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	nAPP2216142252
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party EOG Resources, Inc	OGRID 7377
Contact Name Amber Griffin	Contact Telephone 575-748-1471
Contact email amber_griffin@eogresources.com	Incident # *nAPP2216142252*
Contact mailing address 104 S. 4th Street, Artesia, NM 88210	

Location of Release Source

Latitude 36.0296898 Longitude -107.3539276
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Bois D Arc Divide 22 #001	Site Type Wellhead
Date Release Discovered 6/9/2022	API# *(if applicable)* 30-043-20952

Unit Letter	Section	Township	Range	County
N	22	21N	05W	Sandoval

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)

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

Cause of Release: Historical impacts were discovered during annual bradenhead testing. The environmental consultant contracted to investigate the area determined on 6/9/2022, based on the impacted area footprint, that the release more than likely breached the reportable volume threshold.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2216142252
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☑ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

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

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

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

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

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

Printed Name: Amber Griffin
Title: Rep Safety & Environmental Sr

Signature: Amber Griffin
Date: 6/10/2022

email: amber_griffin@eogresources.com
Telephone: 575-748-1471

OCD Only

Received by: Jocelyn Harimon
Date:

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

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 116024
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	When submitting future reports regarding this release, please submit the calculations used or specific justification for the volumes reported on the initial C-141	6/13/2022

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2216142252
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	167.45 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☑ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☑ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☑ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☑ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☑ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☑ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☑ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☑ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☑ No

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

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

- ☑ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☑ Field data
- ☑ Data table of soil contaminant concentration data
- ☑ Depth to water determination
- ☑ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☑ Boring or excavation logs
- ☑ Photographs including date and GIS information
- ☑ Topographic/Aerial maps
- ☑ Laboratory data including chain of custody

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

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2216142252
District RP	
Facility ID	
Application ID	

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

Printed Name: Chase Settle Title: Rep Safety & Environmental Sr

Signature: Chase Settle Date: 09/07/2022

email: Chase_Settle@eogresources.com Telephone: 575-748-1471

OCD Only

Received by: Jocelyn Harimon Date: 09/07/2022

Incident ID	nAPP2216142252
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☑ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Chase Settle Title: Rep Safety & Environmental Sr

Signature: Chase Settle Date: 09/07/2022

email: Chase_Settle@eogresources.com Telephone: 575-748-1471

OCD Only

Received by: Jocelyn Harimon Date: 09/07/2022

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

Closure Approved by: Nelson Velez Date: 11/17/2022

Printed Name: Nelson Velez Title: Environmental Specialist – Adv

6121 Indian School Rd NE,
Suite 200
Albuquerque, NM 87110
www.GHD.com

Our Ref.: 12565401-NMOCD-1

September 7, 2022

New Mexico Oil Conservation Division
District 3
1000 Rio Brazos Road
Aztec, New Mexico 87410

Site Closure Report
EOG Resources, Inc.
Incident ID: nAPP2216142252
N-22-21N-05W, Sandoval County, New Mexico

Dear Sir or Madam:

1. Introduction

GHD Services Inc. (GHD), on behalf of EOG Resources (EOG), submits this Site Closure Report to the New Mexico Oil Conservation Division (NMOCD) District 3 Office. This Report provides documentation of delineation, sampling, remedial activities, and analyses conducted in the affected area at the EOG Bois D Arc Divide 22 #001 Site (Site). The Site is located in Unit Letter N, Section 22 of Township 21 North and Range 05 West in Sandoval County, New Mexico. The GPS coordinates for the release Site are 36.0296898º N latitude and -107.3539276º W longitude. The release occurred on federally owned land. Figure 1 depicts the Site location and other Site details are depicted on Figure 2.

2. Background Information

A Form C-141, Release Notification, for this release was submitted to the NMOCD on June 9, 2022. The Form C-141 stated that no known volume or date could be assigned to this historical release. The potential release area was discovered during annual bradenhead testing associated with this location. Soils adjacent to the wellhead appeared to be discolored. On May 24, 2022, GHD was on Site to investigate if the stained soils constituted a reportable release. Based on the analytical results of the May 2022 investigative sampling received on June 9, 2022, EOG made the decision to file a Form C-141 for the release location.

The release falls under the jurisdiction of the NMOCD District 3 Office in Artesia, New Mexico. The NMOCD assigned the release with Incident Number nAPP2216142252. The Release Notification, Site Assessment/Characterization, and Closure portions of Form C-141 are attached to the front of this report.

3. Groundwater and Site Characterization

GHD characterized the Site according to Table I, Closure Criteria for Soils Impacted by a Release, from New Mexico Administrative Code (NMAC) Title 19, Chapter 15, Part 29, Section 12 (NMAC 19.15.29.12). The Site is located within 0.4 miles of a point of diversion. Envirotech, Inc. (Envirotech) of Farmington, New Mexico, was retained by EOG Resources (EOG), to provide drilling oversight activities for an exploratory soil boring at Bois D Arc Divide 22 #003 (#003). The one soil boring was advanced from June 30, 2021, through July 8, 2022. The soil boring was completed to a depth to groundwater of 144.30 feet below ground surface (ft bgs). On June 13, 2022, the depth to groundwater was measured at 100.45 ft bgs. Based on the measured depth to groundwater at the #003, the estimated depth to groundwater for the Site based on the increased elevation over #003, is greater than 100 ft bgs. Attachment C includes the drilling report. No other receptors (water wells, high karst potential areas, playas, wetlands, waterways, lakebeds or ordinance boundaries) were located within each specific boundary or distance from the Site. The Site characterization documentation (Points of Diversion, Significant Watercourse Map, Federal Emergency Management Agency [FEMA], and Wetlands maps) are provided in Attachment A. The soil closure criteria are listed below.

General Site Characterization and Groundwater

Site Characterization	Average Groundwater Depth (feet)
No Receptors Found	Determined to be >100 ft

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

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

4. Initial Soil Delineation Assessment Summary and Findings

On October 21, 2021, six composite soil samples, Comp 1 through Comp 6, were collected at a depth of 1 ft below grounds surface (bgs). The soil samples were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) by the Unite States Environmental Protection Agency (EPA) Method 8021B, total petroleum hydrocarbons (TPH) by Method 8015B Modified, and chloride by EPA Method 300 by Hall Environmental Analysis Laboratory (HEAL) in Albuquerque, New Mexico. Five of the six composite samples exceeded Site specific Closure Criteria.

To further investigate the suspected release in the areas of the five composite samples GHD and EOG contracted Kelly Oilfield Services to advance four test pits, TP1 through TP4, on May 24, 2022. Soil samples were collected at depths of 2 ft and 4 ft bgs from the test pits and analyzed for BTEX, total TPH, and chloride. Analytical results of the May 24, 2022, samples indicated BTEX, TPH, and chloride concentrations were below Table I Closure Criteria with the exception of the 2 ft samples form TP-1 and TP-3.

Figure 3: Sampling Detail with Analytical Results Map, depicts the locations of the initial delineation samples and analytical concentrations. Analytical results are provided in Table 1 and in the associated laboratory analytical reports are provided in Attachment B.

5. Excavation, Waste Management and Confirmation Sampling

Due to the initial soil sampling activities exhibiting TPH and chloride concentrations above NMAC 19.15.29.13 Closure Criteria, GHD and Kelly Oilfield Services mobilized to the Site on July 18, 2022, to excavate the affected soils. The excavation measured approximately 25 ft by 18 ft by 4 ft equaling approximately 66 cubic yards. As shown on Figure 3, four sidewall (SW, SN, SE, and SS) and two excavation floor (F1 and F2) composite confirmation samples were collected. All confirmation samples were taken to and analyzed for BTEX, TPH, and chloride. Analytical results indicated one side wall sample exhibited TPH concentrations above Table I Closure Criteria: SE. Analytical results for confirmation samples are summarized in Table 1 and in the associated laboratory analytical report provided in Attachment B.

Due to confirmation sampling activities exhibiting TPH concentrations above Table I Closure Criteria, GHD and Kelly Oilfield Services returned to the Site on August 15, 2022, to further excavate the affected area around sample location SE. Although sampling areas F1 and F2 exhibited TPH levels, the soil meets the allowable limits for what can be left in place below 4 ft bgs in areas with a depth to groundwater greater than 100 ft. The excavation was extended an additional 4 ft east for total measurements of 25 ft by 22 ft by 4 ft equaling approximately 80 cubic yards. The confirmation sample, Bois #1 East, was taken to HEAL and analyzed for BTEX, total TPH, and chloride by EPA Method 300. The analytical results indicated BTEX, TPH, and chloride concentrations were below Table I Closure Criteria. Analytical results for the additional confirmation sample are summarized in Table 1 and in the laboratory analytical report provided in Attachment C.

Waste Management activities were performed in coordination with EOG directives. EOG obtained regulatory approval via the successful processing of Form C-138 Request for Approval to Accept Solid Waste. The waste was approved for acceptance at the OCD-permitted (#NM-01-0011) Envirotech Inc. Soil Remediation Facility located at #43 Road 7175, south of Bloomfield New Mexico. Approximately 80 yards of impacted soil were disposed at the Envirotech Inc. facility.

6. nAPP2216142252 Closure Request

The excavation will be backfilled with non-impacted material at a future date. Site characterization, soil delineation, and remediation activities for this incident number have been performed in accordance with applicable NMOCD guidance and regulations. Based upon supporting documentation provided in this report, GHD, on behalf of EOG, respectfully requests closure and no further regulatory actions for nAPP2216142252.

If you have any questions or comments concerning this Site Closure Report, please do not hesitate to contact our Albuquerque office at (505) 200-3210.

Regards,

GHD

Adrianna Copeland
Project Scientist
(713) 731-6634
adrianna.copeland@GHD.com

Christine Mathews
Project Manager
(505) 269-0088
christine.mathews@ghd.com

NR/jlf/1

Encl.: Table 1 - Summary of Soil Analytical Data
Figure 1 - Site Location Map
Figure 2 - Site Details Map
Figure 3 - Sampling Details with Analytical Results Map
Attachment A - Site Characterization Documentation
Attachment B - Laboratory Analytical Reports and Chain-of-Custody Documentation
Attachment C - Bois Exploratory Drilling Report

Tables

Table 1
Summary of Soil Analytical Data
Bois D Arc Divide 22 #001
EOG Resources
Sandoval County, New Mexico

