1
Summary of Soil Analytical Data
Jackson B #33
EOG Resources
Eddy County, New Mexico

Sample ID	Sample Date	Depth (feet 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									(mg/Kg)
			10 mg/Kg	---	---	---	50 mg/Kg	1,000 mg/Kg	---	2,500 mg/Kg	20,000 mg/Kg	

1. Values reported in mg/kg
2. < = Value Less than Reporting Limit (RL)
3. Bold Indicates Analyte Detected
4. BTEX analyses by EPA Method SW 8021B.
5. TPH analyses by EPA Method SW 8015 Mod.
6. GRO/DRO/MRO = Gasoline/Diesel/Motor Oil
7. Yellow shaded cells indicate analytical samples that exceed the NMOC 19.15.29.12 Table 1 Closure Criteria for the site.
8. J - the target analytes was positively identified below the quantitation limit and above the detection limit.

B-BH-2 Sample Point Excavated

Attachment A

Site Characterization Documentation

EOG Resources

Eddy County, NM

Groundwater Reference Map

Legend


-  .10 Miles
-  .30 Miles
-  .50 Miles
-  Jackson B
-  Temporary Well




EOG Jackson B#59

Eddy County, New Mexico

Legend

 32.85697,-103.92703

32.85697,-103.92703

 Jackson B#59 Temp Well

Square Lake Rd

220

Google Earth

1000 ft





BORING LOG

Project No.: 700438.238.01

Weather: Clear, Temp.: 75°F

Driller: D. Londagin

Site Name: Jackson B #59

Logger: D. Adkins

Rig Type: Reich Drill

Location: Eddy County, New Mexico

Field Instrument: NA

Bit Size: 5-7/8"

Date: 5/18/2021

Latitude: 32.85697 N

Drilling Method: Air Rotary

Boring Number: B-1

Longitude: -103.92703 W

Sample Retrieval Method: Drill Cuttings

Time	Lab Sample Collected	Sample Interval (ft)	Sample Recovery (ft)	USCS	Composition (%)	Sample Material/Comments Include composition, color, grain size, moisture, hardness, plasticity, density	Hydrocarbon Odor	PID (ppm)
	<input type="checkbox"/>	0-30'				Red/brown fine Sand (SP)	<u>None</u> Slight Mod. Strong	
	<input type="checkbox"/>	30-40'				Red/brown fine Sand (SP) with varying amounts of silt and caliche	<u>None</u> Slight Mod. Strong	
	<input type="checkbox"/>	40-80'				Dry, dark red/brown sandy Silts (SM)	<u>None</u> Slight Mod. Strong	
	<input type="checkbox"/>	80-125'				Red/brown fine Sand (SP)	<u>None</u> Slight Mod. Strong	
	<input type="checkbox"/>					__ TD 125' __	None Slight Mod. Strong	
	<input type="checkbox"/>						None Slight Mod. Strong	
	<input type="checkbox"/>						None Slight Mod. Strong	
	<input type="checkbox"/>						None Slight Mod. Strong	
	<input type="checkbox"/>						None Slight Mod. Strong	
	<input type="checkbox"/>						None Slight Mod. Strong	
	<input type="checkbox"/>						None Slight Mod. Strong	
	<input type="checkbox"/>						None Slight Mod. Strong	

Surface Elevation: _____

Notes: Groundwater Not Encountered @ 125' BGS – 72 hr.

Logger Initials: DJA

Time	Lab Sample Collected	Sample Interval (ft)	Sample Recovery (ft)	USCS	Composition (%)	Sample Material/Comments Include composition, color, grain size, moisture, hardness, plasticity, density	Hydrocarbon Odor	PID (ppm)
	<input type="checkbox"/>						None Slight Mod. Strong	
	<input type="checkbox"/>						None Slight Mod. Strong	
	<input type="checkbox"/>						None Slight Mod. Strong	
	<input type="checkbox"/>						None Slight Mod. Strong	
	<input type="checkbox"/>						None Slight Mod. Strong	
	<input type="checkbox"/>						None Slight Mod. Strong	
	<input type="checkbox"/>						None Slight Mod. Strong	
	<input type="checkbox"/>						None Slight Mod. Strong	
	<input type="checkbox"/>						None Slight Mod. Strong	
	<input type="checkbox"/>						None Slight Mod. Strong	
	<input type="checkbox"/>						None Slight Mod. Strong	
	<input type="checkbox"/>						None Slight Mod. Strong	
	<input type="checkbox"/>						None Slight Mod. Strong	
	<input type="checkbox"/>						None Slight Mod. Strong	
	<input type="checkbox"/>						None Slight Mod. Strong	




Notes:

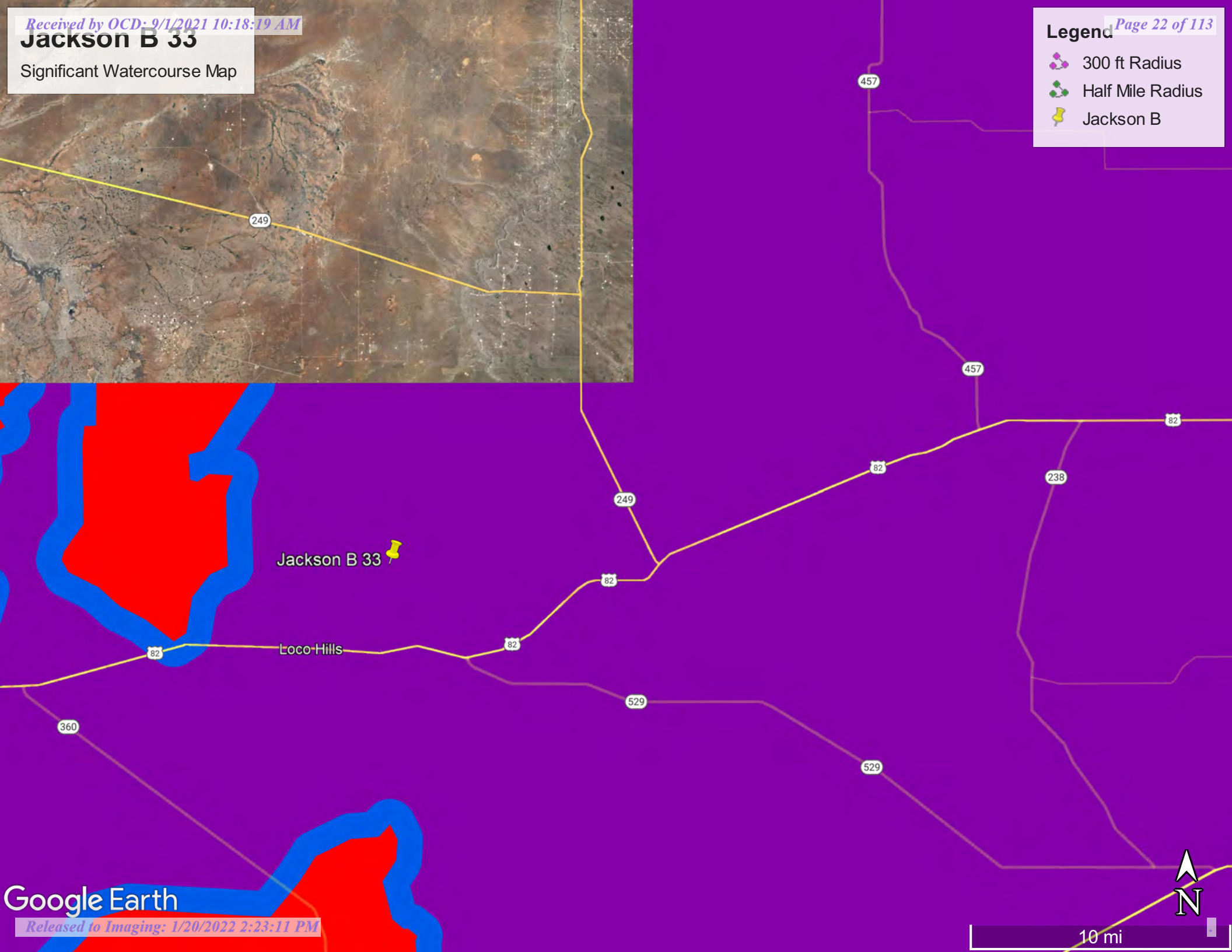
The borehole was advanced to 125' below ground surface (bgs). A 2-inch diameter temporary well constructed of schedule 40 PVC thread coupled to 10-feet of machine slotted well screen was installed in the open borehole. 72-hours after installation, a Solinst water level meter was utilized to determine the presence or absence of groundwater. The temporary well casing was subsequently removed and the bore hole backfilled with hole plug (bentonite chips) and hydrated.