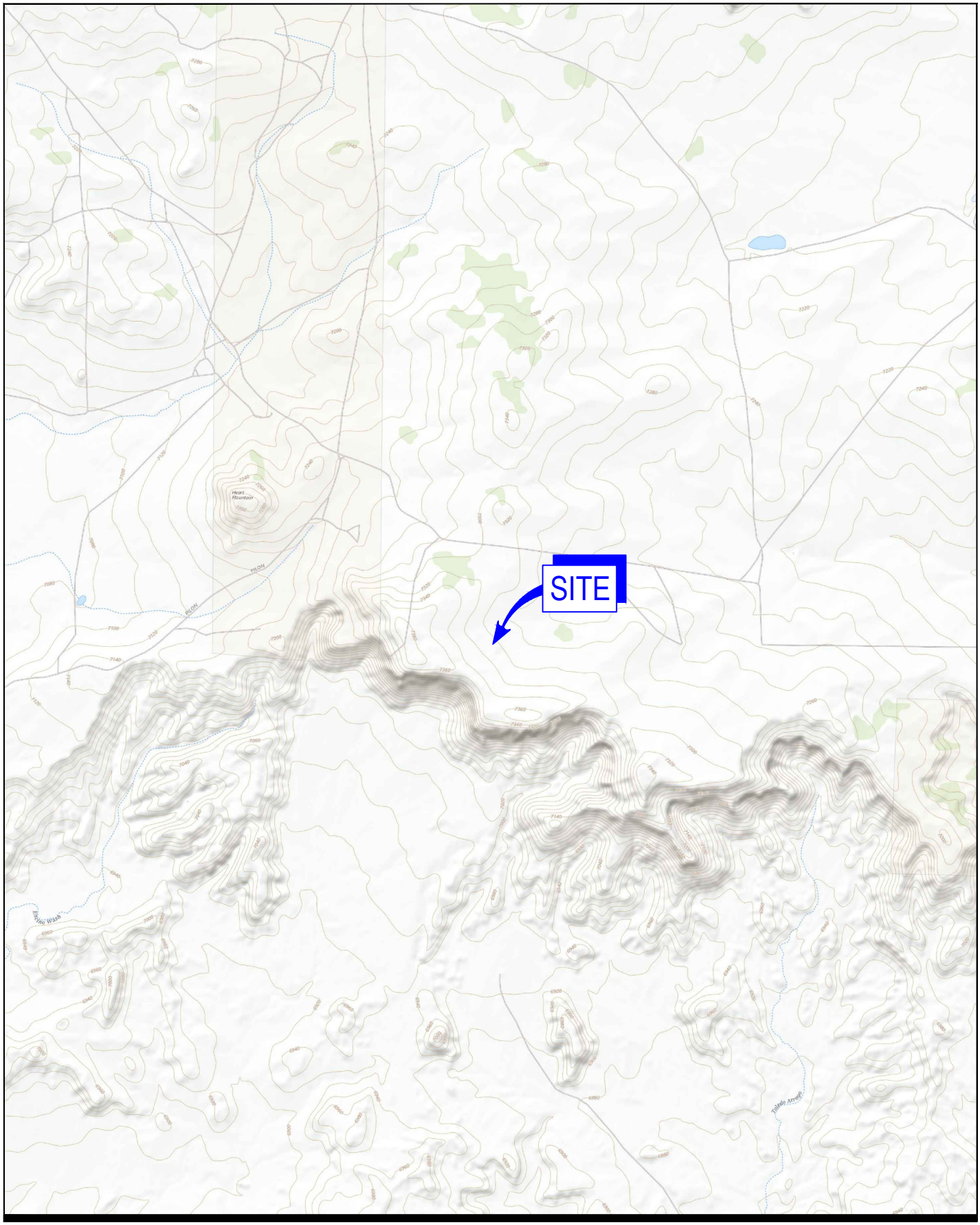
SAMPLE ID	SAMPLE DATE	DEPTH (FEET BGS)	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES	BTEX	TPH				CHLORIDE
								GRO (C6-C10)	DRO (C10-C28)	MRO (C28-C35)	TOTAL GRO/DRO/MRO	
			(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
			Table I Closure Criteria for 19.15.29.13 Restoration, Reclamation and Re-Vegetation (0-4 Feet)									
			10 mg/Kg	---	---	---	50 mg/Kg	---	---	---	100 mg/Kg	600 mg/Kg
			Table I Closure Criteria for 19.15.29.12 NMAC Soils Impacted by a Release (4 feet and deeper) with >100 feet Depth to Groundwater									
			10 mg/Kg	---	---	---	50 mg/Kg	1,000 mg/Kg		---	2,500 mg/Kg	20,000 mg/Kg
INITIAL ASSESSMENT SAMPLES												
Comp 1 (1') Bottom	10/21/21	1	< 0.025	< 0.05	< 0.05	< 0.10	< 0.10	< 5.0	**130**	**180**	**310**	**170**
Comp 2 (1') Bottom	10/21/21	1	< 0.024	< 0.048	< 0.048	< 0.097	< 0.097	< 4.8	**530**	**630**	**1160**	**140**
Comp 3 (1') Wall	10/21/21	1	< 0.025	< 0.049	< 0.049	< 0.098	< 0.098	< 4.9	**11**	< 49	**11**	**61**
Comp 4 (1') Wall	10/21/21	1	< 0.12	< 0.24	< 0.24	< 0.49	< 0.49	< 24	**1200**	**640**	**1840**	**290**
Comp 5 (1') Wall	10/21/21	1	< 0.024	< 0.049	< 0.049	< 0.097	< 0.097	< 4.9	**2100**	**1700**	**3800**	< 60
Comp 6 (1') Wall	10/21/21	1	< 0.025	< 0.05	< 0.05	< 0.10	< 0.10	< 5.0	**35**	**86**	**121**	**77**
TP-1 (2')	5/24/22	2	< 0.025	< 0.049	< 0.049	< 0.098	<0.098	< 4.9	**1800**	**830**	**2630**	**750**
TP-1 (4')	5/24/22	4	<0.018	<0.037	< 0.037	< 0.073	< 0.073	< 3.7	**49**	**120**	**169**	**900**
TP-2 (2')	5/24/22	2	< 0.019	< 0.038	< 0.038	< 0.077	< 0.077	< 3.8	**29**	< 46	**29**	**120**
TP-2 (4')	5/24/22	4	< 0.019	< 0.039	< 0.039	< 0.078	< 0.078	< 3.9	< 9.8	< 49	< 49	**230**
TP-2 (EW)	5/24/22	0 - 4	< 0.023	< 0.045	< 0.045	< 0.091	< 0.091	< 4.5	< 9.5	< 48	< 48	**69**
TP-3 (2')	5/24/22	2	< 0.020	< 0.041	< 0.041	< 0.082	< 0.082	< 4.1	**56**	**130**	**186**	**430**
TP-3 (4')	5/24/22	4	< 0.017	< 0.034	< 0.034	< 0.067	< 0.067	< 3.4	< 9.4	< 47	< 47	**620**
TP-4 (2')	5/24/22	2	< 0.021	< 0.042	< 0.042	< 0.084	< 0.084	< 4.2	< 9.5	< 47	< 47	< 60
TP-4 (4')	5/24/22	4	< 0.017	< 0.033	< 0.033	< 0.067	< 0.067	< 3.3	< 9.6	< 48	< 48	< 60
CONFIRMATION SAMPLES												
Bois 1 - SW	7/20/22	0 - 4	< 0.024	< 0.049	< 0.049	< 0.098	< 0.098	< 4.9	< 15	< 49	< 49	< 60
Bois 1 - SN	7/20/22	0 - 4	< 0.025	< 0.050	< 0.050	< 0.10	< 0.10	< 5.0	< 15	< 48	< 48	**74**
~~Bois 1 - SE~~	~~7/20/22~~	~~0 - 4~~	~~< 0.024~~	~~< 0.049~~	~~< 0.049~~	~~< 0.097~~	~~< 0.097~~	~~< 4.9~~	~~7900~~	~~5100~~	~~13000~~	~~210~~
Bois #1 East	8/16/22	0 - 4	< 0.025	< 0.050	< 0.050	< 0.10	< 0.10	< 5.0	< 14	< 47	< 47	**140**
Bois 1 - SS	7/20/22	0 - 4	< 0.024	< 0.049	< 0.049	< 0.097	< 0.097	< 4.9	**42**	**50**	**92**	**85**
Bois 1 - F1	7/20/22	4	< 0.025	< 0.050	< 0.050	< 0.099	< 0.099	< 5.0	**80**	**83**	**163**	**290**
Bois 1 - F2	7/20/22	4	< 0.025	< 0.050	< 0.050	< 0.10	< 0.10	< 5.0	**1000**	**680**	**1680**	**210**

Notes:
1. Values reported in mg/kg
2. < = Value Less than Reporting Limit (RL)
3. Bold Indicates Analyte Detected
4. BTEX analyses by EPA Method SW 8021B.
5. TPH analyses by EPA Method SW 8015 Mod.
6. GRO/DRO/MRO = Gasoline/Diesel/Motor Oil
7. Yellow shaded cells indicate analytical samples that exceed the NMOC 19.15.29.12 Table 1 Closure Criteria for the site.

~~Bois 1 - SE~~ Sample Point Excavated

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

Figures



0 1000 2000 ft

1" = 2000 ft

Coordinate System:
NAD 1983 - STATE PLANE
NEW MEXICO CENTRAL - FT

N

GHD

EOG RESOURCES, INC.
SANDOVAL COUNTY, NEW MEXICO
BOIS D ARC DIVIDE 22 001

Project No. **12565401**
Date **June 2022**

SITE LOCATION MAP

FIGURE 1

Filename: \\ghdnet\ghd\US\Midland\Projects\562\12565401\Digital_Design\ACAD\Figures\12565401-GHD-0000-RPT-EN-0101_DL.dwg

Data Source: USGS 7.5 MINUTE QUADRANGLES "DEER MESA AND MULE DAM, NEW MEXICO)