Jackson B 33

Significant Watercourse Map

Legend

-  300 ft Radius
-  Half Mile Radius
-  Jackson B



Google Earth




OSE PUBLIC PRINT



8/20/2021, 9:20:36 AM

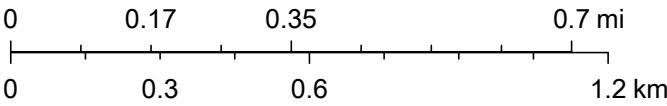
 OSE District Boundary

New Mexico State Trust Lands

 Both Estates

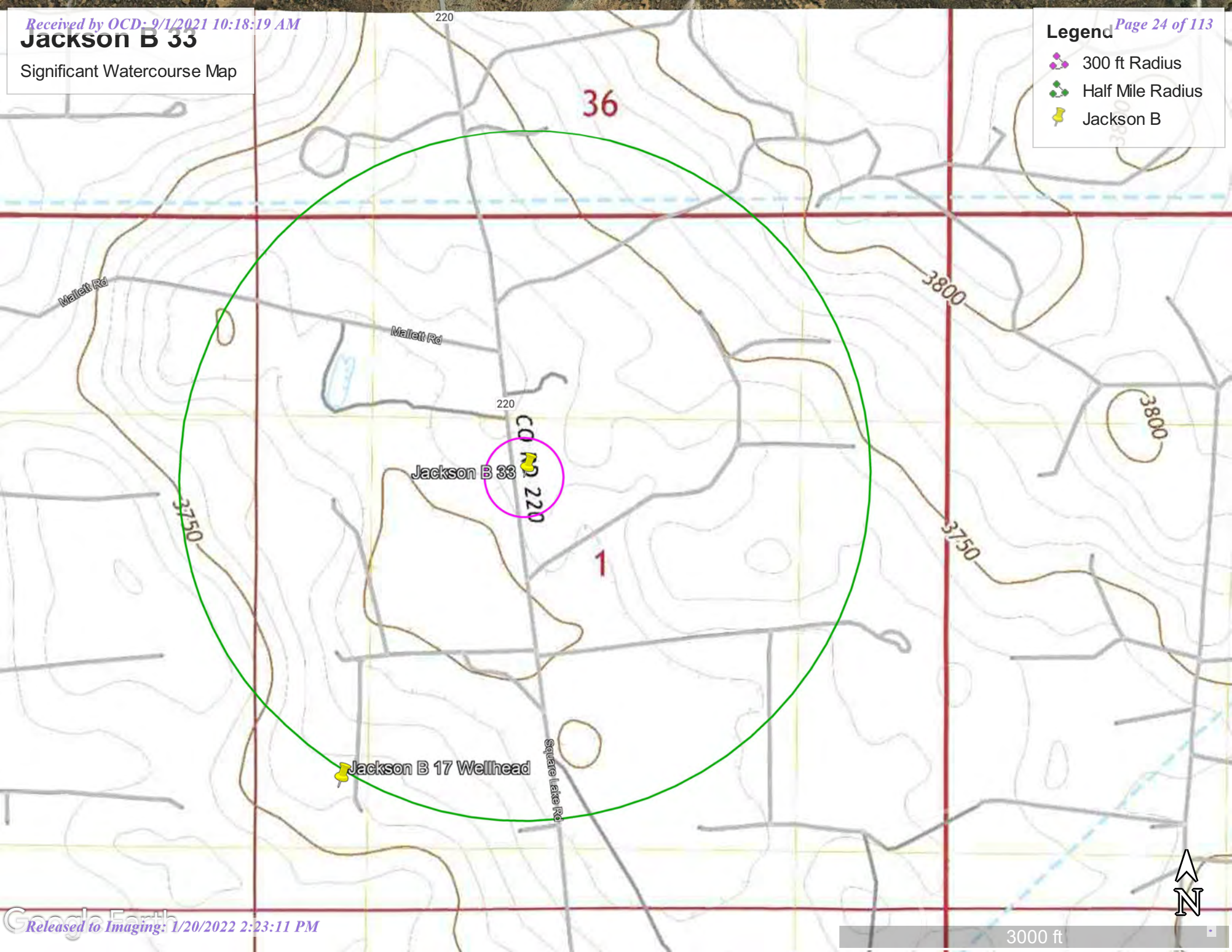
 SiteBoundaries

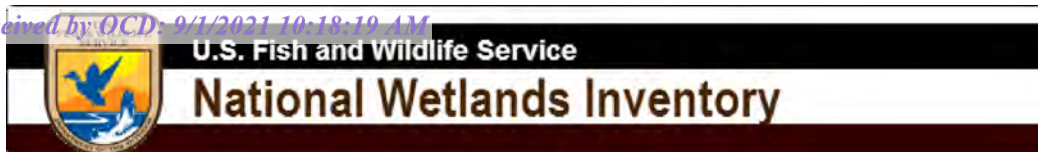
1:18,056



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

Significant Watercourse Map





EOG Jackson B #33



August 26, 2021

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

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

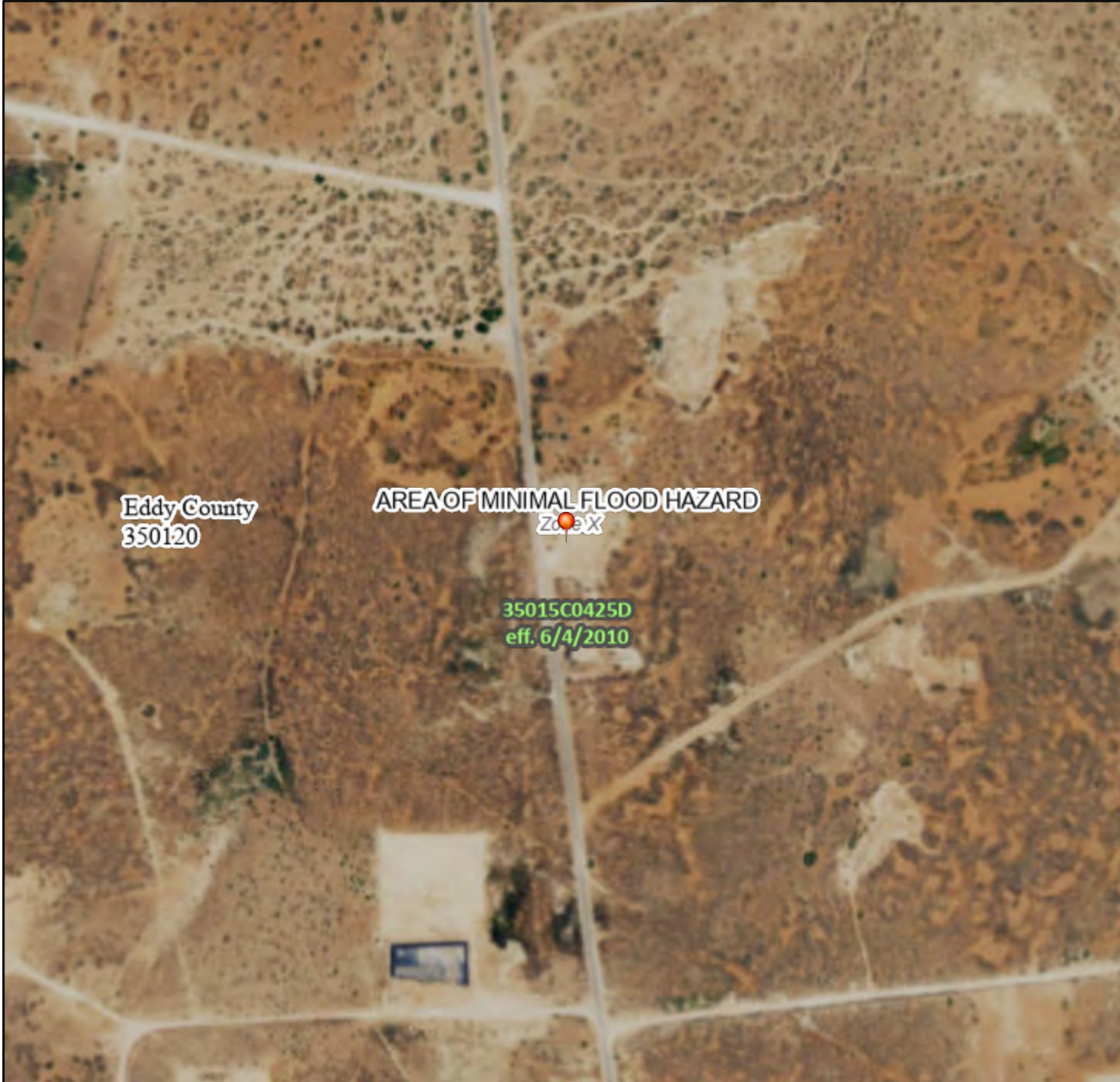
- Lake
- Other
- Riverine

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

National Flood Hazard Layer FIRMMette



103°55'57"W 32°52'10"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
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 8/26/2021 at 1:10 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 Soil Boring Log



SOIL BORING STRATIGRAPHIC LOG (OVERBURDEN)

Page 1 of 1

PROJECT NAME: EOG Jackson B #33 PROJECT NUMBER:

HOLE DESIGNATION: TP-5

11228405 CLIENT: EOG Resources. INC.

DATE COMPLETED: 21 July 2021

LOCATION: F-1-17S-30E, 32.866518, -103.927175 Eddy County, NM

TEST PIT METHOD: Air Rotary

FIELD PERSONNEL: Lee M./Zach C.

File: \\GHDNET\GHD\USMIDLAND\PROJECTS\56211228405\FIELD NOTES\GINT LOGS\11228405 LOG.GPJ Library File: 11228405 GHD_ENVIRO_V04.GLB Report: OVERBURDEN LOG Date: 19/8/21

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH m BGS	SAMPLE				
			NUMBER	INTERVAL	REC (%)	mS/cm	NaCl
	START STRAT LOG @: 20 ft						
25	SAND, fine, with sandstone interbedded, brown, dry		20-25'		100	1490	
30			25-30'		100	1100	
35	- with partially consolidated sandstone, brown, dry from 32.50 to 37.00ft BGS		30-35'		100	2000	
40	CLAYEY SAND, with partially consolidated sandstone throughout, dry	37.00	35-40'		100	1447	
45			40-45'		100	1130	732
50	BORE collapsed and fell to 52.5 ft bgs	45.00	45-50'		0		
55	SAND, brown and gray, dry	52.50	50-55'		100	1320	
60	- with consolidated sandstone, brown, dry from 57.50 to 90.00ft BGS		55-60'		100	2220	
65			60-65'		0		
70			65-70'		100	1232	
75			70-75'		100	980	
80			75-80'		100	985	
85			80-85'		100	1750	
90	- with partially consolidated beds of sandstone, brown, dry from 90.00 to 100.00ft BGS		85-90'		100	280	252
95			90-95'		100	270	252
100			95-100'		100	110	
105	END OF BOREHOLE @ 100.00ft BGS	100.00					
110							
115							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



Attachment C 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

May 11, 2021

Tom Larson

GHD

6121 Indian School Road, NE #200

Albuquerque, NM 87110

TEL: (505) 884-0672

FAX:

RE: Jackson B 33

OrderNo.: 2105147

Dear Tom Larson:

Hall Environmental Analysis Laboratory received 8 sample(s) on 5/5/2021 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 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: 2105147

Date Reported: 5/11/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2105147

Project: Jackson B 33

Lab ID: 2105147-001

Collection Date: 5/3/2021 1:40:00 PM

Client Sample ID: HA1-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	3900	150		mg/Kg	50	5/7/2021 9:17:08 AM	59840
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/5/2021 5:09:47 PM	59826
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/5/2021 5:09:47 PM	59826
Surr: DNOP	85.2	70-130		%Rec	1	5/5/2021 5:09:47 PM	59826
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/6/2021 8:44:34 PM	59822
Surr: BFB	94.2	70-130		%Rec	1	5/6/2021 8:44:34 PM	59822
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	5/6/2021 8:44:34 PM	59822
Toluene	ND	0.047		mg/Kg	1	5/6/2021 8:44:34 PM	59822
Ethylbenzene	ND	0.047		mg/Kg	1	5/6/2021 8:44:34 PM	59822
Xylenes, Total	ND	0.093		mg/Kg	1	5/6/2021 8:44:34 PM	59822
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	5/6/2021 8:44:34 PM	59822

Lab ID: 2105147-002

Collection Date: 5/3/2021 1:45:00 PM

Client Sample ID: HA1-4

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	4400	150		mg/Kg	50	5/7/2021 9:29:33 AM	59840
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	5/5/2021 5:19:36 PM	59826
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/5/2021 5:19:36 PM	59826
Surr: DNOP	90.4	70-130		%Rec	1	5/5/2021 5:19:36 PM	59826
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/6/2021 9:55:19 PM	59822
Surr: BFB	89.9	70-130		%Rec	1	5/6/2021 9:55:19 PM	59822
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	5/6/2021 9:55:19 PM	59822
Toluene	ND	0.049		mg/Kg	1	5/6/2021 9:55:19 PM	59822
Ethylbenzene	ND	0.049		mg/Kg	1	5/6/2021 9:55:19 PM	59822
Xylenes, Total	ND	0.097		mg/Kg	1	5/6/2021 9:55:19 PM	59822
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	5/6/2021 9:55:19 PM	59822

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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		

Analytical Report

Lab Order: 2105147

Date Reported: 5/11/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2105147

Project: Jackson B 33

Lab ID: 2105147-003

Collection Date: 5/3/2021 1:50:00 PM

Client Sample ID: HA2-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2000	61		mg/Kg	20	5/6/2021 2:50:12 PM	59840
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	16	9.8		mg/Kg	1	5/6/2021 9:02:43 AM	59826
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/6/2021 9:02:43 AM	59826
Surr: DNOP	117	70-130		%Rec	1	5/6/2021 9:02:43 AM	59826
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	5/6/2021 10:18:41 PM	59822
Surr: BFB	90.9	70-130		%Rec	1	5/6/2021 10:18:41 PM	59822
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	5/6/2021 10:18:41 PM	59822
Toluene	ND	0.046		mg/Kg	1	5/6/2021 10:18:41 PM	59822
Ethylbenzene	ND	0.046		mg/Kg	1	5/6/2021 10:18:41 PM	59822
Xylenes, Total	ND	0.093		mg/Kg	1	5/6/2021 10:18:41 PM	59822
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	5/6/2021 10:18:41 PM	59822

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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		

Page 2 of 11

Analytical Report

Lab Order: 2105147

Date Reported: 5/11/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2105147

Project: Jackson B 33

Lab ID: 2105147-004

Collection Date: 5/3/2021 1:55:00 PM

Client Sample ID: HA2-4

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	630	59		mg/Kg	20	5/6/2021 3:52:13 PM	59851
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	5/5/2021 5:29:29 PM	59826
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	5/5/2021 5:29:29 PM	59826
Surr: DNOP	95.6	70-130		%Rec	1	5/5/2021 5:29:29 PM	59826
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/6/2021 10:42:04 PM	59822
Surr: BFB	92.0	70-130		%Rec	1	5/6/2021 10:42:04 PM	59822
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/6/2021 10:42:04 PM	59822
Toluene	ND	0.049		mg/Kg	1	5/6/2021 10:42:04 PM	59822
Ethylbenzene	ND	0.049		mg/Kg	1	5/6/2021 10:42:04 PM	59822
Xylenes, Total	ND	0.098		mg/Kg	1	5/6/2021 10:42:04 PM	59822
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	5/6/2021 10:42:04 PM	59822

Lab ID: 2105147-005

Collection Date: 5/3/2021 2:00:00 PM

Client Sample ID: HA3-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	230	60		mg/Kg	20	5/6/2021 4:04:37 PM	59851
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/5/2021 5:39:22 PM	59826
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/5/2021 5:39:22 PM	59826
Surr: DNOP	94.9	70-130		%Rec	1	5/5/2021 5:39:22 PM	59826
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/6/2021 11:05:30 PM	59822
Surr: BFB	93.6	70-130		%Rec	1	5/6/2021 11:05:30 PM	59822
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	5/6/2021 11:05:30 PM	59822
Toluene	ND	0.048		mg/Kg	1	5/6/2021 11:05:30 PM	59822
Ethylbenzene	ND	0.048		mg/Kg	1	5/6/2021 11:05:30 PM	59822
Xylenes, Total	ND	0.096		mg/Kg	1	5/6/2021 11:05:30 PM	59822
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	5/6/2021 11:05:30 PM	59822

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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		

Analytical Report

Lab Order: 2105147

Date Reported: 5/11/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2105147

Project: Jackson B 33

Lab ID: 2105147-006

Collection Date: 5/3/2021 2:05:00 PM

Client Sample ID: HA3-4

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	250	60		mg/Kg	20	5/6/2021 4:17:02 PM	59851
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	5/5/2021 5:49:21 PM	59826
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/5/2021 5:49:21 PM	59826
Surr: DNOP	102	70-130		%Rec	1	5/5/2021 5:49:21 PM	59826
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/6/2021 11:29:01 PM	59822
Surr: BFB	93.3	70-130		%Rec	1	5/6/2021 11:29:01 PM	59822
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	5/6/2021 11:29:01 PM	59822
Toluene	ND	0.048		mg/Kg	1	5/6/2021 11:29:01 PM	59822
Ethylbenzene	ND	0.048		mg/Kg	1	5/6/2021 11:29:01 PM	59822
Xylenes, Total	ND	0.096		mg/Kg	1	5/6/2021 11:29:01 PM	59822
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	5/6/2021 11:29:01 PM	59822

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

Qualifiers:		*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix		E	Value above quantitation range
	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			

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Analytical Report

Lab Order: 2105147

Date Reported: 5/11/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2105147

Project: Jackson B 33

Lab ID: 2105147-007

Collection Date: 5/3/2021 2:10:00 PM

Client Sample ID: HA4-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1100	60		mg/Kg	20	5/6/2021 4:29:26 PM	59851
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	5/5/2021 8:09:05 PM	59826
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/5/2021 8:09:05 PM	59826
Surr: DNOP	90.7	70-130		%Rec	1	5/5/2021 8:09:05 PM	59826
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/6/2021 11:52:27 PM	59822
Surr: BFB	92.1	70-130		%Rec	1	5/6/2021 11:52:27 PM	59822
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	5/6/2021 11:52:27 PM	59822
Toluene	ND	0.049		mg/Kg	1	5/6/2021 11:52:27 PM	59822
Ethylbenzene	ND	0.049		mg/Kg	1	5/6/2021 11:52:27 PM	59822
Xylenes, Total	ND	0.098		mg/Kg	1	5/6/2021 11:52:27 PM	59822
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	5/6/2021 11:52:27 PM	59822

Lab ID: 2105147-008

Collection Date: 5/3/2021 2:15:00 PM

Client Sample ID: HA4-4

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	870	61		mg/Kg	20	5/6/2021 4:41:51 PM	59851
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/5/2021 5:59:25 PM	59826
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/5/2021 5:59:25 PM	59826
Surr: DNOP	86.9	70-130		%Rec	1	5/5/2021 5:59:25 PM	59826
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/7/2021 12:16:00 AM	59822
Surr: BFB	91.7	70-130		%Rec	1	5/7/2021 12:16:00 AM	59822
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	5/7/2021 12:16:00 AM	59822
Toluene	ND	0.048		mg/Kg	1	5/7/2021 12:16:00 AM	59822
Ethylbenzene	ND	0.048		mg/Kg	1	5/7/2021 12:16:00 AM	59822
Xylenes, Total	ND	0.097		mg/Kg	1	5/7/2021 12:16:00 AM	59822
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	5/7/2021 12:16:00 AM	59822

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

Qualifiers:		*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix		E	Value above quantitation range
	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			

Analytical Report

Lab Order: 2105147

Date Reported: 5/11/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2105147

Project: Jackson B 33

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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		