0 40 80 ft

1" = 80 ft

Coordinate System:
NAD 1983 - STATE PLANE
NEW MEXICO CENTRAL - FT

N

GHD

EOG RESOURCES, INC.
SANDOVAL COUNTY, NEW MEXICO
BOIS D ARC DIVIDE 22 001

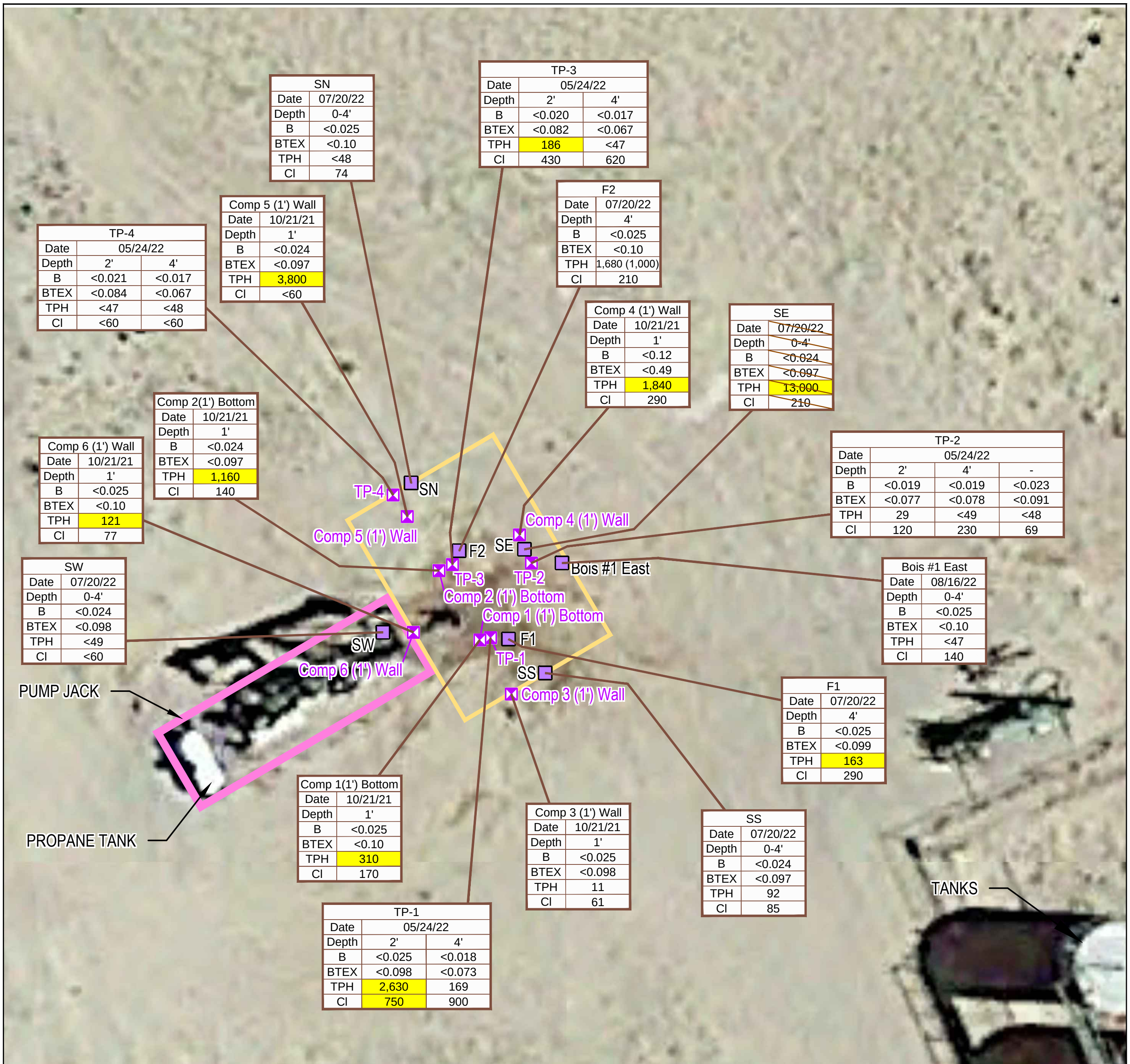
Project No. 12565401
Date June 2022

SITE DETAIL

FIGURE 2

Filename: \\ghdnet\ghd\US\Midland\Projects\562\12565401\Digital_Design\ACAD\Figures\12565401-GHD-0000-RPT-EN-0101_DL.dwg

Source: Microsoft Product Screen Shot(s) Reprinted with permission from Microsoft Corporation, Accessed: 2021



LEGEND

- INITIAL SOIL SAMPLE LOCATION
- CLOSURE SAMPLE LOCATION
- DEPTH — DEPTH OF SAMPLE (FT)
- B — BENZENE CONCENTRATION (MG/KG)
- BTEX — BENZENE, TOLUENE, ETHYLBENZENE & XYLENES CONCENTRATION (MG/KG)
- TPH — TOTAL PETROLEUM HYDROCARBONS CONCENTRATION (TOTAL) (MG/KG)
- Cl — CHLORIDES CONCENTRATION (MG/KG)

NOTE:

Results shaded yellow exceed Cleanup Criteria.

Cleanup Criteria		
Constituent	19.15.29.13 Restoration, Reclamation and Re-Vegetation (Impacted Area 0-4 Feet)	19.15.29.12 NMAC Table I Closure Criteria for Soils Impacted by a Release (Impacted Area 4 feet and deeper)
B	10 mg/kg	10 mg/kg
BTEX	50 mg/kg	50 mg/kg
TPH (total)	100 mg/kg	2,500 mg/kg (GRO/DRO 1,000)
Cl	600 mg/kg	20,000 mg/kg

0 10 20 ft

1" = 20 ft

Coordinate System:
NAD 1983 - STATE PLANE
NEW MEXICO CENTRAL - FT

N

GHD

EOG RESOURCES, INC.
SANDOVAL COUNTY, NEW MEXICO
BOIS D ARC DIVIDE 22 001

SAMPLING DETAIL WITH ANALYTICAL RESULTS

Project No. 12565401
Date September 2022

FIGURE 3

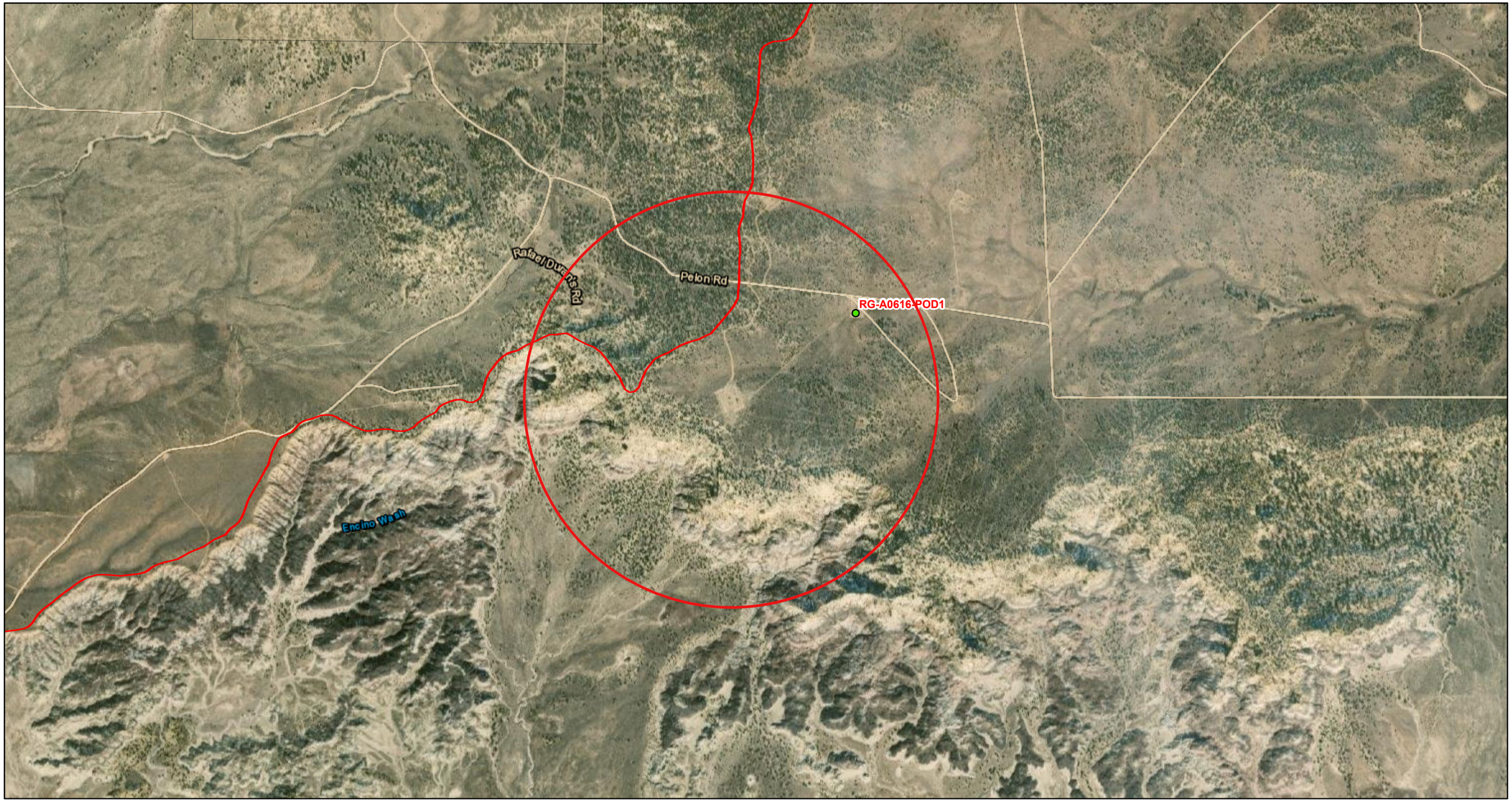
Filename: \\ghdnet\ghd\US\Midland\Projects\562\12565401\Digital_Design\ACAD\Figures\12565401-GHD-0000-RPT-EN-0101_DL.dwg

Source: Google Aerial Image dated June 2014, Accessed: 2021

Attachment A

Site Characterization Documentation

OSE POD Locations Map



9/1/2022, 8:57:50 AM

Override 1

OSE District Boundary

SiteBoundaries

GIS WATERS PODs

New Mexico State Trust Lands

Pending

Subsurface Estate

1:18,056

0 0.17 0.35 0.7 mi

0 0.28 0.55 1.1 km

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

Web Generated Map
Map is generated by web users.

WELL PLUGGING PLAN OF OPERATIONS

NOTE: A Well Plugging Plan of Operations shall be filed with and accepted by the Office of the State Engineer prior to plugging. This form may be used to plug a single well, or if you are plugging multiple monitoring wells on the same site using the same plugging methodology.

Alert! Your well may be eligible to participate in the Aquifer Mapping Program (AMP)-NM Bureau of Geology geoinfo.nmt.edu/resources/water/cgmn/ if within an area of interest and meets the minimum construction requirements, such as there is still water in your well, and the well construction reflected in a well record and log is not compromised, contact AMP at 575-835-5038 or -6951, or by email nmbg-waterlevels@nmt.edu, prior to completing this prior form. Showing proof to the OSE that your well was accepted in this program, may delay the plugging of your well until a later date.

I. FILING FEE: There is no filing fee for this form.

II. GENERAL / WELL OWNERSHIP: ☐ Check here if proposing one plan for multiple monitoring wells on the same site and attaching WD-08m

Existing Office of the State Engineer POD Number (Well Number) for well to be plugged: RG-A0616 POD1

Name of well owner: EOG Resources

Mailing address: 104 S 4th Street County:

City: Artesia State: New Mexico Zip code: 88210

Phone number: 505-632-0615 E-mail: bhall@envirotech-inc.com

III. WELL DRILLER INFORMATION:

Well Driller contracted to provide plugging services: Envirotech

New Mexico Well Driller License No.: WD-1521 Expiration Date: 11/30/2022

STATE ENGINEER OFFICE ALBUQUERQUE, NEW MEXICO 2022 AUG -2 AM 8:14

IV. WELL INFORMATION: ☐ **Check here if this plan describes method for plugging multiple monitoring wells on the same site and attach supplemental form WD-08m and skip to #2 in this section.**

Note: A copy of the existing Well Record for the well(s) to be plugged should be attached to this plan.

1) GPS Well Location: Latitude: 36 deg, 1 min, 57.77 sec
Longitude: -107 deg, 20 min, 54.78 sec, NAD 83

2) Reason(s) for plugging well(s):

Depth to groundwater in the well has been confirmed. Borehole is no longer needed.

3) Was well used for any type of monitoring program? no If yes, please use section VII of this form to detail what hydrogeologic parameters were monitored. If the well was used to monitor contaminated or poor quality water, authorization from the New Mexico Environment Department may be required prior to plugging.

4) Does the well tap brackish, saline, or otherwise poor quality water? no If yes, provide additional detail, including analytical results and/or laboratory report(s):

5) Static water level: 100.45 feet below land surface / feet above land surface (circle one)

6) Depth of the well: 144.3 feet

7) Inside diameter of innermost casing: 6 inches.

8) Casing material: 2" slotted pvc was inserted to prevent cave-in, entire length of pvc will be removed

9) The well was constructed with:

☐ an open-hole production interval, state the open interval: n/a

☐ a well screen or perforated pipe, state the screened interval(s): n/a

10) What annular interval surrounding the artesian casing of this well is cement-grouted? n/a

11) Was the well built with surface casing? no If yes, is the annulus surrounding the surface casing grouted or otherwise sealed? _____ If yes, please describe:

n/a

12) Has all pumping equipment and associated piping been removed from the well? n/a If not, describe remaining equipment and intentions to remove prior to plugging in Section VII of this form.

V. DESCRIPTION OF PLANNED WELL PLUGGING:

☐ **If plugging method differs between multiple wells on same site, a separate form must be completed for each method.**

Note: If this plan proposes to plug an artesian well in a way other than with cement grout, placed bottom to top with a tremie pipe, a detailed diagram of the well showing proposed final plugged configuration shall be attached, as well as any additional technical information, such as geophysical logs, that are necessary to adequately describe the proposal. Attach a copy of any signed OSE variance to this plugging plan.

Also, if this planned plugging plan requires a variance to 19.27.4 NMAC, attach a detailed variance request signed by the applicant.

1) Describe the method by which cement grout shall be placed in the well, or describe requested plugging methodology proposed for the well:

PVC casing will be removed prior to plugging. The 6" bore hole will be filled twith hydrated bentonite utilizing a tremie pipe. The bore hole will be filled from the bottom upwards to ground surface. The tremie pipe will remain submerged in the bentonite slurry through the sealing process. The drill cuttings will be used to recountour the surface

2) Will well head be cut-off below land surface after plugging? n/a

VI. PLUGGING AND SEALING MATERIALS:

Note: The plugging of a well that taps poor quality water may require the use of a specialty cement or specialty sealant. Attach a copy of the batch mix recipe from the cement company and/or product description for specialty cement mixes or any sealant that deviates from the list of OSE approved sealants.

1) For plugging intervals that employ cement grout, complete and attach Table A.

2) For plugging intervals that will employ approved non-cement based sealant(s), complete and attach Table B.

3) Theoretical volume of grout required to plug the well to land surface: 211.5

4) Type of Cement proposed: bentonite

5) Proposed cement grout mix: _____ gallons of water per 94 pound sack of Portland cement.

6) Will the grout be: _____ batch-mixed and delivered to the site

x mixed on site

7) Grout additives requested, and percent by dry weight relative to cement:

8) Additional notes and calculations:

VII. ADDITIONAL INFORMATION: List additional information below, or on separate sheet(s):

VIII. SIGNATURE:

I, Brittany Hall, say that I have carefully read the foregoing Well Plugging Plan of Operations and any attachments, which are a part hereof; that I am familiar with the rules and regulations of the State Engineer pertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well Plugging Plan of Operations and attachments are true to the best of my knowledge and belief.

Brittany Hall Digitally signed by Brittany Hall Date: 2022.08.01 15:25:45 -06'00' 8/1/2022

Signature of Applicant Date

IX. ACTION OF THE STATE ENGINEER:

This Well Plugging Plan of Operations is:

X Approved subject to the attached conditions.
_____ Not approved for the reasons provided on the attached letter.

Witness my hand and official seal this 16th day of August, 2022

Mike A. Hamman, P.E.
State Engineer

_____., New Mexico State Engineer

By: Amy Clyde
Amy Clyde, Water Resources Prof I

TABLE A - For plugging intervals that employ cement grout. Start with deepest interval.

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of grout placement (ft bgl)			
Bottom of proposed interval of grout placement (ft bgl)			
Theoretical volume of grout required per interval (gallons)			
Proposed cement grout mix gallons of water per 94-lb. sack of Portland cement			
Mixed on-site or batch-mixed and delivered?			
Grout additive 1 requested			
Additive 1 percent by dry weight relative to cement			
Grout additive 2 requested			
Additive 2 percent by dry weight relative to cement			

Mike A. Hamman, P.E.
State Engineer

TABLE B - For plugging intervals that will employ approved non-cement based sealant(s). Start with deepest interval.

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of sealant placement (ft bgl)			3 feet
Bottom of proposed sealant of grout placement (ft bgl)			144.3 feet
Theoretical volume of sealant required per interval (gallons)			211.5 gallons
Proposed abandonment sealant (manufacturer and trade name)			Bentonite chips

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL PLUGGING PLAN OF OPERATIONS
CONDITIONS OF APPROVAL

This plugging plan is approved subject to the following conditions of approval:

Well File No. RG-A0616 POD1

Permittee: EOG Resources
104 S 4th St
Artesia, NM 88210

Location: 36° 1' 57.77" N / -107° 20' 54.78" W

Plugging Plan File Date: August 2, 2022

1. The well shall be plugged in accordance with Subsection C of Section 19.27.4.30 NMAC by a well driller licensed in the State of New Mexico.

2. The well driller shall pull the well casing prior to placement of approved sealant.

   Theoretical volume of sealant required for abandonment of a 6"-diameter bore hole is approximately 1.469 gallons/foot after the ***casing is pulled***. Theoretical volume of sealant required was calculated to be 211.977 gallons. Total minimum volume of necessary sealant shall be calculated upon sounding the actual pluggable depth of the well.

3. The Well Plugging Plan of Operations submitted requests use of hydrated bentonite as a sealant.

4. Paragraph (1) of Subsection C of 19.27.4.30 NMAC specifies placement of sealant from the bottom of the well upward by use of a tremie pipe. In the alternative, surface pour is approved for this small diameter shallow well. The driller shall sound the top of the chip column periodically and record the column height and volume of sealant emplaced in order to gauge the appropriate progress of plugging and to establish that the chips have not bridged inappropriately uphole. If bridging occurs, it shall be rectified before plugging continues. In addition to these instructions, the driller shall follow the manufacturer's instructions for screening and the pouring of the bentonite product from the surface.

5. When placing bentonite chips above static water level, potable water shall be added to the borehole/casing in increments such that the chips are discharged into a small amount of standing water. If borehole lithology is too permeable to retain added water prior to chip placement, the driller shall discharge potable water into the borehole following every bag of chips, in accordance with the manufacturer's instructions, to provide the bentonite sufficient available water to swell and seal the borehole.

6. Should the NMED or another regulatory agency sharing jurisdiction of the project authorize, or by regulation require, a more stringent well plugging procedure than herein acknowledged, the more-stringent procedure should be followed. This, in part, includes provisions regarding pre-authorization to proceed, contaminant remediation, inspection,

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL PLUGGING PLAN OF OPERATIONS
CONDITIONS OF APPROVAL

pulling/perforating of casing, or prohibition of free discharge of any fluid from the borehole during or related to the plugging process.

7. The well driller shall file a complete plugging record with the State Engineer and the permit holder no later than 30 days after completion of the plugging.

The NMOSE Well Plugging Plan of Operations, as annotated, is hereby approved with the aforesaid conditions applied.

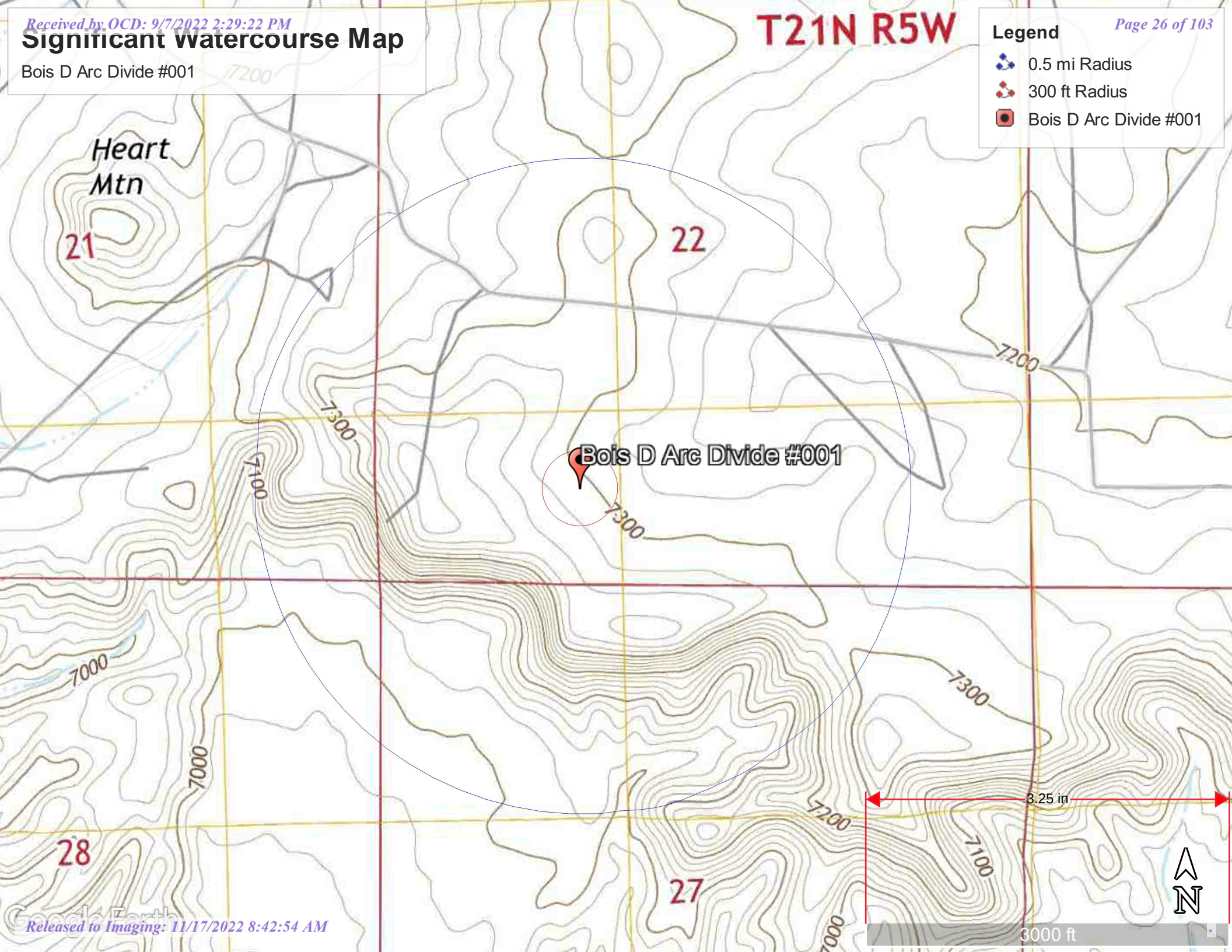
Witness my hand and seal this 16th day of August 2022.