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

WO#: 2105147

11-May-21

Client: GHD
Project: Jackson B 33

Sample ID: MB-59840	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 59840	RunNo: 77183								
Prep Date: 5/6/2021	Analysis Date: 5/6/2021	SeqNo: 2737988 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-59840	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 59840	RunNo: 77183								
Prep Date: 5/6/2021	Analysis Date: 5/6/2021	SeqNo: 2737989 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.5	90	110			

Sample ID: MB-59851	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 59851	RunNo: 77183								
Prep Date: 5/6/2021	Analysis Date: 5/6/2021	SeqNo: 2738022 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-59851	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 59851	RunNo: 77183								
Prep Date: 5/6/2021	Analysis Date: 5/6/2021	SeqNo: 2738023 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.2	90	110			

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

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

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

WO#: 2105147

11-May-21

Client: GHD
Project: Jackson B 33

Sample ID: MB-59826	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 59826	RunNo: 77152								
Prep Date: 5/5/2021	Analysis Date: 5/5/2021	SeqNo: 2736833 Units: mg/Kg								
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	9.2		10.00		92.3	70	130			

Sample ID: LCS-59826	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 59826	RunNo: 77152								
Prep Date: 5/5/2021	Analysis Date: 5/5/2021	SeqNo: 2736835 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.5	68.9	141			
Surr: DNOP	4.6		5.000		91.8	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

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

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

WO#: 2105147

11-May-21

Client: GHD
Project: Jackson B 33

Sample ID: MB-59822	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 59822	RunNo: 77197								
Prep Date: 5/5/2021	Analysis Date: 5/6/2021	SeqNo: 2737863 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	920		1000		92.0	70	130			

Sample ID: LCS-59822	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 59822	RunNo: 77197								
Prep Date: 5/5/2021	Analysis Date: 5/6/2021	SeqNo: 2737864 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	95.0	78.6	131			
Surr: BFB	1000		1000		102	70	130			

Sample ID: mb-59845	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 59845	RunNo: 77243								
Prep Date: 5/6/2021	Analysis Date: 5/8/2021	SeqNo: 2739198 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	940		1000		93.6	70	130			

Sample ID: lcs-59845	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 59845	RunNo: 77243								
Prep Date: 5/6/2021	Analysis Date: 5/7/2021	SeqNo: 2739199 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		104	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

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

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

WO#: 2105147

11-May-21

Client: GHD
Project: Jackson B 33

Sample ID: MB-59822	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 59822	RunNo: 77197								
Prep Date: 5/5/2021	Analysis Date: 5/6/2021	SeqNo: 2737911 Units: mg/Kg								
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: LCS-59822	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 59822	RunNo: 77197								
Prep Date: 5/5/2021	Analysis Date: 5/6/2021	SeqNo: 2737912 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	96.3	80	120			
Toluene	0.98	0.050	1.000	0	97.6	80	120			
Ethylbenzene	0.98	0.050	1.000	0	97.6	80	120			
Xylenes, Total	2.9	0.10	3.000	0	97.9	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	70	130			

Sample ID: 2105147-001ams	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: HA1-2	Batch ID: 59822	RunNo: 77197								
Prep Date: 5/5/2021	Analysis Date: 5/6/2021	SeqNo: 2737915 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	0.9881	0	105	76.3	120			
Toluene	1.1	0.049	0.9881	0	110	78.5	120			
Ethylbenzene	1.1	0.049	0.9881	0	112	78.1	124			
Xylenes, Total	3.3	0.099	2.964	0	112	79.3	125			
Surr: 4-Bromofluorobenzene	1.0		0.9881		103	70	130			

Sample ID: 2105147-001amsd	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: HA1-2	Batch ID: 59822	RunNo: 77197								
Prep Date: 5/5/2021	Analysis Date: 5/6/2021	SeqNo: 2737916 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.024	0.9461	0	102	80	120	6.98	20	
Toluene	1.0	0.047	0.9461	0	108	80	120	6.39	20	
Ethylbenzene	1.0	0.047	0.9461	0	109	80	120	6.60	20	
Xylenes, Total	3.1	0.095	2.838	0	111	80	120	5.32	20	
Surr: 4-Bromofluorobenzene	0.98		0.9461		103	70	130	0	0	

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

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

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2105147

11-May-21

Client: GHD
Project: Jackson B 33

Sample ID: mb-59845	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: 59845			RunNo: 77243						
Prep Date: 5/6/2021	Analysis Date: 5/8/2021			SeqNo: 2739254		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		103	70	130			

Sample ID: LCS-59845	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: 59845			RunNo: 77243						
Prep Date: 5/6/2021	Analysis Date: 5/7/2021			SeqNo: 2739255		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		103	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

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

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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

Work Order Number: 2105147

RcptNo: 1

Received By: Juan Rojas

5/5/2021 7:25:00 AM

Juan Rojas

Completed By: Desiree Dominguez

5/5/2021 8:35:40 AM

DD

Reviewed By:

*jr 5/5/21*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°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:

TO
5/5/21

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	3.3	Good				

**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

[illegible]

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

June 02, 2021

Tom Larson

GHD

6121 Indian School Road, NE #200

Albuquerque, NM 87110

TEL: (505) 884-0672

FAX

RE: Jackson B 33

OrderNo.: 2105A87

Dear Tom Larson:

Hall Environmental Analysis Laboratory received 16 sample(s) on 5/26/2021 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 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: 2105A87

Date Reported: 6/2/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2105A87

Project: Jackson B 33

Lab ID: 2105A87-001

Collection Date: 5/24/2021 7:30:00 AM

Client Sample ID: TP1-S

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2300	150		mg/Kg	50	5/29/2021 2:08:24 PM	60336
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	210	8.9		mg/Kg	1	5/28/2021 12:25:56 PM	60287
Motor Oil Range Organics (MRO)	500	44		mg/Kg	1	5/28/2021 12:25:56 PM	60287
Surr: DNOP	92.7	70-130		%Rec	1	5/28/2021 12:25:56 PM	60287
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/27/2021 8:37:08 PM	60281
Surr: BFB	99.4	70-130		%Rec	1	5/27/2021 8:37:08 PM	60281
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	5/27/2021 8:37:08 PM	60281
Toluene	ND	0.047		mg/Kg	1	5/27/2021 8:37:08 PM	60281
Ethylbenzene	ND	0.047		mg/Kg	1	5/27/2021 8:37:08 PM	60281
Xylenes, Total	ND	0.093		mg/Kg	1	5/27/2021 8:37:08 PM	60281
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	5/27/2021 8:37:08 PM	60281

Lab ID: 2105A87-002

Collection Date: 5/24/2021 7:35:00 AM

Client Sample ID: TP1-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	170	60		mg/Kg	20	5/29/2021 12:57:47 AM	60336
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	51	9.6		mg/Kg	1	5/28/2021 11:46:19 AM	60287
Motor Oil Range Organics (MRO)	120	48		mg/Kg	1	5/28/2021 11:46:19 AM	60287
Surr: DNOP	95.7	70-130		%Rec	1	5/28/2021 11:46:19 AM	60287
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/27/2021 9:00:38 PM	60281
Surr: BFB	98.1	70-130		%Rec	1	5/27/2021 9:00:38 PM	60281
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/27/2021 9:00:38 PM	60281
Toluene	ND	0.050		mg/Kg	1	5/27/2021 9:00:38 PM	60281
Ethylbenzene	ND	0.050		mg/Kg	1	5/27/2021 9:00:38 PM	60281
Xylenes, Total	ND	0.099		mg/Kg	1	5/27/2021 9:00:38 PM	60281
Surr: 4-Bromofluorobenzene	99.9	70-130		%Rec	1	5/27/2021 9:00:38 PM	60281

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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		

Analytical Report

Lab Order: 2105A87

Date Reported: 6/2/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2105A87

Project: Jackson B 33

Lab ID: 2105A87-003

Collection Date: 5/24/2021 7:40:00 AM

Client Sample ID: TP2-S

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	5/29/2021 1:10:12 AM	60336
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	8.5		mg/Kg	1	5/27/2021 3:07:23 PM	60287
Motor Oil Range Organics (MRO)	ND	42		mg/Kg	1	5/27/2021 3:07:23 PM	60287
Surr: DNOP	99.8	70-130		%Rec	1	5/27/2021 3:07:23 PM	60287
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/27/2021 9:24:04 PM	60281
Surr: BFB	100	70-130		%Rec	1	5/27/2021 9:24:04 PM	60281
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	5/27/2021 9:24:04 PM	60281
Toluene	ND	0.047		mg/Kg	1	5/27/2021 9:24:04 PM	60281
Ethylbenzene	ND	0.047		mg/Kg	1	5/27/2021 9:24:04 PM	60281
Xylenes, Total	ND	0.093		mg/Kg	1	5/27/2021 9:24:04 PM	60281
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	5/27/2021 9:24:04 PM	60281

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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		

Analytical Report

Lab Order: 2105A87

Date Reported: 6/2/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2105A87

Project: Jackson B 33

Lab ID: 2105A87-004

Collection Date: 5/24/2021 7:50:00 AM

Client Sample ID: TP3-4

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1600	60		mg/Kg	20	5/29/2021 1:22:36 AM	60336
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	93	9.5		mg/Kg	1	5/28/2021 1:05:59 PM	60287
Motor Oil Range Organics (MRO)	130	48		mg/Kg	1	5/28/2021 1:05:59 PM	60287
Surr: DNOP	92.3	70-130		%Rec	1	5/28/2021 1:05:59 PM	60287
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/27/2021 9:47:35 PM	60281
Surr: BFB	101	70-130		%Rec	1	5/27/2021 9:47:35 PM	60281
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/27/2021 9:47:35 PM	60281
Toluene	ND	0.050		mg/Kg	1	5/27/2021 9:47:35 PM	60281
Ethylbenzene	ND	0.050		mg/Kg	1	5/27/2021 9:47:35 PM	60281
Xylenes, Total	ND	0.10		mg/Kg	1	5/27/2021 9:47:35 PM	60281
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	5/27/2021 9:47:35 PM	60281

Lab ID: 2105A87-005

Collection Date: 5/24/2021 8:15:00 AM

Client Sample ID: TP3-12

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1600	60		mg/Kg	20	5/29/2021 1:35:00 AM	60336
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	5/27/2021 3:17:18 PM	60287
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/27/2021 3:17:18 PM	60287
Surr: DNOP	107	70-130		%Rec	1	5/27/2021 3:17:18 PM	60287
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/27/2021 10:11:17 PM	60281
Surr: BFB	99.0	70-130		%Rec	1	5/27/2021 10:11:17 PM	60281
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/27/2021 10:11:17 PM	60281
Toluene	ND	0.050		mg/Kg	1	5/27/2021 10:11:17 PM	60281
Ethylbenzene	ND	0.050		mg/Kg	1	5/27/2021 10:11:17 PM	60281
Xylenes, Total	ND	0.10		mg/Kg	1	5/27/2021 10:11:17 PM	60281
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	5/27/2021 10:11:17 PM	60281

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

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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Analytical Report

Lab Order: 2105A87

Date Reported: 6/2/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2105A87

Project: Jackson B 33

Lab ID: 2105A87-006

Collection Date: 5/24/2021 8:20:00 AM

Client Sample ID: TP3-14

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	600	60		mg/Kg	20	5/29/2021 2:12:13 AM	60336
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	8.3		mg/Kg	1	5/27/2021 3:27:09 PM	60287
Motor Oil Range Organics (MRO)	ND	41		mg/Kg	1	5/27/2021 3:27:09 PM	60287
Surr: DNOP	118	70-130		%Rec	1	5/27/2021 3:27:09 PM	60287
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/27/2021 10:35:05 PM	60281
Surr: BFB	98.7	70-130		%Rec	1	5/27/2021 10:35:05 PM	60281
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/27/2021 10:35:05 PM	60281
Toluene	ND	0.050		mg/Kg	1	5/27/2021 10:35:05 PM	60281
Ethylbenzene	ND	0.050		mg/Kg	1	5/27/2021 10:35:05 PM	60281
Xylenes, Total	ND	0.10		mg/Kg	1	5/27/2021 10:35:05 PM	60281
Surr: 4-Bromofluorobenzene	98.6	70-130		%Rec	1	5/27/2021 10:35:05 PM	60281

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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		

Analytical Report

Lab Order: 2105A87

Date Reported: 6/2/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2105A87

Project: Jackson B 33

Lab ID: 2105A87-007

Collection Date: 5/24/2021 8:40:00 AM

Client Sample ID: TP4-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	890	60		mg/Kg	20	5/29/2021 2:24:37 AM	60336
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/27/2021 3:36:59 PM	60287
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/27/2021 3:36:59 PM	60287
Surr: DNOP	116	70-130		%Rec	1	5/27/2021 3:36:59 PM	60287
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/27/2021 11:46:16 PM	60281
Surr: BFB	100	70-130		%Rec	1	5/27/2021 11:46:16 PM	60281
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	5/27/2021 11:46:16 PM	60281
Toluene	ND	0.049		mg/Kg	1	5/27/2021 11:46:16 PM	60281
Ethylbenzene	ND	0.049		mg/Kg	1	5/27/2021 11:46:16 PM	60281
Xylenes, Total	ND	0.098		mg/Kg	1	5/27/2021 11:46:16 PM	60281
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	5/27/2021 11:46:16 PM	60281

Lab ID: 2105A87-008

Collection Date: 5/24/2021 8:50:00 AM

Client Sample ID: TP5-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1100	60		mg/Kg	20	5/29/2021 2:37:02 AM	60336
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	5/27/2021 3:46:53 PM	60287
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	5/27/2021 3:46:53 PM	60287
Surr: DNOP	106	70-130		%Rec	1	5/27/2021 3:46:53 PM	60287
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/28/2021 12:09:53 AM	60281
Surr: BFB	99.6	70-130		%Rec	1	5/28/2021 12:09:53 AM	60281
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	5/28/2021 12:09:53 AM	60281
Toluene	ND	0.047		mg/Kg	1	5/28/2021 12:09:53 AM	60281
Ethylbenzene	ND	0.047		mg/Kg	1	5/28/2021 12:09:53 AM	60281
Xylenes, Total	ND	0.094		mg/Kg	1	5/28/2021 12:09:53 AM	60281
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	5/28/2021 12:09:53 AM	60281

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

Qualifiers:		*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix		E	Value above quantitation range
	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			

Analytical Report

Lab Order: 2105A87

Date Reported: 6/2/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2105A87

Project: Jackson B 33

Lab ID: 2105A87-009

Collection Date: 5/24/2021 8:55:00 AM

Client Sample ID: TP5-4

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1200	60		mg/Kg	20	5/29/2021 2:49:26 AM	60336
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	8.6		mg/Kg	1	5/27/2021 3:56:45 PM	60287
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	5/27/2021 3:56:45 PM	60287
Surr: DNOP	115	70-130		%Rec	1	5/27/2021 3:56:45 PM	60287
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/28/2021 12:33:31 AM	60281
Surr: BFB	99.0	70-130		%Rec	1	5/28/2021 12:33:31 AM	60281
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/28/2021 12:33:31 AM	60281
Toluene	ND	0.050		mg/Kg	1	5/28/2021 12:33:31 AM	60281
Ethylbenzene	ND	0.050		mg/Kg	1	5/28/2021 12:33:31 AM	60281
Xylenes, Total	ND	0.10		mg/Kg	1	5/28/2021 12:33:31 AM	60281
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	5/28/2021 12:33:31 AM	60281

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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		

Analytical Report

Lab Order: 2105A87

Date Reported: 6/2/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2105A87

Project: Jackson B 33

Lab ID: 2105A87-010

Collection Date: 5/24/2021 9:35:00 AM

Client Sample ID: TP5-14

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2800	150		mg/Kg	50	5/29/2021 2:20:49 PM	60336
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/27/2021 4:06:33 PM	60287
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/27/2021 4:06:33 PM	60287
Surr: DNOP	112	70-130		%Rec	1	5/27/2021 4:06:33 PM	60287
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/28/2021 12:57:11 AM	60281
Surr: BFB	99.9	70-130		%Rec	1	5/28/2021 12:57:11 AM	60281
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/28/2021 12:57:11 AM	60281
Toluene	ND	0.049		mg/Kg	1	5/28/2021 12:57:11 AM	60281
Ethylbenzene	ND	0.049		mg/Kg	1	5/28/2021 12:57:11 AM	60281
Xylenes, Total	ND	0.098		mg/Kg	1	5/28/2021 12:57:11 AM	60281
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	5/28/2021 12:57:11 AM	60281

Lab ID: 2105A87-011

Collection Date: 5/24/2021 9:40:00 AM

Client Sample ID: TP6-S

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	490	60		mg/Kg	20	5/29/2021 3:14:15 AM	60336
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	13	9.2		mg/Kg	1	5/28/2021 12:52:41 PM	60287
Motor Oil Range Organics (MRO)	140	46		mg/Kg	1	5/28/2021 12:52:41 PM	60287
Surr: DNOP	84.0	70-130		%Rec	1	5/28/2021 12:52:41 PM	60287
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/28/2021 1:21:00 AM	60281
Surr: BFB	98.9	70-130		%Rec	1	5/28/2021 1:21:00 AM	60281
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	5/28/2021 1:21:00 AM	60281
Toluene	ND	0.047		mg/Kg	1	5/28/2021 1:21:00 AM	60281
Ethylbenzene	ND	0.047		mg/Kg	1	5/28/2021 1:21:00 AM	60281
Xylenes, Total	ND	0.094		mg/Kg	1	5/28/2021 1:21:00 AM	60281
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	5/28/2021 1:21:00 AM	60281

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

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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Analytical Report

Lab Order: 2105A87

Date Reported: 6/2/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2105A87

Project: Jackson B 33

Lab ID: 2105A87-012

Collection Date: 5/24/2021 9:45:00 AM

Client Sample ID: TP6-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	730	60		mg/Kg	20	5/29/2021 3:26:40 AM	60336
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	30	8.7		mg/Kg	1	5/28/2021 11:59:27 AM	60287
Motor Oil Range Organics (MRO)	220	43		mg/Kg	1	5/28/2021 11:59:27 AM	60287
Surr: DNOP	82.8	70-130		%Rec	1	5/28/2021 11:59:27 AM	60287
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/28/2021 1:44:50 AM	60281
Surr: BFB	98.8	70-130		%Rec	1	5/28/2021 1:44:50 AM	60281
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	5/28/2021 1:44:50 AM	60281
Toluene	ND	0.049		mg/Kg	1	5/28/2021 1:44:50 AM	60281
Ethylbenzene	ND	0.049		mg/Kg	1	5/28/2021 1:44:50 AM	60281
Xylenes, Total	ND	0.098		mg/Kg	1	5/28/2021 1:44:50 AM	60281
Surr: 4-Bromofluorobenzene	99.8	70-130		%Rec	1	5/28/2021 1:44:50 AM	60281

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

Qualifiers:		*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
		D	Sample Diluted Due to Matrix	E	Value above quantitation range
		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		

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Analytical Report

Lab Order: 2105A87

Date Reported: 6/2/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2105A87

Project: Jackson B 33

Lab ID: 2105A87-013

Collection Date: 5/24/2021 9:50:00 AM

Client Sample ID: TP7-4

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	930	60		mg/Kg	20	5/29/2021 3:39:04 AM	60336
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	5/27/2021 4:16:21 PM	60287
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	5/27/2021 4:16:21 PM	60287
Surr: DNOP	124	70-130		%Rec	1	5/27/2021 4:16:21 PM	60287
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/28/2021 2:08:33 AM	60281
Surr: BFB	99.0	70-130		%Rec	1	5/28/2021 2:08:33 AM	60281
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/28/2021 2:08:33 AM	60281
Toluene	ND	0.049		mg/Kg	1	5/28/2021 2:08:33 AM	60281
Ethylbenzene	ND	0.049		mg/Kg	1	5/28/2021 2:08:33 AM	60281
Xylenes, Total	ND	0.098		mg/Kg	1	5/28/2021 2:08:33 AM	60281
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	5/28/2021 2:08:33 AM	60281

Lab ID: 2105A87-014

Collection Date: 5/24/2021 10:00:00 AM

Client Sample ID: TP8-S

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	110	60		mg/Kg	20	6/1/2021 2:35:01 PM	60357
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/27/2021 4:26:11 PM	60287
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/27/2021 4:26:11 PM	60287
Surr: DNOP	106	70-130		%Rec	1	5/27/2021 4:26:11 PM	60287
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/28/2021 2:32:18 AM	60281
Surr: BFB	98.0	70-130		%Rec	1	5/28/2021 2:32:18 AM	60281
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/28/2021 2:32:18 AM	60281
Toluene	ND	0.050		mg/Kg	1	5/28/2021 2:32:18 AM	60281
Ethylbenzene	ND	0.050		mg/Kg	1	5/28/2021 2:32:18 AM	60281
Xylenes, Total	ND	0.10		mg/Kg	1	5/28/2021 2:32:18 AM	60281
Surr: 4-Bromofluorobenzene	98.5	70-130		%Rec	1	5/28/2021 2:32:18 AM	60281

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

Qualifiers:		*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix		E	Value above quantitation range
	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			

Analytical Report

Lab Order: 2105A87

Date Reported: 6/2/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2105A87

Project: Jackson B 33

Lab ID: 2105A87-015

Collection Date: 5/24/2021 10:05:00 AM

Client Sample ID: TP8-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	290	60		mg/Kg	20	6/1/2021 2:47:26 PM	60357
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	5/27/2021 4:35:58 PM	60287
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/27/2021 4:35:58 PM	60287
Surr: DNOP	118	70-130		%Rec	1	5/27/2021 4:35:58 PM	60287
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/28/2021 2:56:01 AM	60281
Surr: BFB	99.9	70-130		%Rec	1	5/28/2021 2:56:01 AM	60281
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/28/2021 2:56:01 AM	60281
Toluene	ND	0.050		mg/Kg	1	5/28/2021 2:56:01 AM	60281
Ethylbenzene	ND	0.050		mg/Kg	1	5/28/2021 2:56:01 AM	60281
Xylenes, Total	ND	0.10		mg/Kg	1	5/28/2021 2:56:01 AM	60281
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	5/28/2021 2:56:01 AM	60281

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

Qualifiers:		*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
		D	Sample Diluted Due to Matrix	E	Value above quantitation range
		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		

Analytical Report

Lab Order: 2105A87

Date Reported: 6/2/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2105A87

Project: Jackson B 33

Lab ID: 2105A87-016

Collection Date: 5/25/2021 7:50:00 AM

Client Sample ID: TP5-20

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2100	60		mg/Kg	20	6/1/2021 3:24:39 PM	60357
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/27/2021 4:45:42 PM	60287
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/27/2021 4:45:42 PM	60287
Surr: DNOP	114	70-130		%Rec	1	5/27/2021 4:45:42 PM	60287
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/28/2021 3:19:50 AM	60281
Surr: BFB	100	70-130		%Rec	1	5/28/2021 3:19:50 AM	60281
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	5/28/2021 3:19:50 AM	60281
Toluene	ND	0.047		mg/Kg	1	5/28/2021 3:19:50 AM	60281
Ethylbenzene	ND	0.047		mg/Kg	1	5/28/2021 3:19:50 AM	60281
Xylenes, Total	ND	0.095		mg/Kg	1	5/28/2021 3:19:50 AM	60281
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	5/28/2021 3:19:50 AM	60281

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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		

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

WO#: 2105A87

02-Jun-21

Client: GHD
Project: Jackson B 33

Sample ID: MB-60336	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 60336	RunNo: 77726								
Prep Date: 5/28/2021	Analysis Date: 5/28/2021	SeqNo: 2760740 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-60336	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 60336	RunNo: 77726								
Prep Date: 5/28/2021	Analysis Date: 5/28/2021	SeqNo: 2760741 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.6	90	110			

Sample ID: MB-60357	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 60357	RunNo: 78785								
Prep Date: 6/1/2021	Analysis Date: 6/1/2021	SeqNo: 2762658 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-60357	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 60357	RunNo: 78785								
Prep Date: 6/1/2021	Analysis Date: 6/1/2021	SeqNo: 2762659 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.5	90	110			

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

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

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

WO#: 2105A87

02-Jun-21

Client: GHD
Project: Jackson B 33

Sample ID: MB-60287	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 60287	RunNo: 77689								
Prep Date: 5/26/2021	Analysis Date: 5/27/2021	SeqNo: 2758381	Units: mg/Kg							
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	11		10.00		111	70	130			

Sample ID: LCS-60287	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 60287	RunNo: 77689								
Prep Date: 5/26/2021	Analysis Date: 5/27/2021	SeqNo: 2758383	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	59	10	50.00	0	118	68.9	141			
Surr: DNOP	6.0		5.000		121	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

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

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

WO#: 2105A87

02-Jun-21

Client: GHD
Project: Jackson B 33

Sample ID: mb-60281	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 60281	RunNo: 77699								
Prep Date: 5/26/2021	Analysis Date: 5/27/2021	SeqNo: 2758755	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		102	70	130			

Sample ID: lcs-60281	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 60281	RunNo: 77699								
Prep Date: 5/26/2021	Analysis Date: 5/27/2021	SeqNo: 2758756	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	101	78.6	131			
Surr: BFB	1100		1000		112	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

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

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

WO#: 2105A87

02-Jun-21

Client: GHD
Project: Jackson B 33

Sample ID: mb-60281	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 60281	RunNo: 77699								
Prep Date: 5/26/2021	Analysis Date: 5/27/2021	SeqNo: 2758801	Units: mg/Kg							
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		103	70	130			

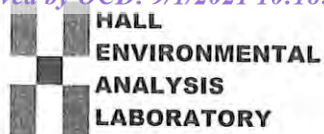
Sample ID: LCS-60281	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 60281	RunNo: 77699								
Prep Date: 5/26/2021	Analysis Date: 5/27/2021	SeqNo: 2758802	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	101	80	120			
Toluene	1.0	0.050	1.000	0	102	80	120			
Ethylbenzene	1.0	0.050	1.000	0	100	80	120			
Xylenes, Total	3.0	0.10	3.000	0	102	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		105	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

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

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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**Work Order Number: **2105A87**RcptNo: **1**Received By: **Juan Rojas**

5/26/2021 7:30:00 AM

*Juan Rojas*Completed By: **Cheyenne Cason**

5/26/2021 7:53:05 AM

*Cheyenne Cason*Reviewed By: **SPA 5.26.21**

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°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:

IO
5.26.21

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	5.4	Good				

Chain-of-Custody Record

Client:

GHD

Mailing Address:

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

Phone #: (505) 577-4218

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

QA/QC Package: Chalk - Seattle @ resources.com

Tom. Larson @ GHD.com

Standard Level 4 (Full Validation)

Accreditation: ☐ Az Compliance☐ NELAC ☐ Other☐ EDD (Type)

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

Jackson B #33

Project #:

11228405

Project Manager:

Tom Larson
Becky Haskell

Sampler:

Zach Comino

On Ice: ☒ Yes ☐ No

of Coolers: 1

Cooler Temp (including CF): 5.5-6.1-5.4 (°C)

Container Type and #

Preservative Type

HEAL No.