Mike A. Hamman, P.E., State Engineer

By: Amy Clyde
Amy Clyde, Water Resources Professional I
District 1, Water Resource Allocation Program

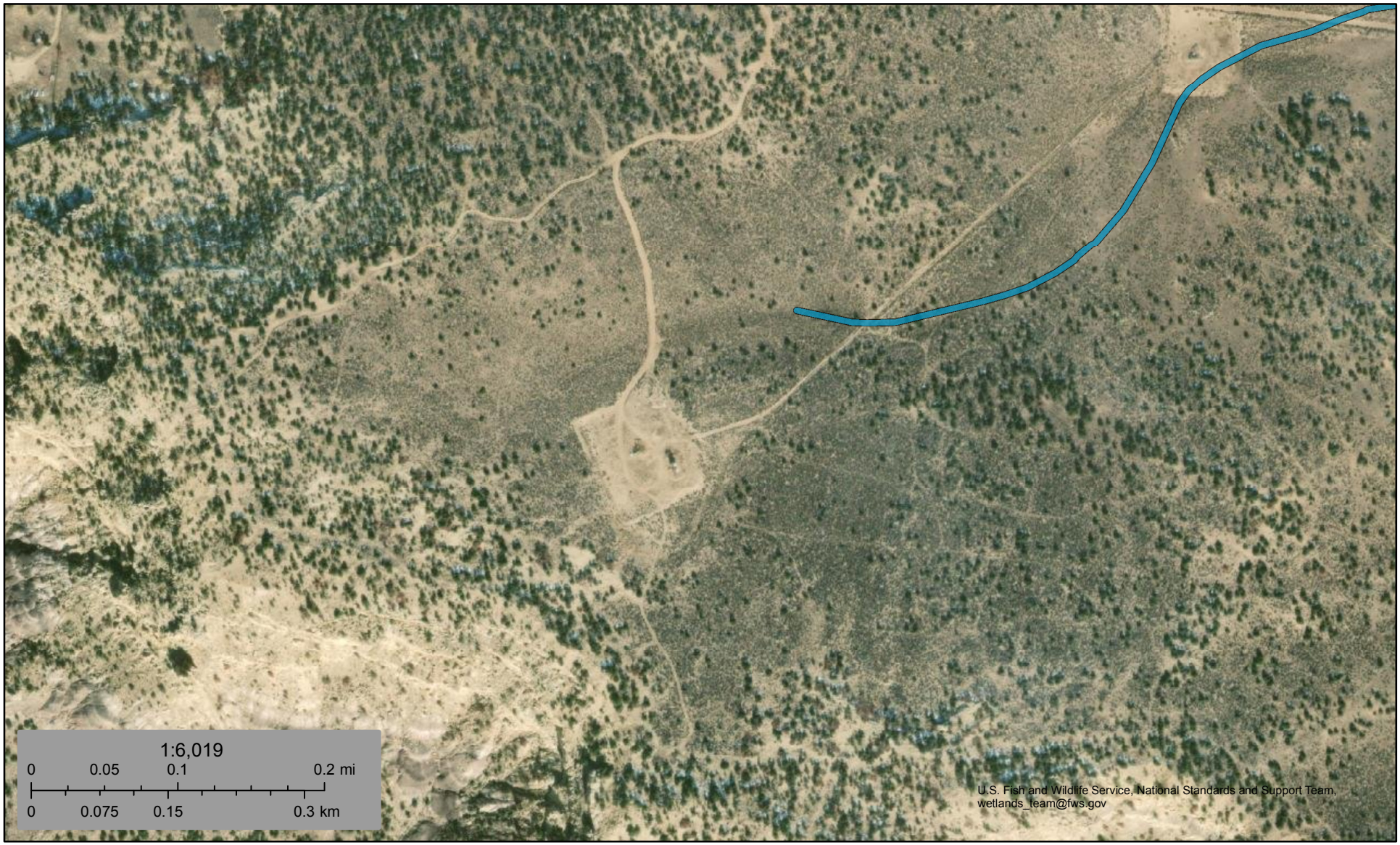
Significant Watercourse Map

Bois D Arc Divide #001



U.S. Fish and Wildlife Service
National Wetlands Inventory

Wetlands Map



May 23, 2022

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

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

National Flood Hazard Layer FIRMette

FEMA

107°21'33"W 36°2'2"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

107°20'56"W 36°1'33"N

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

Legend

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

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

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 5/23/2022 at 11:55 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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

Attachment B

Laboratory Analytical Reports and Chain-of-Custody Documentation

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

November 08, 2021

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

RE: Bois D Arc Divide 22 001 OrderNo.: 2110A96

Dear Becky Haskell:

Hall Environmental Analysis Laboratory received 6 sample(s) on 10/22/2021 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2110A96**
Date Reported: **11/8/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland
Client Sample ID: Comp 1 (1') bottom
Project: Bois D Arc Divide 22 001
Collection Date: 10/21/2021 12:20:00 PM
Lab ID: 2110A96-001 **Matrix:** SOIL **Received Date:** 10/22/2021 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	170	60		mg/Kg	20	10/28/2021 6:56:02 PM	63632
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	130	9.8		mg/Kg	1	11/2/2021 1:26:40 PM	63573
Motor Oil Range Organics (MRO)	180	49		mg/Kg	1	11/2/2021 1:26:40 PM	63573
Surr: DNOP	113	70-130		%Rec	1	11/2/2021 1:26:40 PM	63573
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/28/2021 8:58:00 AM	63545
Surr: BFB	103	70-130		%Rec	1	10/28/2021 8:58:00 AM	63545
EPA METHOD 8021B: VOLATILES						Analyst: **mb**	
Benzene	ND	0.025		mg/Kg	1	10/28/2021 8:58:00 AM	63545
Toluene	ND	0.050		mg/Kg	1	10/28/2021 8:58:00 AM	63545
Ethylbenzene	ND	0.050		mg/Kg	1	10/28/2021 8:58:00 AM	63545
Xylenes, Total	ND	0.10		mg/Kg	1	10/28/2021 8:58:00 AM	63545
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	10/28/2021 8:58:00 AM	63545

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2110A96**
Date Reported: **11/8/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland
Client Sample ID: Comp 2 (1') bottom
Project: Bois D Arc Divide 22 001
Collection Date: 10/21/2021 1:15:00 PM
Lab ID: 2110A96-002 **Matrix:** SOIL **Received Date:** 10/22/2021 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	140	60		mg/Kg	20	10/28/2021 7:08:26 PM	63632
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	530	98		mg/Kg	10	10/29/2021 1:43:50 PM	63573
Motor Oil Range Organics (MRO)	630	490		mg/Kg	10	10/29/2021 1:43:50 PM	63573
Surr: DNOP	0	70-130	S	%Rec	10	10/29/2021 1:43:50 PM	63573
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/28/2021 9:17:00 AM	63545
Surr: BFB	101	70-130		%Rec	1	10/28/2021 9:17:00 AM	63545
EPA METHOD 8021B: VOLATILES						Analyst: **mb**	
Benzene	ND	0.024		mg/Kg	1	10/28/2021 9:17:00 AM	63545
Toluene	ND	0.048		mg/Kg	1	10/28/2021 9:17:00 AM	63545
Ethylbenzene	ND	0.048		mg/Kg	1	10/28/2021 9:17:00 AM	63545
Xylenes, Total	ND	0.097		mg/Kg	1	10/28/2021 9:17:00 AM	63545
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	1	10/28/2021 9:17:00 AM	63545

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
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

Analytical Report
Lab Order **2110A96**
Date Reported: **11/8/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland
Client Sample ID: Comp 3 (1') wall
Project: Bois D Arc Divide 22 001
Collection Date: 10/21/2021 1:00:00 PM
Lab ID: 2110A96-003 **Matrix:** SOIL **Received Date:** 10/22/2021 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	61	60		mg/Kg	20	10/28/2021 7:20:51 PM	63632
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	11	9.9		mg/Kg	1	10/29/2021 1:54:54 PM	63573
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/29/2021 1:54:54 PM	63573
Surr: DNOP	94.8	70-130		%Rec	1	10/29/2021 1:54:54 PM	63573
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/28/2021 9:37:00 AM	63545
Surr: BFB	103	70-130		%Rec	1	10/28/2021 9:37:00 AM	63545
EPA METHOD 8021B: VOLATILES						Analyst: **mb**	
Benzene	ND	0.025		mg/Kg	1	10/28/2021 9:37:00 AM	63545
Toluene	ND	0.049		mg/Kg	1	10/28/2021 9:37:00 AM	63545
Ethylbenzene	ND	0.049		mg/Kg	1	10/28/2021 9:37:00 AM	63545
Xylenes, Total	ND	0.098		mg/Kg	1	10/28/2021 9:37:00 AM	63545
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	10/28/2021 9:37:00 AM	63545

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2110A96**
Date Reported: **11/8/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland
Client Sample ID: Comp 4 (1') wall
Project: Bois D Arc Divide 22 001
Collection Date: 10/21/2021 12:40:00 PM
Lab ID: 2110A96-004 **Matrix:** SOIL **Received Date:** 10/22/2021 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	290	60		mg/Kg	20	10/28/2021 7:58:04 PM	63641
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	1200	97		mg/Kg	10	10/29/2021 2:05:42 PM	63573
Motor Oil Range Organics (MRO)	640	490		mg/Kg	10	10/29/2021 2:05:42 PM	63573
Surr: DNOP	0	70-130	S	%Rec	10	10/29/2021 2:05:42 PM	63573
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	ND	24		mg/Kg	5	10/28/2021 9:57:00 AM	63545
Surr: BFB	98.3	70-130		%Rec	5	10/28/2021 9:57:00 AM	63545
EPA METHOD 8021B: VOLATILES						Analyst: **mb**	
Benzene	ND	0.12		mg/Kg	5	10/28/2021 9:57:00 AM	63545
Toluene	ND	0.24		mg/Kg	5	10/28/2021 9:57:00 AM	63545
Ethylbenzene	ND	0.24		mg/Kg	5	10/28/2021 9:57:00 AM	63545
Xylenes, Total	ND	0.49		mg/Kg	5	10/28/2021 9:57:00 AM	63545
Surr: 4-Bromofluorobenzene	97.1	70-130		%Rec	5	10/28/2021 9:57:00 AM	63545

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2110A96**
Date Reported: **11/8/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland
Client Sample ID: Comp 5 (1') wall
Project: Bois D Arc Divide 22 001
Collection Date: 10/21/2021 1:40:00 PM
Lab ID: 2110A96-005 **Matrix:** SOIL **Received Date:** 10/22/2021 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	10/28/2021 8:35:18 PM	63641
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	2100	94		mg/Kg	10	11/2/2021 1:48:10 PM	63573
Motor Oil Range Organics (MRO)	1700	470		mg/Kg	10	11/2/2021 1:48:10 PM	63573
Surr: DNOP	0	70-130	S	%Rec	10	11/2/2021 1:48:10 PM	63573
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/28/2021 10:16:00 AM	63545
Surr: BFB	98.5	70-130		%Rec	1	10/28/2021 10:16:00 AM	63545
EPA METHOD 8021B: VOLATILES						Analyst: **mb**	
Benzene	ND	0.024		mg/Kg	1	10/28/2021 10:16:00 AM	63545
Toluene	ND	0.049		mg/Kg	1	10/28/2021 10:16:00 AM	63545
Ethylbenzene	ND	0.049		mg/Kg	1	10/28/2021 10:16:00 AM	63545
Xylenes, Total	ND	0.097		mg/Kg	1	10/28/2021 10:16:00 AM	63545
Surr: 4-Bromofluorobenzene	96.3	70-130		%Rec	1	10/28/2021 10:16:00 AM	63545

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2110A96**
Date Reported: **11/8/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland
Client Sample ID: Comp 6 (1') wall
Project: Bois D Arc Divide 22 001
Collection Date: 10/21/2021 2:00:00 PM
Lab ID: 2110A96-006 **Matrix:** SOIL **Received Date:** 10/22/2021 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	77	60		mg/Kg	20	10/28/2021 9:12:31 PM	63641
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	35	9.8		mg/Kg	1	10/29/2021 2:16:30 PM	63573
Motor Oil Range Organics (MRO)	86	49		mg/Kg	1	10/29/2021 2:16:30 PM	63573
Surr: DNOP	87.1	70-130		%Rec	1	10/29/2021 2:16:30 PM	63573
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/28/2021 10:36:00 AM	63545
Surr: BFB	97.5	70-130		%Rec	1	10/28/2021 10:36:00 AM	63545
EPA METHOD 8021B: VOLATILES						Analyst: **mb**	
Benzene	ND	0.025		mg/Kg	1	10/28/2021 10:36:00 AM	63545
Toluene	ND	0.050		mg/Kg	1	10/28/2021 10:36:00 AM	63545
Ethylbenzene	ND	0.050		mg/Kg	1	10/28/2021 10:36:00 AM	63545
Xylenes, Total	ND	0.10		mg/Kg	1	10/28/2021 10:36:00 AM	63545
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	10/28/2021 10:36:00 AM	63545