2105487

012

013

014

015

016

Sample Name

TP6-2

TP7-4

TP8-5

TP8-2

TP5-20

Date

05/24/0945

0950

1000

1005

0952/0750

Date:

05/24/0900

0900

1900

Relinquished by:

Zach Comino / ZH

Relinquished by:

Zach Comino / ZH

Received by:

Zach Comino

Date

5/25/21

0900

Via:

Zach Comino

Date

5/25/21

0900

Via:

Zach Comino

Received by:

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Zach Comino

Date



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

July 09, 2021

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

RE: Jackson B 33

OrderNo.: 2106E76

Dear Becky Haskell:

Hall Environmental Analysis Laboratory received 19 sample(s) on 6/29/2021 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 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: 2106E76

Date Reported: 7/9/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Lab Order: 2106E76

Project: Jackson B 33

Lab ID: 2106E76-001

Collection Date: 6/28/2021 8:30:00 AM

Client Sample ID: TP9-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	760	60		mg/Kg	20	7/3/2021 12:13:56 AM	61106
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	7/3/2021 8:36:14 PM	61039
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/3/2021 8:36:14 PM	61039
Surr: DNOP	76.4	70-130		%Rec	1	7/3/2021 8:36:14 PM	61039
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/3/2021 5:13:20 AM	61022
Surr: BFB	101	70-130		%Rec	1	7/3/2021 5:13:20 AM	61022
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	7/3/2021 5:13:20 AM	61022
Toluene	ND	0.048		mg/Kg	1	7/3/2021 5:13:20 AM	61022
Ethylbenzene	ND	0.048		mg/Kg	1	7/3/2021 5:13:20 AM	61022
Xylenes, Total	ND	0.096		mg/Kg	1	7/3/2021 5:13:20 AM	61022
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	7/3/2021 5:13:20 AM	61022

Lab ID: 2106E76-002

Collection Date: 6/28/2021 8:35:00 AM

Client Sample ID: TP9-4

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	630	60		mg/Kg	20	7/3/2021 1:16:01 AM	61106
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	7/3/2021 9:00:11 PM	61039
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/3/2021 9:00:11 PM	61039
Surr: DNOP	73.6	70-130		%Rec	1	7/3/2021 9:00:11 PM	61039
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	7/3/2021 5:36:53 AM	61022
Surr: BFB	100	70-130		%Rec	1	7/3/2021 5:36:53 AM	61022
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	7/3/2021 5:36:53 AM	61022
Toluene	ND	0.046		mg/Kg	1	7/3/2021 5:36:53 AM	61022
Ethylbenzene	ND	0.046		mg/Kg	1	7/3/2021 5:36:53 AM	61022
Xylenes, Total	ND	0.091		mg/Kg	1	7/3/2021 5:36:53 AM	61022
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	7/3/2021 5:36:53 AM	61022

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

Qualifiers:		*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix		E	Value above quantitation range
	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			

Analytical Report

Lab Order: 2106E76

Date Reported: 7/9/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Lab Order: 2106E76

Project: Jackson B 33

Lab ID: 2106E76-003

Collection Date: 6/28/2021 8:40:00 AM

Client Sample ID: TP10-S

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	7/3/2021 1:28:26 AM	61106
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	7/3/2021 9:48:04 PM	61039
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/3/2021 9:48:04 PM	61039
Surr: DNOP	85.6	70-130		%Rec	1	7/3/2021 9:48:04 PM	61039
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/3/2021 6:00:25 AM	61022
Surr: BFB	101	70-130		%Rec	1	7/3/2021 6:00:25 AM	61022
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	7/3/2021 6:00:25 AM	61022
Toluene	ND	0.048		mg/Kg	1	7/3/2021 6:00:25 AM	61022
Ethylbenzene	ND	0.048		mg/Kg	1	7/3/2021 6:00:25 AM	61022
Xylenes, Total	ND	0.096		mg/Kg	1	7/3/2021 6:00:25 AM	61022
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	7/3/2021 6:00:25 AM	61022

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

Qualifiers:		*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix		E	Value above quantitation range
	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			

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Analytical Report

Lab Order: 2106E76

Date Reported: 7/9/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Lab Order: 2106E76

Project: Jackson B 33

Lab ID: 2106E76-004

Collection Date: 6/28/2021 8:45:00 AM

Client Sample ID: TP10-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	7/3/2021 1:40:50 AM	61106
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	7/3/2021 10:11:59 PM	61039
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	7/3/2021 10:11:59 PM	61039
Surr: DNOP	162	70-130	S	%Rec	1	7/3/2021 10:11:59 PM	61039
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/3/2021 6:24:04 AM	61022
Surr: BFB	99.7	70-130		%Rec	1	7/3/2021 6:24:04 AM	61022
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	7/3/2021 6:24:04 AM	61022
Toluene	ND	0.047		mg/Kg	1	7/3/2021 6:24:04 AM	61022
Ethylbenzene	ND	0.047		mg/Kg	1	7/3/2021 6:24:04 AM	61022
Xylenes, Total	ND	0.094		mg/Kg	1	7/3/2021 6:24:04 AM	61022
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	7/3/2021 6:24:04 AM	61022

Lab ID: 2106E76-005

Collection Date: 6/28/2021 8:55:00 AM

Client Sample ID: TP11-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	4200	150		mg/Kg	50	7/6/2021 7:56:34 AM	61106
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	7/3/2021 10:35:53 PM	61039
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/3/2021 10:35:53 PM	61039
Surr: DNOP	214	70-130	S	%Rec	1	7/3/2021 10:35:53 PM	61039
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	7/3/2021 6:47:40 AM	61022
Surr: BFB	101	70-130		%Rec	1	7/3/2021 6:47:40 AM	61022
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	7/3/2021 6:47:40 AM	61022
Toluene	ND	0.046		mg/Kg	1	7/3/2021 6:47:40 AM	61022
Ethylbenzene	ND	0.046		mg/Kg	1	7/3/2021 6:47:40 AM	61022
Xylenes, Total	ND	0.092		mg/Kg	1	7/3/2021 6:47:40 AM	61022
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	7/3/2021 6:47:40 AM	61022

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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		

Analytical Report

Lab Order: 2106E76

Date Reported: 7/9/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Lab Order: 2106E76

Project: Jackson B 33

Lab ID: 2106E76-006

Collection Date: 6/28/2021 9:15:00 AM

Client Sample ID: TP11-8

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	4300	150		mg/Kg	50	7/6/2021 8:08:59 AM	61106
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	8.2		mg/Kg	1	7/3/2021 10:59:50 PM	61039
Motor Oil Range Organics (MRO)	ND	41		mg/Kg	1	7/3/2021 10:59:50 PM	61039
Surr: DNOP	99.8	70-130		%Rec	1	7/3/2021 10:59:50 PM	61039
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/3/2021 7:11:17 AM	61022
Surr: BFB	100	70-130		%Rec	1	7/3/2021 7:11:17 AM	61022
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	7/3/2021 7:11:17 AM	61022
Toluene	ND	0.048		mg/Kg	1	7/3/2021 7:11:17 AM	61022
Ethylbenzene	ND	0.048		mg/Kg	1	7/3/2021 7:11:17 AM	61022
Xylenes, Total	ND	0.096		mg/Kg	1	7/3/2021 7:11:17 AM	61022
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	7/3/2021 7:11:17 AM	61022

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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		

Analytical Report

Lab Order: 2106E76

Date Reported: 7/9/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Lab Order: 2106E76

Project: Jackson B 33

Lab ID: 2106E76-007

Collection Date: 6/28/2021 9:20:00 AM

Client Sample ID: TP11-10

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	3600	150		mg/Kg	50	7/6/2021 8:21:24 AM	61106
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	7/3/2021 11:23:43 PM	61039
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	7/3/2021 11:23:43 PM	61039
Surr: DNOP	88.0	70-130		%Rec	1	7/3/2021 11:23:43 PM	61039
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/3/2021 7:34:54 AM	61022
Surr: BFB	99.7	70-130		%Rec	1	7/3/2021 7:34:54 AM	61022
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	7/3/2021 7:34:54 AM	61022
Toluene	ND	0.049		mg/Kg	1	7/3/2021 7:34:54 AM	61022
Ethylbenzene	ND	0.049		mg/Kg	1	7/3/2021 7:34:54 AM	61022
Xylenes, Total	ND	0.099		mg/Kg	1	7/3/2021 7:34:54 AM	61022
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	7/3/2021 7:34:54 AM	61022

Lab ID: 2106E76-008

Collection Date: 6/28/2021 9:30:00 AM

Client Sample ID: TP11-12

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	370	61		mg/Kg	20	7/3/2021 2:30:29 AM	61106
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	7/3/2021 11:47:38 PM	61039
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/3/2021 11:47:38 PM	61039
Surr: DNOP	91.4	70-130		%Rec	1	7/3/2021 11:47:38 PM	61039
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/3/2021 7:58:32 AM	61022
Surr: BFB	101	70-130		%Rec	1	7/3/2021 7:58:32 AM	61022
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	7/3/2021 7:58:32 AM	61022
Toluene	ND	0.048		mg/Kg	1	7/3/2021 7:58:32 AM	61022
Ethylbenzene	ND	0.048		mg/Kg	1	7/3/2021 7:58:32 AM	61022
Xylenes, Total	ND	0.095		mg/Kg	1	7/3/2021 7:58:32 AM	61022
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	7/3/2021 7:58:32 AM	61022

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

Qualifiers:		*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix		E	Value above quantitation range
	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			

Analytical Report

Lab Order: 2106E76

Date Reported: 7/9/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Lab Order: 2106E76

Project: Jackson B 33

Lab ID: 2106E76-009

Collection Date: 6/28/2021 9:35:00 AM

Client Sample ID: TP12-S

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	7/3/2021 2:42:54 AM	61106
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	7/4/2021 12:11:29 AM	61039
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/4/2021 12:11:29 AM	61039
Surr: DNOP	85.0	70-130		%Rec	1	7/4/2021 12:11:29 AM	61039
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/3/2021 8:45:45 AM	61022
Surr: BFB	99.7	70-130		%Rec	1	7/3/2021 8:45:45 AM	61022
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	7/3/2021 8:45:45 AM	61022
Toluene	ND	0.048		mg/Kg	1	7/3/2021 8:45:45 AM	61022
Ethylbenzene	ND	0.048		mg/Kg	1	7/3/2021 8:45:45 AM	61022
Xylenes, Total	ND	0.095		mg/Kg	1	7/3/2021 8:45:45 AM	61022
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	7/3/2021 8:45:45 AM	61022

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

Qualifiers:		*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix		E	Value above quantitation range
	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			

Analytical Report

Lab Order: 2106E76

Date Reported: 7/9/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Lab Order: 2106E76

Project: Jackson B 33

Lab ID: 2106E76-010

Collection Date: 6/28/2021 9:40:00 AM

Client Sample ID: TP12-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	7/6/2021 3:49:48 PM	61106
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	8.7		mg/Kg	1	7/4/2021 12:59:14 AM	61039
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	7/4/2021 12:59:14 AM	61039
Surr: DNOP	120	70-130		%Rec	1	7/4/2021 12:59:14 AM	61039
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/3/2021 9:09:17 AM	61022
Surr: BFB	103	70-130		%Rec	1	7/3/2021 9:09:17 AM	61022
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	7/3/2021 9:09:17 AM	61022
Toluene	ND	0.047		mg/Kg	1	7/3/2021 9:09:17 AM	61022
Ethylbenzene	ND	0.047		mg/Kg	1	7/3/2021 9:09:17 AM	61022
Xylenes, Total	ND	0.093		mg/Kg	1	7/3/2021 9:09:17 AM	61022
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	7/3/2021 9:09:17 AM	61022

Lab ID: 2106E76-011

Collection Date: 6/28/2021 9:45:00 AM

Client Sample ID: TP13-S

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	7/6/2021 4:02:13 PM	61106
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	7/6/2021 4:55:39 PM	61039
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/6/2021 4:55:39 PM	61039
Surr: DNOP	74.2	70-130		%Rec	1	7/6/2021 4:55:39 PM	61039
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/3/2021 9:32:46 AM	61022
Surr: BFB	101	70-130		%Rec	1	7/3/2021 9:32:46 AM	61022
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	7/3/2021 9:32:46 AM	61022
Toluene	ND	0.049		mg/Kg	1	7/3/2021 9:32:46 AM	61022
Ethylbenzene	ND	0.049		mg/Kg	1	7/3/2021 9:32:46 AM	61022
Xylenes, Total	ND	0.097		mg/Kg	1	7/3/2021 9:32:46 AM	61022
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	7/3/2021 9:32:46 AM	61022

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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		

Analytical Report

Lab Order: 2106E76

Date Reported: 7/9/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Lab Order: 2106E76

Project: Jackson B 33

Lab ID: 2106E76-012

Collection Date: 6/28/2021 9:55:00 AM

Client Sample ID: TP13-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	7/6/2021 11:54:02 AM	61120
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	7/4/2021 1:46:56 AM	61039
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/4/2021 1:46:56 AM	61039
Surr: DNOP	115	70-130		%Rec	1	7/4/2021 1:46:56 AM	61039
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/3/2021 9:56:18 AM	61022
Surr: BFB	102	70-130		%Rec	1	7/3/2021 9:56:18 AM	61022
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	7/3/2021 9:56:18 AM	61022
Toluene	ND	0.048		mg/Kg	1	7/3/2021 9:56:18 AM	61022
Ethylbenzene	ND	0.048		mg/Kg	1	7/3/2021 9:56:18 AM	61022
Xylenes, Total	ND	0.095		mg/Kg	1	7/3/2021 9:56:18 AM	61022
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	7/3/2021 9:56:18 AM	61022

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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		

Analytical Report

Lab Order: 2106E76

Date Reported: 7/9/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Lab Order: 2106E76

Project: Jackson B 33

Lab ID: 2106E76-013

Collection Date: 6/28/2021 10:00:00 AM

Client Sample ID: TP14-S

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	120	60		mg/Kg	20	7/6/2021 12:06:26 PM	61120
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	7/6/2021 5:19:40 PM	61039
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/6/2021 5:19:40 PM	61039
Surr: DNOP	71.6	70-130		%Rec	1	7/6/2021 5:19:40 PM	61039
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	7/3/2021 10:19:48 AM	61022
Surr: BFB	102	70-130		%Rec	1	7/3/2021 10:19:48 AM	61022
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	7/3/2021 10:19:48 AM	61022
Toluene	ND	0.046		mg/Kg	1	7/3/2021 10:19:48 AM	61022
Ethylbenzene	ND	0.046		mg/Kg	1	7/3/2021 10:19:48 AM	61022
Xylenes, Total	ND	0.093		mg/Kg	1	7/3/2021 10:19:48 AM	61022
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	7/3/2021 10:19:48 AM	61022

Lab ID: 2106E76-014

Collection Date: 6/28/2021 10:05:00 AM

Client Sample ID: TP14-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	100	60		mg/Kg	20	7/6/2021 12:18:51 PM	61120
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	7/4/2021 2:34:36 AM	61039
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/4/2021 2:34:36 AM	61039
Surr: DNOP	93.2	70-130		%Rec	1	7/4/2021 2:34:36 AM	61039
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/3/2021 10:43:19 AM	61022
Surr: BFB	99.8	70-130		%Rec	1	7/3/2021 10:43:19 AM	61022
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	7/3/2021 10:43:19 AM	61022
Toluene	ND	0.049		mg/Kg	1	7/3/2021 10:43:19 AM	61022
Ethylbenzene	ND	0.049		mg/Kg	1	7/3/2021 10:43:19 AM	61022
Xylenes, Total	ND	0.099		mg/Kg	1	7/3/2021 10:43:19 AM	61022
Surr: 4-Bromofluorobenzene	99.9	70-130		%Rec	1	7/3/2021 10:43:19 AM	61022

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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		

Analytical Report

Lab Order: 2106E76

Date Reported: 7/9/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Lab Order: 2106E76

Project: Jackson B 33

Lab ID: 2106E76-015

Collection Date: 6/28/2021 10:10:00 AM

Client Sample ID: TP15-S

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	7/6/2021 12:56:06 PM	61120
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/1/2021 9:19:33 PM	61027
Surr: BFB	97.7	70-130		%Rec	1	7/1/2021 9:19:33 PM	61027
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	8.8		mg/Kg	1	7/1/2021 11:14:43 AM	61050
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	7/1/2021 11:14:43 AM	61050
Surr: DNOP	123	70-130		%Rec	1	7/1/2021 11:14:43 AM	61050
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.024		mg/Kg	1	7/1/2021 9:19:33 PM	61027
Toluene	ND	0.048		mg/Kg	1	7/1/2021 9:19:33 PM	61027
Ethylbenzene	ND	0.048		mg/Kg	1	7/1/2021 9:19:33 PM	61027
Xylenes, Total	ND	0.096		mg/Kg	1	7/1/2021 9:19:33 PM	61027
Surr: 1,2-Dichloroethane-d4	100	70-130		%Rec	1	7/1/2021 9:19:33 PM	61027
Surr: 4-Bromofluorobenzene	97.7	70-130		%Rec	1	7/1/2021 9:19:33 PM	61027
Surr: Dibromofluoromethane	102	70-130		%Rec	1	7/1/2021 9:19:33 PM	61027
Surr: Toluene-d8	99.4	70-130		%Rec	1	7/1/2021 9:19:33 PM	61027

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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		

Analytical Report

Lab Order: 2106E76

Date Reported: 7/9/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Lab Order: 2106E76

Project: Jackson B 33

Lab ID: 2106E76-016

Collection Date: 6/28/2021 10:15:00 AM

Client Sample ID: TP15-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	59		mg/Kg	20	7/6/2021 1:08:30 PM	61120
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/1/2021 9:48:11 PM	61027
Surr: BFB	98.8	70-130		%Rec	1	7/1/2021 9:48:11 PM	61027
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	8.6		mg/Kg	1	7/1/2021 3:53:04 PM	61050
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	7/1/2021 3:53:04 PM	61050
Surr: DNOP	108	70-130		%Rec	1	7/1/2021 3:53:04 PM	61050
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.024		mg/Kg	1	7/1/2021 9:48:11 PM	61027
Toluene	ND	0.049		mg/Kg	1	7/1/2021 9:48:11 PM	61027
Ethylbenzene	ND	0.049		mg/Kg	1	7/1/2021 9:48:11 PM	61027
Xylenes, Total	ND	0.098		mg/Kg	1	7/1/2021 9:48:11 PM	61027
Surr: 1,2-Dichloroethane-d4	99.7	70-130		%Rec	1	7/1/2021 9:48:11 PM	61027
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	7/1/2021 9:48:11 PM	61027
Surr: Dibromofluoromethane	102	70-130		%Rec	1	7/1/2021 9:48:11 PM	61027
Surr: Toluene-d8	93.2	70-130		%Rec	1	7/1/2021 9:48:11 PM	61027

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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		

Analytical Report

Lab Order: 2106E76

Date Reported: 7/9/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Lab Order: 2106E76

Project: Jackson B 33

Lab ID: 2106E76-017

Collection Date: 6/28/2021 10:30:00 AM

Client Sample ID: TP4-4

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	120	60		mg/Kg	20	7/6/2021 1:20:55 PM	61120
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/1/2021 10:16:48 PM	61027
Surr: BFB	95.0	70-130		%Rec	1	7/1/2021 10:16:48 PM	61027
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	7/1/2021 11:34:20 AM	61050
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	7/1/2021 11:34:20 AM	61050
Surr: DNOP	113	70-130		%Rec	1	7/1/2021 11:34:20 AM	61050
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.024		mg/Kg	1	7/1/2021 10:16:48 PM	61027
Toluene	ND	0.049		mg/Kg	1	7/1/2021 10:16:48 PM	61027
Ethylbenzene	ND	0.049		mg/Kg	1	7/1/2021 10:16:48 PM	61027
Xylenes, Total	ND	0.097		mg/Kg	1	7/1/2021 10:16:48 PM	61027
Surr: 1,2-Dichloroethane-d4	96.0	70-130		%Rec	1	7/1/2021 10:16:48 PM	61027
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	7/1/2021 10:16:48 PM	61027
Surr: Dibromofluoromethane	102	70-130		%Rec	1	7/1/2021 10:16:48 PM	61027
Surr: Toluene-d8	96.2	70-130		%Rec	1	7/1/2021 10:16:48 PM	61027

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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		

Analytical Report

Lab Order: 2106E76

Date Reported: 7/9/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Lab Order: 2106E76

Project: Jackson B 33

Lab ID: 2106E76-018

Collection Date: 6/28/2021 10:45:00 AM

Client Sample ID: TP7-6

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	65	60		mg/Kg	20	7/6/2021 1:33:19 PM	61120
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/2/2021 3:02:36 AM	61027
Surr: BFB	96.1	70-130		%Rec	1	7/2/2021 3:02:36 AM	61027
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	7/1/2021 11:44:08 AM	61050
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	7/1/2021 11:44:08 AM	61050
Surr: DNOP	122	70-130		%Rec	1	7/1/2021 11:44:08 AM	61050
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.024		mg/Kg	1	7/2/2021 3:02:36 AM	61027
Toluene	ND	0.048		mg/Kg	1	7/2/2021 3:02:36 AM	61027
Ethylbenzene	ND	0.048		mg/Kg	1	7/2/2021 3:02:36 AM	61027
Xylenes, Total	ND	0.096		mg/Kg	1	7/2/2021 3:02:36 AM	61027
Surr: 1,2-Dichloroethane-d4	95.4	70-130		%Rec	1	7/2/2021 3:02:36 AM	61027
Surr: 4-Bromofluorobenzene	99.8	70-130		%Rec	1	7/2/2021 3:02:36 AM	61027
Surr: Dibromofluoromethane	98.1	70-130		%Rec	1	7/2/2021 3:02:36 AM	61027
Surr: Toluene-d8	95.9	70-130		%Rec	1	7/2/2021 3:02:36 AM	61027

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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		

Analytical Report

Lab Order: 2106E76

Date Reported: 7/9/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Lab Order: 2106E76

Project: Jackson B 33

Lab ID: 2106E76-019

Collection Date: 6/28/2021 11:00:00 AM

Client Sample ID: TP6-4

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	280	60		mg/Kg	20	7/6/2021 1:45:43 PM	61120
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/2/2021 3:31:12 AM	61027
Surr: BFB	101	70-130		%Rec	1	7/2/2021 3:31:12 AM	61027
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	7/1/2021 11:54:01 AM	61050
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/1/2021 11:54:01 AM	61050
Surr: DNOP	128	70-130		%Rec	1	7/1/2021 11:54:01 AM	61050
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.024		mg/Kg	1	7/2/2021 3:31:12 AM	61027
Toluene	ND	0.049		mg/Kg	1	7/2/2021 3:31:12 AM	61027
Ethylbenzene	ND	0.049		mg/Kg	1	7/2/2021 3:31:12 AM	61027
Xylenes, Total	ND	0.097		mg/Kg	1	7/2/2021 3:31:12 AM	61027
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	7/2/2021 3:31:12 AM	61027
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	7/2/2021 3:31:12 AM	61027
Surr: Dibromofluoromethane	101	70-130		%Rec	1	7/2/2021 3:31:12 AM	61027
Surr: Toluene-d8	100	70-130		%Rec	1	7/2/2021 3:31:12 AM	61027

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

Qualifiers:		*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix		E	Value above quantitation range
	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			

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

WO#: 2106E76

09-Jul-21

Client: GHD Midland**Project:** Jackson B 33

Sample ID: MB-61106	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 61106	RunNo: 79537								
Prep Date: 7/2/2021	Analysis Date: 7/2/2021	SeqNo: 2798059	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-61106	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 61106	RunNo: 79537								
Prep Date: 7/2/2021	Analysis Date: 7/2/2021	SeqNo: 2798060	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.8	90	110			

Sample ID: LCS-61120	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 61120	RunNo: 79587								
Prep Date: 7/6/2021	Analysis Date: 7/6/2021	SeqNo: 2799387	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.3	90	110			

Sample ID: MB-61120	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 61120	RunNo: 79587								
Prep Date: 7/6/2021	Analysis Date: 7/6/2021	SeqNo: 2799388	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

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

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

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

WO#: 2106E76

09-Jul-21

Client: GHD Midland**Project:** Jackson B 33

Sample ID: LCS-61050	SampType: LCS				TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID: LCSS	Batch ID: 61050				RunNo: 79506					
Prep Date: 6/30/2021	Analysis Date: 7/1/2021				SeqNo: 2795288	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	101	68.9	141			
Surr: DNOP	5.1		5.000		102	70	130			

Sample ID: MB-61050	SampType: MBLK				TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID: PBS	Batch ID: 61050				RunNo: 79506					
Prep Date: 6/30/2021	Analysis Date: 7/1/2021				SeqNo: 2795290	Units: mg/Kg				
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	10		10.00		102	70	130			

Sample ID: MB-61039	SampType: MBLK				TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID: PBS	Batch ID: 61039				RunNo: 79583					
Prep Date: 6/30/2021	Analysis Date: 7/3/2021				SeqNo: 2798903	Units: mg/Kg				
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		99.3	70	130			

Sample ID: LCS-61039	SampType: LCS				TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID: LCSS	Batch ID: 61039				RunNo: 79583					
Prep Date: 6/30/2021	Analysis Date: 7/3/2021				SeqNo: 2798904	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	100	68.9	141			
Surr: DNOP	5.4		5.000		109	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

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

Page 16 of 20

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

WO#: 2106E76

09-Jul-21

Client: GHD Midland**Project:** Jackson B 33

Sample ID: mb-61022	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 61022	RunNo: 79564								
Prep Date: 6/29/2021	Analysis Date: 7/3/2021	SeqNo: 2797811	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	990		1000		99.4	70	130			

Sample ID: lcs-61022	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 61022	RunNo: 79564								
Prep Date: 6/29/2021	Analysis Date: 7/2/2021	SeqNo: 2797812	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.1	78.6	131			
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

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

Page 17 of 20

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

WO#: 2106E76

09-Jul-21

Client: GHD Midland**Project:** Jackson B 33

Sample ID: mb-61022	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 61022	RunNo: 79564								
Prep Date: 6/29/2021	Analysis Date: 7/3/2021	SeqNo: 2797869	Units: mg/Kg							
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: LCS-61022	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 61022	RunNo: 79564								
Prep Date: 6/29/2021	Analysis Date: 7/2/2021	SeqNo: 2797870	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.83	0.025	1.000	0	83.2	80	120			
Toluene	0.87	0.050	1.000	0	87.2	80	120			
Ethylbenzene	0.87	0.050	1.000	0	87.2	80	120			
Xylenes, Total	2.6	0.10	3.000	0	87.3	80	120			
Surr: 4-Bromofluorobenzene	0.99		1.000		98.7	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

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

Page 18 of 20

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

WO#: 2106E76

09-Jul-21

Client: GHD Midland**Project:** Jackson B 33

Sample ID: lcs-61027	SampType: LCS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: BatchQC	Batch ID: 61027	RunNo: 79525								
Prep Date: 6/29/2021	Analysis Date: 7/1/2021	SeqNo: 2796932	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	89.7	80	120			
Toluene	0.89	0.050	1.000	0	88.8	80	120			
Ethylbenzene	0.92	0.050	1.000	0	92.0	80	120			
Xylenes, Total	2.7	0.10	3.000	0	88.6	80	120			
Surr: 1,2-Dichloroethane-d4	0.52		0.5000		104	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		99.2	70	130			
Surr: Dibromofluoromethane	0.52		0.5000		104	70	130			
Surr: Toluene-d8	0.49		0.5000		98.4	70	130			

Sample ID: mb-61027	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBS	Batch ID: 61027	RunNo: 79525								
Prep Date: 6/29/2021	Analysis Date: 7/1/2021	SeqNo: 2796934	Units: mg/Kg							
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: 1,2-Dichloroethane-d4	0.54		0.5000		108	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		102	70	130			
Surr: Dibromofluoromethane	0.53		0.5000		107	70	130			
Surr: Toluene-d8	0.49		0.5000		97.5	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

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

Page 19 of 20

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 2106E76
09-Jul-21

Client: GHD Midland
Project: Jackson B 33

Sample ID: lcs-61027	SampType: LCS	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: LCSS	Batch ID: 61027	RunNo: 79525								
Prep Date: 6/29/2021	Analysis Date: 7/1/2021	SeqNo: 2796980	Units: mg/Kg							
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	70	130			
Surr: BFB	520		500.0		104	70	130			

Sample ID: mb-61027	SampType: MBLK	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: PBS	Batch ID: 61027	RunNo: 79525								
Prep Date: 6/29/2021	Analysis Date: 7/1/2021	SeqNo: 2796982	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	490		500.0		98.5	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
- B

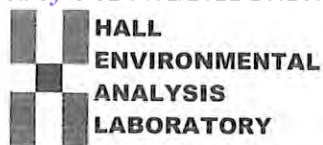
Analyte detected in the associated Method Blank
- E

Value above quantitation range
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit



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

Work Order Number: 2106E76

RcptNo: 1

Received By: Juan Rojas

6/28/2021 4:02:00 PM

Juan Rojas

Completed By: Cheyenne Cason

6/29/2021 7:48:56 AM

Cason

Reviewed By:

*JR 6/29/21*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°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:

*SPA 6.29.21*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	4.6	Good				

Chain-of-Custody Record

Client:

GHD

Mailing Address:

246 Main St Suite 108, Albuquerque, NM 87102

Phone #: (505) 372-4218

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

QA/QC Package: Check Sealie @ eoyresources.com

☐ Standard
☐ Level 4 (Full Validation)

Accreditation:

☐ Az Compliance
☐ NELAC
☐ EDD (Type)

☐ Other

Turn-Around Time:

☒ Standard
☐ Rush

Project Name:

Jackson B. #33

Project #:

11228405

Project Manager:

Becky Haskell
Tom Larson

Sampler:

Zach Comins

On Ice:

☒ Yes
☐ No

of Coolers:

1

Cooler Temp (including CF):

41.8-0.2=41.6 (°C)

Container

Type and #

Preservative

Type

HEAL No.