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2110A96**
08-Nov-21

Client: GHD Midland
Project: Bois D Arc Divide 22 001

Sample ID: **MB-63632** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **63632** RunNo: **82423**
Prep Date: **10/28/2021** Analysis Date: **10/28/2021** SeqNo: **2925056** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-63632** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **63632** RunNo: **82423**
Prep Date: **10/28/2021** Analysis Date: **10/28/2021** SeqNo: **2925057** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.5	90	110			

Sample ID: **MB-63641** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **63641** RunNo: **82423**
Prep Date: **10/28/2021** Analysis Date: **10/28/2021** SeqNo: **2925088** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-63641** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **63641** RunNo: **82423**
Prep Date: **10/28/2021** Analysis Date: **10/28/2021** SeqNo: **2925089** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	90.8	90	110			

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
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#: **2110A96**
08-Nov-21

Client: GHD Midland
Project: Bois D Arc Divide 22 001

Sample ID: **MB-63573**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **63573**	RunNo: **82349**
Prep Date: **10/26/2021**	Analysis Date: **10/28/2021**	SeqNo: **2923815** 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		126	70	130			

Sample ID: **LCS-63573**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **63573**	RunNo: **82480**
Prep Date: **10/26/2021**	Analysis Date: **11/1/2021**	SeqNo: **2928293** 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	117	68.9	135			
Surr: DNOP	5.9		5.000		117	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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
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#: **2110A96**
08-Nov-21

Client: GHD Midland
Project: Bois D Arc Divide 22 001

Sample ID: **mb-63545** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS** Batch ID: **63545** RunNo: **82371**
Prep Date: **10/25/2021** Analysis Date: **10/27/2021** SeqNo: **2923257** 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	950		1000		95.3	70	130			

Sample ID: **lcs-63545** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS** Batch ID: **63545** RunNo: **82371**
Prep Date: **10/25/2021** Analysis Date: **10/28/2021** SeqNo: **2923259** 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	102	78.6	131			
Surr: BFB	1100		1000		108	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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
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#: **2110A96**

08-Nov-21

Client: GHD Midland

Project: Bois D Arc Divide 22 001

Sample ID: **mb-63545** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **63545** RunNo: **82371**

Prep Date: **10/25/2021** Analysis Date: **10/27/2021** SeqNo: **2923287** 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		101	70	130			

Sample ID: **lcs-63545** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **63545** RunNo: **82371**

Prep Date: **10/25/2021** Analysis Date: **10/28/2021** SeqNo: **2923289** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	1.000	0	97.0	80	120			
Toluene	0.97	0.050	1.000	0	97.0	80	120			
Ethylbenzene	0.97	0.050	1.000	0	96.8	80	120			
Xylenes, Total	2.9	0.10	3.000	0	97.8	80	120			
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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
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

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: 2110A96 | RcptNo: 1

Received By: Juan Rojas 10/22/2021 9:05:00 AM

Completed By: Isaiah Ortiz 10/22/2021 11:33:11 AM

Reviewed By: JN 10/22/21

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° 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: 10.22.21

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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.2	Good	Not Present			

Chain-of-Custody Record

Client: BHD for EDR

Mailing Address: 6121 Indian School Rd NE #200

Phone #: 505-269-0088

email or Fax#: Christine.Mathews@bhdenv.com

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: Bois D Arc Divide 22 #001

Project #: 12565401

Project Manager: Becky Haskell

Sampler: C. Mathews

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 0.4-0.2=0.2 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2110A96	BTEX / MTBE / TMBs (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
10/21/21	1220	Soil	Comp 1 (1') bottom	1 jar		001	X	X					X			
10/21/21	1315	Soil	Comp 2 (1') bottom	1 jar		002	X	X					X			
10/21/21	1300	Soil	Comp 3 (1') wall	1 jar		003	X	X					X			
10/21/21	1240	Soil	Comp 4 (1') wall	1 jar		004	X	X					X			
10/21/21	1340	Soil	Comp 5 (1') wall	1 jar		005	X	X					X			
10/21/21	1400	Soil	Comp 6 (1') wall	1 jar		006	X	X					X			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
10/22/21	900			CDO	10/22/21	9:05
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks: BTEX, TPH GRO/DRO/ORO and Chloride only Thanks!

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

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

June 02, 2022

Chase Settle
EOG
105 South Fourth Street
Artesia, NM 88210
TEL:
FAX:

RE: Bois De Arc 22 001 OrderNo.: 2205A83

Dear Chase Settle:

Hall Environmental Analysis Laboratory received 9 sample(s) on 5/25/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2205A83**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG **Client Sample ID:** TP-1 (2')
Project: Bois De Arc 22 001 **Collection Date:** 5/24/2022 10:20:00 AM
Lab ID: 2205A83-001 **Matrix:** MEOH (SOIL) **Received Date:** 5/25/2022 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**LRN**
Chloride	750	60		mg/Kg	20	5/25/2022 6:48:31 PM	67684
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**ED**
Diesel Range Organics (DRO)	1800	99		mg/Kg	10	5/25/2022 11:27:46 AM	67679
Motor Oil Range Organics (MRO)	830	500		mg/Kg	10	5/25/2022 11:27:46 AM	67679
Surr: DNOP	0	51.1-141	S	%Rec	10	5/25/2022 11:27:46 AM	67679
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/25/2022 9:26:28 AM	G88270
Surr: BFB	110	37.7-212		%Rec	1	5/25/2022 9:26:28 AM	G88270
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.025		mg/Kg	1	5/25/2022 9:26:28 AM	R88270
Toluene	ND	0.049		mg/Kg	1	5/25/2022 9:26:28 AM	R88270
Ethylbenzene	ND	0.049		mg/Kg	1	5/25/2022 9:26:28 AM	R88270
Xylenes, Total	ND	0.098		mg/Kg	1	5/25/2022 9:26:28 AM	R88270
Surr: 4-Bromofluorobenzene	98.5	70-130		%Rec	1	5/25/2022 9:26:28 AM	R88270

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	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2205A83**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG **Client Sample ID:** TP-1 (4')
Project: Bois De Arc 22 001 **Collection Date:** 5/24/2022 10:25:00 AM
Lab ID: 2205A83-002 **Matrix:** MEOH (SOIL) **Received Date:** 5/25/2022 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LRN**	
Chloride	900	61		mg/Kg	20	5/25/2022 7:00:56 PM	67684
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **ED**	
Diesel Range Organics (DRO)	49	9.4		mg/Kg	1	5/25/2022 11:51:20 AM	67679
Motor Oil Range Organics (MRO)	120	47		mg/Kg	1	5/25/2022 11:51:20 AM	67679
Surr: DNOP	102	51.1-141		%Rec	1	5/25/2022 11:51:20 AM	67679
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	5/25/2022 9:50:10 AM	G88270
Surr: BFB	94.4	37.7-212		%Rec	1	5/25/2022 9:50:10 AM	G88270
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.018		mg/Kg	1	5/25/2022 9:50:10 AM	R88270
Toluene	ND	0.037		mg/Kg	1	5/25/2022 9:50:10 AM	R88270
Ethylbenzene	ND	0.037		mg/Kg	1	5/25/2022 9:50:10 AM	R88270
Xylenes, Total	ND	0.073		mg/Kg	1	5/25/2022 9:50:10 AM	R88270
Surr: 4-Bromofluorobenzene	98.9	70-130		%Rec	1	5/25/2022 9:50:10 AM	R88270

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	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2205A83**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG **Client Sample ID:** TP-2 (2')
Project: Bois De Arc 22 001 **Collection Date:** 5/24/2022 10:35:00 AM
Lab ID: 2205A83-003 **Matrix:** MEOH (SOIL) **Received Date:** 5/25/2022 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**LRN**
Chloride	120	60		mg/Kg	20	5/25/2022 7:13:20 PM	67684
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**ED**
Diesel Range Organics (DRO)	29	9.2		mg/Kg	1	5/25/2022 12:15:05 PM	67679
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/25/2022 12:15:05 PM	67679
Surr: DNOP	101	51.1-141		%Rec	1	5/25/2022 12:15:05 PM	67679
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	5/25/2022 10:13:46 AM	G88270
Surr: BFB	91.2	37.7-212		%Rec	1	5/25/2022 10:13:46 AM	G88270
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.019		mg/Kg	1	5/25/2022 10:13:46 AM	R88270
Toluene	ND	0.038		mg/Kg	1	5/25/2022 10:13:46 AM	R88270
Ethylbenzene	ND	0.038		mg/Kg	1	5/25/2022 10:13:46 AM	R88270
Xylenes, Total	ND	0.077		mg/Kg	1	5/25/2022 10:13:46 AM	R88270
Surr: 4-Bromofluorobenzene	96.6	70-130		%Rec	1	5/25/2022 10:13:46 AM	R88270

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	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2205A83**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG **Client Sample ID:** TP-2 (4')
Project: Bois De Arc 22 001 **Collection Date:** 5/24/2022 10:40:00 AM
Lab ID: 2205A83-004 **Matrix:** MEOH (SOIL) **Received Date:** 5/25/2022 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LRN**	
Chloride	230	60		mg/Kg	20	5/25/2022 7:25:44 PM	67684
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **ED**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	5/25/2022 12:38:45 PM	67679
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/25/2022 12:38:45 PM	67679
Surr: DNOP	92.2	51.1-141		%Rec	1	5/25/2022 12:38:45 PM	67679
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	5/25/2022 10:37:16 AM	G88270
Surr: BFB	95.6	37.7-212		%Rec	1	5/25/2022 10:37:16 AM	G88270
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.019		mg/Kg	1	5/25/2022 10:37:16 AM	R88270
Toluene	ND	0.039		mg/Kg	1	5/25/2022 10:37:16 AM	R88270
Ethylbenzene	ND	0.039		mg/Kg	1	5/25/2022 10:37:16 AM	R88270
Xylenes, Total	ND	0.078		mg/Kg	1	5/25/2022 10:37:16 AM	R88270
Surr: 4-Bromofluorobenzene	96.6	70-130		%Rec	1	5/25/2022 10:37:16 AM	R88270

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	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2205A83**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG **Client Sample ID:** TP-2 East Wall
Project: Bois De Arc 22 001 **Collection Date:** 5/24/2022 10:50:00 AM
Lab ID: 2205A83-005 **Matrix:** MEOH (SOIL) **Received Date:** 5/25/2022 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LRN**	
Chloride	69	60		mg/Kg	20	5/25/2022 8:02:57 PM	67684
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **ED**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/25/2022 1:02:21 PM	67679
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/25/2022 1:02:21 PM	67679
Surr: DNOP	100	51.1-141		%Rec	1	5/25/2022 1:02:21 PM	67679
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.5		mg/Kg	1	5/25/2022 11:00:54 AM	G88270
Surr: BFB	92.5	37.7-212		%Rec	1	5/25/2022 11:00:54 AM	G88270
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	5/25/2022 11:00:54 AM	R88270
Toluene	ND	0.045		mg/Kg	1	5/25/2022 11:00:54 AM	R88270
Ethylbenzene	ND	0.045		mg/Kg	1	5/25/2022 11:00:54 AM	R88270
Xylenes, Total	ND	0.091		mg/Kg	1	5/25/2022 11:00:54 AM	R88270
Surr: 4-Bromofluorobenzene	98.4	70-130		%Rec	1	5/25/2022 11:00:54 AM	R88270