2106126

Date

Time

Matrix

Sample Name

Date

Time

Matrix

Sample Name

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

August 02, 2021

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

RE: Jackson B 33

OrderNo.: 2107B84

Dear Becky Haskell:

Hall Environmental Analysis Laboratory received 14 sample(s) on 7/23/2021 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 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 2107B84

Date Reported: 8/2/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP5-25

Project: Jackson B 33

Collection Date: 7/21/2021 9:15:00 AM

Lab ID: 2107B84-001

Matrix: SOIL

Received Date: 7/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2300	60		mg/Kg	20	7/29/2021 5:09:49 AM	61633
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	7/27/2021 2:11:16 PM	61556
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/27/2021 2:11:16 PM	61556
Surr: DNOP	146	70-130	S	%Rec	1	7/27/2021 2:11:16 PM	61556
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/28/2021 12:06:12 PM	61536
Surr: BFB	109	70-130		%Rec	1	7/28/2021 12:06:12 PM	61536
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	7/28/2021 12:06:12 PM	61536
Toluene	ND	0.050		mg/Kg	1	7/28/2021 12:06:12 PM	61536
Ethylbenzene	ND	0.050		mg/Kg	1	7/28/2021 12:06:12 PM	61536
Xylenes, Total	ND	0.10		mg/Kg	1	7/28/2021 12:06:12 PM	61536
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	7/28/2021 12:06:12 PM	61536

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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		

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Analytical Report

Lab Order 2107B84

Date Reported: 8/2/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP5-30

Project: Jackson B 33

Collection Date: 7/21/2021 9:45:00 AM

Lab ID: 2107B84-002

Matrix: SOIL

Received Date: 7/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1700	60		mg/Kg	20	7/29/2021 5:22:14 AM	61633
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	27	9.9		mg/Kg	1	7/27/2021 5:08:44 PM	61571
Motor Oil Range Organics (MRO)	73	49		mg/Kg	1	7/27/2021 5:08:44 PM	61571
Surr: DNOP	134	70-130	S	%Rec	1	7/27/2021 5:08:44 PM	61571
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/28/2021 11:16:00 AM	61543
Surr: BFB	121	70-130		%Rec	1	7/28/2021 11:16:00 AM	61543
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/28/2021 11:16:00 AM	61543
Toluene	ND	0.049		mg/Kg	1	7/28/2021 11:16:00 AM	61543
Ethylbenzene	ND	0.049		mg/Kg	1	7/28/2021 11:16:00 AM	61543
Xylenes, Total	ND	0.099		mg/Kg	1	7/28/2021 11:16:00 AM	61543
Surr: 4-Bromofluorobenzene	108	70-130		%Rec	1	7/28/2021 11:16:00 AM	61543

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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		

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Analytical Report

Lab Order 2107B84

Date Reported: 8/2/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP5-35

Project: Jackson B 33

Collection Date: 7/21/2021 10:45:00 AM

Lab ID: 2107B84-003

Matrix: SOIL

Received Date: 7/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1900	60		mg/Kg	20	7/29/2021 5:34:39 AM	61633
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	61	9.5		mg/Kg	1	7/27/2021 2:04:15 PM	61571
Motor Oil Range Organics (MRO)	82	48		mg/Kg	1	7/27/2021 2:04:15 PM	61571
Surr: DNOP	120	70-130		%Rec	1	7/27/2021 2:04:15 PM	61571
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/28/2021 12:15:00 PM	61543
Surr: BFB	114	70-130		%Rec	1	7/28/2021 12:15:00 PM	61543
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/28/2021 12:15:00 PM	61543
Toluene	ND	0.049		mg/Kg	1	7/28/2021 12:15:00 PM	61543
Ethylbenzene	ND	0.049		mg/Kg	1	7/28/2021 12:15:00 PM	61543
Xylenes, Total	ND	0.099		mg/Kg	1	7/28/2021 12:15:00 PM	61543
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	7/28/2021 12:15:00 PM	61543

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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		

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Analytical Report

Lab Order 2107B84

Date Reported: 8/2/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP5-40

Project: Jackson B 33

Collection Date: 7/21/2021 11:00:00 AM

Lab ID: 2107B84-004

Matrix: SOIL

Received Date: 7/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1700	60		mg/Kg	20	7/29/2021 11:10:22 AM	61644
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	7/27/2021 2:16:36 PM	61571
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/27/2021 2:16:36 PM	61571
Surr: DNOP	120	70-130		%Rec	1	7/27/2021 2:16:36 PM	61571
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/28/2021 5:56:00 PM	61543
Surr: BFB	101	70-130		%Rec	1	7/28/2021 5:56:00 PM	61543
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/28/2021 5:56:00 PM	61543
Toluene	ND	0.050		mg/Kg	1	7/28/2021 5:56:00 PM	61543
Ethylbenzene	ND	0.050		mg/Kg	1	7/28/2021 5:56:00 PM	61543
Xylenes, Total	ND	0.099		mg/Kg	1	7/28/2021 5:56:00 PM	61543
Surr: 4-Bromofluorobenzene	90.1	70-130		%Rec	1	7/28/2021 5:56:00 PM	61543

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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		

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Analytical Report

Lab Order 2107B84

Date Reported: 8/2/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP5-45

Project: Jackson B 33

Collection Date: 7/21/2021 11:20:00 AM

Lab ID: 2107B84-005

Matrix: SOIL

Received Date: 7/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	1800	75		mg/Kg	50	7/30/2021 8:30:36 AM	61644
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	7/27/2021 2:29:02 PM	61571
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/27/2021 2:29:02 PM	61571
Surr: DNOP	121	70-130		%Rec	1	7/27/2021 2:29:02 PM	61571
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/28/2021 6:16:00 PM	61543
Surr: BFB	99.0	70-130		%Rec	1	7/28/2021 6:16:00 PM	61543
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	7/28/2021 6:16:00 PM	61543
Toluene	ND	0.049		mg/Kg	1	7/28/2021 6:16:00 PM	61543
Ethylbenzene	ND	0.049		mg/Kg	1	7/28/2021 6:16:00 PM	61543
Xylenes, Total	ND	0.097		mg/Kg	1	7/28/2021 6:16:00 PM	61543
Surr: 4-Bromofluorobenzene	90.1	70-130		%Rec	1	7/28/2021 6:16:00 PM	61543

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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		

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Analytical Report

Lab Order 2107B84

Date Reported: 8/2/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP5-55

Project: Jackson B 33

Collection Date: 7/21/2021 11:45:00 AM

Lab ID: 2107B84-006

Matrix: SOIL

Received Date: 7/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	4900	300		mg/Kg	100	7/30/2021 8:43:00 AM	61644
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	21	9.5		mg/Kg	1	7/27/2021 2:41:29 PM	61571
Motor Oil Range Organics (MRO)	48	47		mg/Kg	1	7/27/2021 2:41:29 PM	61571
Surr: DNOP	126	70-130		%Rec	1	7/27/2021 2:41:29 PM	61571
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/28/2021 6:36:00 PM	61543
Surr: BFB	100	70-130		%Rec	1	7/28/2021 6:36:00 PM	61543
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	7/28/2021 6:36:00 PM	61543
Toluene	ND	0.049		mg/Kg	1	7/28/2021 6:36:00 PM	61543
Ethylbenzene	ND	0.049		mg/Kg	1	7/28/2021 6:36:00 PM	61543
Xylenes, Total	ND	0.098		mg/Kg	1	7/28/2021 6:36:00 PM	61543
Surr: 4-Bromofluorobenzene	88.7	70-130		%Rec	1	7/28/2021 6:36:00 PM	61543

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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		

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Analytical Report

Lab Order 2107B84

Date Reported: 8/2/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP5-60

Project: Jackson B 33

Collection Date: 7/21/2021 1:00:00 PM

Lab ID: 2107B84-007

Matrix: SOIL

Received Date: 7/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	4300	150		mg/Kg	50	7/30/2021 8:55:25 AM	61644
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	19	9.9		mg/Kg	1	7/27/2021 2:53:54 PM	61571
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/27/2021 2:53:54 PM	61571
Surr: DNOP	111	70-130		%Rec	1	7/27/2021 2:53:54 PM	61571
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/28/2021 6:56:00 PM	61543
Surr: BFB	109	70-130		%Rec	1	7/28/2021 6:56:00 PM	61543
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	7/28/2021 6:56:00 PM	61543
Toluene	ND	0.049		mg/Kg	1	7/28/2021 6:56:00 PM	61543
Ethylbenzene	ND	0.049		mg/Kg	1	7/28/2021 6:56:00 PM	61543
Xylenes, Total	ND	0.098		mg/Kg	1	7/28/2021 6:56:00 PM	61543
Surr: 4-Bromofluorobenzene	95.6	70-130		%Rec	1	7/28/2021 6:56:00 PM	61543

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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		

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Analytical Report

Lab Order 2107B84

Date Reported: 8/2/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP5-70

Project: Jackson B 33

Collection Date: 7/21/2021 1:40:00 PM

Lab ID: 2107B84-008

Matrix: SOIL

Received Date: 7/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	580	60		mg/Kg	20	7/29/2021 12:00:01 PM	61644
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	7/27/2021 3:06:17 PM	61571
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/27/2021 3:06:17 PM	61571
Surr: DNOP	128	70-130		%Rec	1	7/27/2021 3:06:17 PM	61571
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/28/2021 7:17:00 PM	61543
Surr: BFB	95.9	70-130		%Rec	1	7/28/2021 7:17:00 PM	61543
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/28/2021 7:17:00 PM	61543
Toluene	ND	0.049		mg/Kg	1	7/28/2021 7:17:00 PM	61543
Ethylbenzene	ND	0.049		mg/Kg	1	7/28/2021 7:17:00 PM	61543
Xylenes, Total	ND	0.098		mg/Kg	1	7/28/2021 7:17:00 PM	61543
Surr: 4-Bromofluorobenzene	87.7	70-130		%Rec	1	7/28/2021 7:17:00 PM	61543

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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		

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Analytical Report

Lab Order 2107B84

Date Reported: 8/2/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP5-75

Project: Jackson B 33

Collection Date: 7/21/2021 2:40:00 PM

Lab ID: 2107B84-009

Matrix: SOIL

Received Date: 7/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1700	60		mg/Kg	20	7/29/2021 12:12:25 PM	61644
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	21	9.9		mg/Kg	1	7/27/2021 3:18:35 PM	61571
Motor Oil Range Organics (MRO)	98	49		mg/Kg	1	7/27/2021 3:18:35 PM	61571
Surr: DNOP	124	70-130		%Rec	1	7/27/2021 3:18:35 PM	61571
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/28/2021 7:37:00 PM	61543
Surr: BFB	100	70-130		%Rec	1	7/28/2021 7:37:00 PM	61543
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/28/2021 7:37:00 PM	61543
Toluene	ND	0.050		mg/Kg	1	7/28/2021 7:37:00 PM	61543
Ethylbenzene	ND	0.050		mg/Kg	1	7/28/2021 7:37:00 PM	61543
Xylenes, Total	ND	0.10		mg/Kg	1	7/28/2021 7:37:00 PM	61543
Surr: 4-Bromofluorobenzene	86.3	70-130		%Rec	1	7/28/2021 7:37:00 PM	61543

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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		

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Analytical Report

Lab Order 2107B84

Date Reported: 8/2/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP5-80

Project: Jackson B 33

Collection Date: 7/21/2021 3:10:00 PM

Lab ID: 2107B84-010

Matrix: SOIL

Received Date: 7/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1300	60		mg/Kg	20	7/29/2021 12:49:39 PM	61644
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	33	9.4		mg/Kg	1	7/27/2021 3:30:59 PM	61571
Motor Oil Range Organics (MRO)	110	47		mg/Kg	1	7/27/2021 3:30:59 PM	61571
Surr: DNOP	129	70-130		%Rec	1	7/27/2021 3:30:59 PM	61571
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/28/2021 7:57:00 PM	61543
Surr: BFB	105	70-130		%Rec	1	7/28/2021 7:57:00 PM	61543
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/28/2021 7:57:00 PM	61543
Toluene	ND	0.050		mg/Kg	1	7/28/2021 7:57:00 PM	61543
Ethylbenzene	ND	0.050		mg/Kg	1	7/28/2021 7:57:00 PM	61543
Xylenes, Total	ND	0.099		mg/Kg	1	7/28/2021 7:57:00 PM	61543
Surr: 4-Bromofluorobenzene	90.7	70-130		%Rec	1	7/28/2021 7:57:00 PM	61543

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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		

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Analytical Report

Lab Order 2107B84

Date Reported: 8/2/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP5-85

Project: Jackson B 33

Collection Date: 7/21/2021 3:40:00 PM

Lab ID: 2107B84-011

Matrix: SOIL

Received Date: 7/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	2100	60		mg/Kg	20	7/29/2021 1:02:03 PM	61644
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	14	9.6		mg/Kg	1	7/27/2021 3:43:34 PM	61571
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/27/2021 3:43:34 PM	61571
Surr: DNOP	126	70-130		%Rec	1	7/27/2021 3:43:34 PM	61571
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/28/2021 8:17:00 PM	61543
Surr: BFB	99.1	70-130		%Rec	1	7/28/2021 8:17:00 PM	61543
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/28/2021 8:17:00 PM	61543
Toluene	ND	0.049		mg/Kg	1	7/28/2021 8:17:00 PM	61543
Ethylbenzene	ND	0.049		mg/Kg	1	7/28/2021 8:17:00 PM	61543
Xylenes, Total	ND	0.098		mg/Kg	1	7/28/2021 8:17:00 PM	61543
Surr: 4-Bromofluorobenzene	91.0	70-130		%Rec	1	7/28/2021 8:17:00 PM	61543

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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		

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Analytical Report

Lab Order 2107B84

Date Reported: 8/2/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP5-90

Project: Jackson B 33

Collection Date: 7/21/2021 4:10:00 PM

Lab ID: 2107B84-012

Matrix: SOIL

Received Date: 7/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	170	60		mg/Kg	20	7/29/2021 1:14:28 PM	61644
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	7/27/2021 3:56:05 PM	61571
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/27/2021 3:56:05 PM	61571
Surr: DNOP	136	70-130	S	%Rec	1	7/27/2021 3:56:05 PM	61571
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/28/2021 8:37:00 PM	61543
Surr: BFB	99.1	70-130		%Rec	1	7/28/2021 8:37:00 PM	61543
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	7/28/2021 8:37:00 PM	61543
Toluene	ND	0.048		mg/Kg	1	7/28/2021 8:37:00 PM	61543
Ethylbenzene	ND	0.048		mg/Kg	1	7/28/2021 8:37:00 PM	61543
Xylenes, Total	ND	0.097		mg/Kg	1	7/28/2021 8:37:00 PM	61543
Surr: 4-Bromofluorobenzene	87.0	70-130		%Rec	1	7/28/2021 8:37:00 PM	61543

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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		

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Analytical Report

Lab Order 2107B84

Date Reported: 8/2/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP5-95

Project: Jackson B 33

Collection Date: 7/21/2021 4:40:00 PM

Lab ID: 2107B84-013

Matrix: SOIL

Received Date: 7/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	120	60		mg/Kg	20	7/29/2021 1:26:53 PM	61644
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	7/27/2021 4:08:31 PM	61571
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/27/2021 4:08:31 PM	61571
Surr: DNOP	129	70-130		%Rec	1	7/27/2021 4:08:31 PM	61571
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/28/2021 9:57:00 PM	61543
Surr: BFB	101	70-130		%Rec	1	7/28/2021 9:57:00 PM	61543
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/28/2021 9:57:00 PM	61543
Toluene	ND	0.049		mg/Kg	1	7/28/2021 9:57:00 PM	61543
Ethylbenzene	ND	0.049		mg/Kg	1	7/28/2021 9:57:00 PM	61543
Xylenes, Total	ND	0.098		mg/Kg	1	7/28/2021 9:57:00 PM	61543
Surr: 4-Bromofluorobenzene	89.3	70-130		%Rec	1	7/28/2021 9:57:00 PM	61543

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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		

Analytical Report

Lab Order 2107B84

Date Reported: 8/2/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: TP5-100

Project: Jackson B 33

Collection Date: 7/21/2021 4:50:00 PM

Lab ID: 2107B84-014

Matrix: SOIL

Received Date: 7/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	96	60		mg/Kg	20	7/29/2021 1:39:18 PM	61644
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	7/27/2021 4:20:53 PM	61571
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/27/2021 4:20:53 PM	61571
Surr: DNOP	130	70-130	S	%Rec	1	7/27/2021 4:20:53 PM	61571
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/28/2021 10:17:00 PM	61543
Surr: BFB	100	70-130		%Rec	1	7/28/2021 10:17:00 PM	61543
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	7/28/2021 10:17:00 PM	61543
Toluene	ND	0.049		mg/Kg	1	7/28/2021 10:17:00 PM	61543
Ethylbenzene	ND	0.049		mg/Kg	1	7/28/2021 10:17:00 PM	61543
Xylenes, Total	ND	0.097		mg/Kg	1	7/28/2021 10:17:00 PM	61543
Surr: 4-Bromofluorobenzene	88.5	70-130		%Rec	1	7/28/2021 10:17:00 PM	61543

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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		

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

WO#: 2107B84

02-Aug-21

Client: GHD Midland**Project:** Jackson B 33

Sample ID: MB-61633	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 61633	RunNo: 80149								
Prep Date: 7/28/2021	Analysis Date: 7/28/2021	SeqNo: 2822160 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-61633	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 61633	RunNo: 80149								
Prep Date: 7/28/2021	Analysis Date: 7/28/2021	SeqNo: 2822161 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.1	90	110			

Sample ID: MB-61644	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 61644	RunNo: 80187								
Prep Date: 7/29/2021	Analysis Date: 7/29/2021	SeqNo: 2823302 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-61644	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 61644	RunNo: 80187								
Prep Date: 7/29/2021	Analysis Date: 7/29/2021	SeqNo: 2823303 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.6	90	110			

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

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

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

WO#: 2107B84

02-Aug-21

Client: GHD Midland**Project:** Jackson B 33

Sample ID: LCS-61556	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 61556	RunNo: 80098								
Prep Date: 7/26/2021	Analysis Date: 7/27/2021	SeqNo: 2819508 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	55	10	50.00	0	109	68.9	141			
Surr: DNOP	4.9		5.000		98.8	70	130			

Sample ID: MB-61556	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 61556	RunNo: 80098								
Prep Date: 7/26/2021	Analysis Date: 7/27/2021	SeqNo: 2819509 Units: mg/Kg								
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	13		10.00		127	70	130			

Sample ID: MB-61571	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 61571	RunNo: 80100								
Prep Date: 7/26/2021	Analysis Date: 7/27/2021	SeqNo: 2819515 Units: mg/Kg								
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		123	70	130			

Sample ID: LCS-61571	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 61571	RunNo: 80100								
Prep Date: 7/26/2021	Analysis Date: 7/27/2021	SeqNo: 2819516 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	58	10	50.00	0	116	68.9	141			
Surr: DNOP	5.7		5.000		114	70	130			

Sample ID: MB-61572	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 61572	RunNo: 80098								
Prep Date: 7/26/2021	Analysis Date: 7/27/2021	SeqNo: 2820635 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	12		10.00		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

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

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

WO#: 2107B84

02-Aug-21

Client: GHD Midland**Project:** Jackson B 33

Sample ID: LCS-61572	SampType: LCS				TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID: LCSS	Batch ID: 61572				RunNo: 80098					
Prep Date: 7/26/2021	Analysis Date: 7/27/2021				SeqNo: 2820636	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.9		5.000		97.3	70	130			

Sample ID: 2107B84-002AMS	SampType: MS				TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID: TP5-30	Batch ID: 61571				RunNo: 80100					
Prep Date: 7/26/2021	Analysis Date: 7/27/2021				SeqNo: 2821150	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	54	9.8	49.02	20.75	68.4	15	184			
Surr: DNOP	5.3		4.902		107	70	130			

Sample ID: 2107B84-002AMSD	SampType: MSD				TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID: TP5-30	Batch ID: 61571				RunNo: 80100					
Prep Date: 7/26/2021	Analysis Date: 7/27/2021				SeqNo: 2821151	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	49.90	20.75	48.3	15	184	19.0	23.9	
Surr: DNOP	5.1		4.990		101	70	130	0	0	

Sample ID: MB-61603	SampType: MBLK				TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID: PBS	Batch ID: 61603				RunNo: 80141					
Prep Date: 7/27/2021	Analysis Date: 7/28/2021				SeqNo: 2821624	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.8		10.00		98.1	70	130			

Sample ID: LCS-61603	SampType: LCS				TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID: LCSS	Batch ID: 61603				RunNo: 80141					
Prep Date: 7/27/2021	Analysis Date: 7/28/2021				SeqNo: 2821625	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.8		5.000		116	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

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

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

WO#: 2107B84

02-Aug-21

Client: GHD Midland**Project:** Jackson B 33

Sample ID: mb-61536	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 61536			RunNo: 80115						
Prep Date: 7/23/2021	Analysis Date: 7/28/2021			SeqNo: 2820105		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	980		1000		98.2	70	130			

Sample ID: lcs-61536	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 61536			RunNo: 80115						
Prep Date: 7/23/2021	Analysis Date: 7/27/2021			SeqNo: 2820106		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	95.5	78.6	131			
Surr: BFB	1100		1000		109	70	130			

Sample ID: lcs-61543	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 61543			RunNo: 80145						
Prep Date: 7/24/2021	Analysis Date: 7/28/2021			SeqNo: 2821695		Units: mg/Kg				
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	1400		1000		145	70	130			S

Sample ID: mb-61543	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 61543			RunNo: 80145						
Prep Date: 7/24/2021	Analysis Date: 7/28/2021			SeqNo: 2821698		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	1200		1000		116	70	130			

Sample ID: 2107B84-002ams	SampType: MS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: TP5-30	Batch ID: 61543			RunNo: 80145						
Prep Date: 7/24/2021	Analysis Date: 7/28/2021			SeqNo: 2821700		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	4.9	24.63	0	107	61.3	114			
Surr: BFB	1300		985.2		132	70	130			S

Sample ID: 2107B84-002amsd	SampType: MSD			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: TP5-30	Batch ID: 61543			RunNo: 80145						
Prep Date: 7/24/2021	Analysis Date: 7/28/2021			SeqNo: 2821701		Units: mg/Kg				
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

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

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

WO#: 2107B84

02-Aug-21

Client: GHD Midland**Project:** Jackson B 33

Sample ID: 2107B84-002amsd	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: TP5-30	Batch ID: 61543	RunNo: 80145								
Prep Date: 7/24/2021	Analysis Date: 7/28/2021	SeqNo: 2821701 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	24.90	0	103	61.3	114	2.27	20	
Surr: BFB	1400		996.0		138	70	130	0	0	S

Sample ID: lcs-61570	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 61570	RunNo: 80156								
Prep Date: 7/26/2021	Analysis Date: 7/28/2021	SeqNo: 2822398 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1200		1000		120	70	130			

Sample ID: mb-61570	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 61570	RunNo: 80156								
Prep Date: 7/26/2021	Analysis Date: 7/29/2021	SeqNo: 2822400 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		106	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

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

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

WO#: 2107B84

02-Aug-21

Client: GHD Midland**Project:** Jackson B 33

Sample ID: mb-61536	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 61536	RunNo: 80115								
Prep Date: 7/23/2021	Analysis Date: 7/28/2021	SeqNo: 2820153			Units: mg/Kg					
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: LCS-61536	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 61536	RunNo: 80115								
Prep Date: 7/23/2021	Analysis Date: 7/27/2021	SeqNo: 2820154			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	1.000	0	87.8	80	120			
Toluene	0.90	0.050	1.000	0	90.2	80	120			
Ethylbenzene	0.91	0.050	1.000	0	90.6	80	120			
Xylenes, Total	2.7	0.10	3.000	0	91.3	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		105	70	130			

Sample ID: lcs-61543	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 61543	RunNo: 80145								
Prep Date: 7/24/2021	Analysis Date: 7/28/2021	SeqNo: 2821696			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	93.7	80	120			
Toluene	0.96	0.050	1.000	0	95.9	80	120			
Ethylbenzene	0.99	0.050	1.000	0	99.0	80	120			
Xylenes, Total	3.0	0.10	3.000	0	100	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	70	130			

Sample ID: mb-61543	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 61543	RunNo: 80145								
Prep Date: 7/24/2021	Analysis Date: 7/28/2021	SeqNo: 2821697			Units: mg/Kg					
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		103	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

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

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

WO#: 2107B84

02-Aug-21

Client: GHD Midland**Project:** Jackson B 33

Sample ID: LCS-61570	SampType: LCS				TestCode: EPA Method 8021B: Volatiles					
Client ID: LCSS	Batch ID: 61570				RunNo: 80156					
Prep Date: 7/26/2021	Analysis Date: 7/28/2021				SeqNo: 2822450	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		106	70	130			

Sample ID: mb-61570	SampType: MBLK				TestCode: EPA Method 8021B: Volatiles					
Client ID: PBS	Batch ID: 61570				RunNo: 80156					
Prep Date: 7/26/2021	Analysis Date: 7/29/2021				SeqNo: 2822452	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		101	70	130			

Sample ID: 2107B84-003ams	SampType: MS				TestCode: EPA Method 8021B: Volatiles					
Client ID: TP5-35	Batch ID: 61543				RunNo: 80145					
Prep Date: 7/24/2021	Analysis Date: 7/28/2021				SeqNo: 2822560	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	0.9843	0	89.3	80	120			
Toluene	0.90	0.049	0.9843	0	91.3	80	120			
Ethylbenzene	0.93	0.049	0.9843	0	94.1	80	120			
Xylenes, Total	2.8	0.098	2.953	0	94.6	80	120			
Surr: 4-Bromofluorobenzene	0.87		0.9843		88.7	70	130			

Sample ID: 2107B84-003amsd	SampType: MSD				TestCode: EPA Method 8021B: Volatiles					
Client ID: TP5-35	Batch ID: 61543				RunNo: 80145					
Prep Date: 7/24/2021	Analysis Date: 7/28/2021				SeqNo: 2822561	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.024	0.9756	0	92.2	80	120	2.35	20	
Toluene	0.92	0.049	0.9756	0	94.4	80	120	2.37	20	
Ethylbenzene	0.95	0.049	0.9756	0	97.7	80	120	2.92	20	
Xylenes, Total	2.9	0.098	2.927	0	98.9	80	120	3.49	20	
Surr: 4-Bromofluorobenzene	0.96		0.9756		98.7	70	130	0	0	

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

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



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: **2107B84**RcptNo: **1**Received By: **Juan Rojas**

7/23/2021 7:30:00 AM

*Juan Rojas*Completed By: **Desiree Dominguez**

7/23/2021 10:21:08 AM

*Desiree Dominguez*Reviewed By: *SGC 7/23/21*

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°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: *KPG 7/23/21*

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	4.3	Good				

Incident ID	nAPP2112353281
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: Chase Settle Title: Rep Safety & Environmental Sr
Signature:  Date: 08/31/2021
email: Chase_Settle@eogresources.com Telephone: 575-748-1471

OCD Only

Received by: Robert Hamlet Date: 1/20/2022

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

Signature:  Date: 1/20/2022

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 45802

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 45802
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	The Remediation Plan is Conditionally Approved. All contaminated soil must be reclaimed/remediated and removed down to 4 feet below surface or until it meets strictest closure criteria. In the pasture area, 4 feet below the ground surface, soil contamination limits revert back to Table 1 standards of 2,500 mg/kg (GRO+DRO+MRO) or 1,000 mg/kg (GRO+DRO) and chlorides to 20,000 mg/kg. Sidewall samples should be delineated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. Please collect confirmation samples, representing no more than 200 ft2.	1/20/2022