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	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2205A83**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG **Client Sample ID:** TP-3 (2')
Project: Bois De Arc 22 001 **Collection Date:** 5/24/2022 11:00:00 AM
Lab ID: 2205A83-006 **Matrix:** MEOH (SOIL) **Received Date:** 5/25/2022 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**LRN**
Chloride	430	60		mg/Kg	20	5/25/2022 8:15:22 PM	67684
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**ED**
Diesel Range Organics (DRO)	56	9.7		mg/Kg	1	5/25/2022 1:26:03 PM	67679
Motor Oil Range Organics (MRO)	130	48		mg/Kg	1	5/25/2022 1:26:03 PM	67679
Surr: DNOP	102	51.1-141		%Rec	1	5/25/2022 1:26:03 PM	67679
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	5/25/2022 11:24:30 AM	G88270
Surr: BFB	95.4	37.7-212		%Rec	1	5/25/2022 11:24:30 AM	G88270
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.020		mg/Kg	1	5/25/2022 11:24:30 AM	R88270
Toluene	ND	0.041		mg/Kg	1	5/25/2022 11:24:30 AM	R88270
Ethylbenzene	ND	0.041		mg/Kg	1	5/25/2022 11:24:30 AM	R88270
Xylenes, Total	ND	0.082		mg/Kg	1	5/25/2022 11:24:30 AM	R88270
Surr: 4-Bromofluorobenzene	99.3	70-130		%Rec	1	5/25/2022 11:24:30 AM	R88270

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	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2205A83**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG **Client Sample ID:** TP-3 (4')
Project: Bois De Arc 22 001 **Collection Date:** 5/24/2022 11:05:00 AM
Lab ID: 2205A83-007 **Matrix:** MEOH (SOIL) **Received Date:** 5/25/2022 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**LRN**
Chloride	620	60		mg/Kg	20	5/25/2022 8:27:46 PM	67684
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**ED**
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	5/25/2022 1:49:59 PM	67679
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/25/2022 1:49:59 PM	67679
Surr: DNOP	103	51.1-141		%Rec	1	5/25/2022 1:49:59 PM	67679
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	5/25/2022 11:48:17 AM	G88270
Surr: BFB	92.2	37.7-212		%Rec	1	5/25/2022 11:48:17 AM	G88270
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.017		mg/Kg	1	5/25/2022 11:48:17 AM	R88270
Toluene	ND	0.034		mg/Kg	1	5/25/2022 11:48:17 AM	R88270
Ethylbenzene	ND	0.034		mg/Kg	1	5/25/2022 11:48:17 AM	R88270
Xylenes, Total	ND	0.067		mg/Kg	1	5/25/2022 11:48:17 AM	R88270
Surr: 4-Bromofluorobenzene	95.1	70-130		%Rec	1	5/25/2022 11:48:17 AM	R88270

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	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2205A83**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG **Client Sample ID:** TP-4 (2')
Project: Bois De Arc 22 001 **Collection Date:** 5/24/2022 11:15:00 AM
Lab ID: 2205A83-008 **Matrix:** MEOH (SOIL) **Received Date:** 5/25/2022 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LRN**	
Chloride	ND	60		mg/Kg	20	5/25/2022 9:29:49 PM	67684
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **ED**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/25/2022 2:13:45 PM	67679
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/25/2022 2:13:45 PM	67679
Surr: DNOP	99.0	51.1-141		%Rec	1	5/25/2022 2:13:45 PM	67679
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	5/25/2022 12:11:43 PM	G88270
Surr: BFB	92.9	37.7-212		%Rec	1	5/25/2022 12:11:43 PM	G88270
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.021		mg/Kg	1	5/25/2022 12:11:43 PM	R88270
Toluene	ND	0.042		mg/Kg	1	5/25/2022 12:11:43 PM	R88270
Ethylbenzene	ND	0.042		mg/Kg	1	5/25/2022 12:11:43 PM	R88270
Xylenes, Total	ND	0.084		mg/Kg	1	5/25/2022 12:11:43 PM	R88270
Surr: 4-Bromofluorobenzene	96.5	70-130		%Rec	1	5/25/2022 12:11:43 PM	R88270

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	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2205A83**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG **Client Sample ID:** TP-4 (4')
Project: Bois De Arc 22 001 **Collection Date:** 5/24/2022 11:20:00 AM
Lab ID: 2205A83-009 **Matrix:** MEOH (SOIL) **Received Date:** 5/25/2022 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LRN**	
Chloride	ND	60		mg/Kg	20	5/25/2022 9:42:14 PM	67684
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **ED**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	5/25/2022 3:33:28 PM	67679
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/25/2022 3:33:28 PM	67679
Surr: DNOP	96.8	51.1-141		%Rec	1	5/25/2022 3:33:28 PM	67679
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	5/25/2022 12:35:11 PM	G88270
Surr: BFB	91.8	37.7-212		%Rec	1	5/25/2022 12:35:11 PM	G88270
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.017		mg/Kg	1	5/25/2022 12:35:11 PM	R88270
Toluene	ND	0.033		mg/Kg	1	5/25/2022 12:35:11 PM	R88270
Ethylbenzene	ND	0.033		mg/Kg	1	5/25/2022 12:35:11 PM	R88270
Xylenes, Total	ND	0.067		mg/Kg	1	5/25/2022 12:35:11 PM	R88270
Surr: 4-Bromofluorobenzene	97.6	70-130		%Rec	1	5/25/2022 12:35:11 PM	R88270

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	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2205A83**

02-Jun-22

Client: EOG

Project: Bois De Arc 22 001

Sample ID: **MB-67684**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **67684**	RunNo: **88280**
Prep Date: **5/25/2022**	Analysis Date: **5/25/2022**	SeqNo: **3130699** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-67684**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **67684**	RunNo: **88280**
Prep Date: **5/25/2022**	Analysis Date: **5/25/2022**	SeqNo: **3130700** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.5	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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2205A83**

02-Jun-22

Client: EOG

Project: Bois De Arc 22 001

Sample ID: **MB-67679**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **67679**	RunNo: **88246**
Prep Date: **5/25/2022**	Analysis Date: **5/25/2022**	SeqNo: **3129579** 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		91.8	51.1	141			

Sample ID: **LCS-67679**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **67679**	RunNo: **88246**
Prep Date: **5/25/2022**	Analysis Date: **5/25/2022**	SeqNo: **3129580** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.7	64.4	127			
Surr: DNOP	4.5		5.000		89.9	51.1	141			

Sample ID: **MB-67680**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **67680**	RunNo: **88246**
Prep Date: **5/25/2022**	Analysis Date: **5/26/2022**	SeqNo: **3132682** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.3		10.00		93.1	51.1	141			

Sample ID: **LCS-67680**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **67680**	RunNo: **88246**
Prep Date: **5/25/2022**	Analysis Date: **5/26/2022**	SeqNo: **3132685** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.000		93.1	51.1	141			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2205A83**

02-Jun-22

Client: EOG

Project: Bois De Arc 22 001

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **PBS**	Batch ID: **G88270**	RunNo: **88270**							
Prep Date:	Analysis Date: **5/25/2022**	SeqNo: **3130051**	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		98.4	37.7	212			

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **LCSS**	Batch ID: **G88270**	RunNo: **88270**							
Prep Date:	Analysis Date: **5/25/2022**	SeqNo: **3130052**	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	72.3	137			
Surr: BFB	2100		1000		210	37.7	212			

Sample ID: **mb-67661**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **PBS**	Batch ID: **67661**	RunNo: **88270**							
Prep Date: **5/24/2022**	Analysis Date: **5/26/2022**	SeqNo: **3130075**	Units: **%Rec**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	900		1000		90.3	37.7	212			

Sample ID: **lcs-67661**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **LCSS**	Batch ID: **67661**	RunNo: **88270**							
Prep Date: **5/24/2022**	Analysis Date: **5/25/2022**	SeqNo: **3130076**	Units: **%Rec**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	2100		1000		205	37.7	212			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2205A83**

02-Jun-22

Client: EOG

Project: Bois De Arc 22 001

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **R88270**	RunNo: **88270**
Prep Date:	Analysis Date: **5/25/2022**	SeqNo: **3130099** 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	0.99		1.000		99.0	70	130			

Sample ID: **100ng btex lcs**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **R88270**	RunNo: **88270**
Prep Date:	Analysis Date: **5/25/2022**	SeqNo: **3130100** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	95.1	80	120			
Toluene	0.99	0.050	1.000	0	98.5	80	120			
Ethylbenzene	0.98	0.050	1.000	0	97.8	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.8	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	70	130			

Sample ID: **mb-67661**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **67661**	RunNo: **88270**
Prep Date: **5/24/2022**	Analysis Date: **5/26/2022**	SeqNo: **3130123** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.96		1.000		96.4	70	130			

Sample ID: **LCS-67661**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **67661**	RunNo: **88270**
Prep Date: **5/24/2022**	Analysis Date: **5/25/2022**	SeqNo: **3130124** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.98		1.000		98.3	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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **EOG** Work Order Number: **2205A83** RcptNo: **1**

Received By: **Juan Rojas** **5/25/2022 7:05:00 AM**

Completed By: **Cheyenne Cason** **5/25/2022 8:00:54 AM**

Reviewed By: 5-25-22

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° 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: gn 5/25/22

Special Handling (if applicable)

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

Person Notified: Date:

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.2	Good	Yes			
2	2.6	Good	Yes			

Chain-of-Custody Record

Client: ~~SHF~~ EOG Resources

Mailing Address: Chase Settle
Bill EOG Send Report to EOG

Phone #: 505-269-0086

email or Fax#: christine.mathews@eogr.com

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: Thurs
☐ Standard ☒ Rush 48 HR

Project Name: ~~12565401~~ Bois De Arc 8 #001

Project #: 12565401

Project Manager: C. Mathews

Sampler: Christine Mathews

On Ice: ☑ Yes ☐ No

# of Coolers: 2

Cooler Temp(including CF): 1.3+0.1=1.2 (°C)

2.7+0.1=2.6

HEAL No. 2205A83

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
5/24	1020	soil	TP-1 (2')	(1) 4oz jar	Ice	001
	1025		TP-1 (4')			002
	1035		TP-2 (2')			003
	1040		TP-2 (4')			~~005~~ 004
	1050		TP-2 East Wall			005
	1100		TP-3 (2')			006
	1105		TP-3 (4')			007
	1115		TP-4 (2')			008
	1120		TP-4 (4')			009

Analysis Request

BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
X	X					X			
X	X					X			
X	X					X			
X	X					X			
X	X					X			
X	X					X			
X	X					X			
X	X					X			
X	X					X			

Remarks:

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
5/24/22	1536		Chris Wait		5/24/22	1526
5/24/22	1804	Chris Wait	Courier		5/25/22	7:05

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.

jm 5/25/22

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

July 29, 2022

Christine Mathews
GHD
6121 Indian School Road, NE #200
Albuquerque, NM 87110
TEL: (505) 884-0672
FAX:

RE: Bois D 001 OrderNo.: 2207972

Dear Christine Mathews:

Hall Environmental Analysis Laboratory received 6 sample(s) on 7/20/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2207972**
Date Reported: **7/29/2022**

CLIENT: GHD
Client Sample ID: Bois1 - SW
Project: Bois D 001
Collection Date: 7/20/2022 9:30:00 AM
Lab ID: 2207972-001 **Matrix:** SOIL **Received Date:** 7/20/2022 12:31:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	7/21/2022 11:56:55 AM	68948
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **ED**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/21/2022 12:51:33 PM	68939
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/21/2022 12:51:33 PM	68939
Surr: DNOP	115	51.1-141		%Rec	1	7/21/2022 12:51:33 PM	68939
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/21/2022 11:30:00 AM	68936
Surr: BFB	91.2	37.7-212		%Rec	1	7/21/2022 11:30:00 AM	68936
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.024		mg/Kg	1	7/21/2022 11:30:00 AM	68936
Toluene	ND	0.049		mg/Kg	1	7/21/2022 11:30:00 AM	68936
Ethylbenzene	ND	0.049		mg/Kg	1	7/21/2022 11:30:00 AM	68936
Xylenes, Total	ND	0.098		mg/Kg	1	7/21/2022 11:30:00 AM	68936
Surr: 4-Bromofluorobenzene	91.9	70-130		%Rec	1	7/21/2022 11:30:00 AM	68936

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2207972**
Date Reported: **7/29/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: Bois1 - SN
Project: Bois D 001
Collection Date: 7/20/2022 9:35:00 AM
Lab ID: 2207972-002 **Matrix:** SOIL **Received Date:** 7/20/2022 12:31:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	74	60		mg/Kg	20	7/21/2022 12:09:15 PM	68948
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **ED**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/21/2022 1:05:00 PM	68939
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/21/2022 1:05:00 PM	68939
Surr: DNOP	99.3	51.1-141		%Rec	1	7/21/2022 1:05:00 PM	68939
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/21/2022 11:49:00 AM	68936
Surr: BFB	94.8	37.7-212		%Rec	1	7/21/2022 11:49:00 AM	68936
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.025		mg/Kg	1	7/21/2022 11:49:00 AM	68936
Toluene	ND	0.050		mg/Kg	1	7/21/2022 11:49:00 AM	68936
Ethylbenzene	ND	0.050		mg/Kg	1	7/21/2022 11:49:00 AM	68936
Xylenes, Total	ND	0.10		mg/Kg	1	7/21/2022 11:49:00 AM	68936
Surr: 4-Bromofluorobenzene	91.3	70-130		%Rec	1	7/21/2022 11:49:00 AM	68936

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	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2207972**
Date Reported: **7/29/2022**

CLIENT: GHD
Client Sample ID: Bois1 - SE
Project: Bois D 001
Collection Date: 7/20/2022 9:40:00 AM
Lab ID: 2207972-003 **Matrix:** SOIL **Received Date:** 7/20/2022 12:31:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	210	60		mg/Kg	20	7/21/2022 12:46:18 PM	68948
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	7900	670		mg/Kg	50	7/21/2022 12:59:59 PM	68939
Motor Oil Range Organics (MRO)	5100	2200		mg/Kg	50	7/21/2022 12:59:59 PM	68939
Surr: DNOP	0	51.1-141	S	%Rec	50	7/21/2022 12:59:59 PM	68939
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/21/2022 12:09:00 PM	68936
Surr: BFB	93.2	37.7-212		%Rec	1	7/21/2022 12:09:00 PM	68936
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.024		mg/Kg	1	7/21/2022 12:09:00 PM	68936
Toluene	ND	0.049		mg/Kg	1	7/21/2022 12:09:00 PM	68936
Ethylbenzene	ND	0.049		mg/Kg	1	7/21/2022 12:09:00 PM	68936
Xylenes, Total	ND	0.097		mg/Kg	1	7/21/2022 12:09:00 PM	68936
Surr: 4-Bromofluorobenzene	89.6	70-130		%Rec	1	7/21/2022 12:09:00 PM	68936

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	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2207972**
Date Reported: **7/29/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: Bois1- SS
Project: Bois D 001
Collection Date: 7/20/2022 9:45:00 AM
Lab ID: 2207972-004 **Matrix:** SOIL **Received Date:** 7/20/2022 12:31:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	85	60		mg/Kg	20	7/21/2022 12:58:39 PM	68948
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **ED**	
Diesel Range Organics (DRO)	42	14		mg/Kg	1	7/21/2022 1:32:18 PM	68939
Motor Oil Range Organics (MRO)	50	47		mg/Kg	1	7/21/2022 1:32:18 PM	68939
Surr: DNOP	133	51.1-141		%Rec	1	7/21/2022 1:32:18 PM	68939
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/21/2022 12:29:00 PM	68936
Surr: BFB	93.8	37.7-212		%Rec	1	7/21/2022 12:29:00 PM	68936
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.024		mg/Kg	1	7/21/2022 12:29:00 PM	68936
Toluene	ND	0.049		mg/Kg	1	7/21/2022 12:29:00 PM	68936
Ethylbenzene	ND	0.049		mg/Kg	1	7/21/2022 12:29:00 PM	68936
Xylenes, Total	ND	0.097		mg/Kg	1	7/21/2022 12:29:00 PM	68936
Surr: 4-Bromofluorobenzene	90.3	70-130		%Rec	1	7/21/2022 12:29:00 PM	68936

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	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2207972**
Date Reported: **7/29/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: Bois1 - F1
Project: Bois D 001
Collection Date: 7/20/2022 9:50:00 AM
Lab ID: 2207972-005 **Matrix:** SOIL **Received Date:** 7/20/2022 12:31:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	290	60		mg/Kg	20	7/21/2022 1:10:59 PM	68948
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	80	15		mg/Kg	1	7/26/2022 8:41:31 AM	69051
Motor Oil Range Organics (MRO)	83	51		mg/Kg	1	7/26/2022 8:41:31 AM	69051
Surr: DNOP	108	21-129		%Rec	1	7/26/2022 8:41:31 AM	69051
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/21/2022 1:09:00 PM	68936
Surr: BFB	97.3	37.7-212		%Rec	1	7/21/2022 1:09:00 PM	68936
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.025		mg/Kg	1	7/21/2022 1:09:00 PM	68936
Toluene	ND	0.050		mg/Kg	1	7/21/2022 1:09:00 PM	68936
Ethylbenzene	ND	0.050		mg/Kg	1	7/21/2022 1:09:00 PM	68936
Xylenes, Total	ND	0.099		mg/Kg	1	7/21/2022 1:09:00 PM	68936
Surr: 4-Bromofluorobenzene	93.7	70-130		%Rec	1	7/21/2022 1:09:00 PM	68936

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	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2207972**
Date Reported: **7/29/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: Bois1 - F2
Project: Bois D 001
Collection Date: 7/20/2022 9:55:00 AM
Lab ID: 2207972-006 **Matrix:** SOIL **Received Date:** 7/20/2022 12:31:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	210	60		mg/Kg	20	7/21/2022 1:23:20 PM	68948
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **ED**	
Diesel Range Organics (DRO)	1000	30		mg/Kg	2	7/21/2022 12:10:30 PM	68939
Motor Oil Range Organics (MRO)	680	99		mg/Kg	2	7/21/2022 12:10:30 PM	68939
Surr: DNOP	98.7	51.1-141		%Rec	2	7/21/2022 12:10:30 PM	68939
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/21/2022 1:29:00 PM	68936
Surr: BFB	93.6	37.7-212		%Rec	1	7/21/2022 1:29:00 PM	68936
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.025		mg/Kg	1	7/21/2022 1:29:00 PM	68936
Toluene	ND	0.050		mg/Kg	1	7/21/2022 1:29:00 PM	68936
Ethylbenzene	ND	0.050		mg/Kg	1	7/21/2022 1:29:00 PM	68936
Xylenes, Total	ND	0.10		mg/Kg	1	7/21/2022 1:29:00 PM	68936
Surr: 4-Bromofluorobenzene	93.9	70-130		%Rec	1	7/21/2022 1:29:00 PM	68936

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	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2207972**

29-Jul-22

Client: GHD

Project: Bois D 001

Sample ID: **MB-68948**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **68948**	RunNo: **89679**
Prep Date: **7/21/2022**	Analysis Date: **7/21/2022**	SeqNo: **3194020** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-68948**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **68948**	RunNo: **89679**
Prep Date: **7/21/2022**	Analysis Date: **7/21/2022**	SeqNo: **3194021** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.5	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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2207972**

29-Jul-22

Client: GHD

Project: Bois D 001

Sample ID: **LCS-68939**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **68939**	RunNo: **89671**
Prep Date: **7/20/2022**	Analysis Date: **7/21/2022**	SeqNo: **3192551** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	15	50.00	0	97.9	64.4	127			
Surr: DNOP	5.0		5.000		99.4	51.1	141			

Sample ID: **MB-68939**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **68939**	RunNo: **89671**
Prep Date: **7/20/2022**	Analysis Date: **7/21/2022**	SeqNo: **3192552** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		115	51.1	141			

Sample ID: **MB-69051**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **69051**	RunNo: **89822**
Prep Date: **7/25/2022**	Analysis Date: **7/27/2022**	SeqNo: **3199181** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.6		10.00		96.0	21	129			

Sample ID: **LCS-69051**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **69051**	RunNo: **89822**
Prep Date: **7/25/2022**	Analysis Date: **7/27/2022**	SeqNo: **3199185** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	15	50.00	0	98.6	64.4	127			
Surr: DNOP	4.9		5.000		98.3	21	129			

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2207972**

29-Jul-22

Client: GHD

Project: Bois D 001

Sample ID: **lcs-68936**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **68936**	RunNo: **89674**
Prep Date: **7/20/2022**	Analysis Date: **7/21/2022**	SeqNo: **3192662** 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	104	72.3	137			
Surr: BFB	2000		1000		202	37.7	212			

Sample ID: **mb-68936**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **68936**	RunNo: **89674**
Prep Date: **7/20/2022**	Analysis Date: **7/21/2022**	SeqNo: **3192663** 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	970		1000		97.2	37.7	212			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2207972**

29-Jul-22

Client: GHD

Project: Bois D 001

Sample ID: **lcs-68936**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **68936**	RunNo: **89674**
Prep Date: **7/20/2022**	Analysis Date: **7/21/2022**	SeqNo: **3192683** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.025	1.000	0	91.0	80	120			
Toluene	0.93	0.050	1.000	0	92.9	80	120			
Ethylbenzene	0.94	0.050	1.000	0	93.9	80	120			
Xylenes, Total	2.8	0.10	3.000	0	93.7	80	120			
Surr: 4-Bromofluorobenzene	0.92		1.000		92.5	70	130			

Sample ID: **mb-68936**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **68936**	RunNo: **89674**
Prep Date: **7/20/2022**	Analysis Date: **7/21/2022**	SeqNo: **3192684** 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	0.93		1.000		93.5	70	130			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: GHD | Work Order Number: 2207972 | RcptNo: 1

Received By: Joseph Alderette 7/20/2022 12:31:00 PM

Completed By: Isaiah Ortiz 7/20/2022 1:42:11 PM

Reviewed By: JA 7.20.22

Chain of Custody

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

Log In

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

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: SU 7/20/22

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	16.1	Good	Not Present			

Chain-of-Custody Record

Client: GHD for EOG

Direct Bill EOG Resources

Mailing Address:

Phone #:

email or Fax#: christine.Mathews@ghd.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

☐ Standard ☑ Rush 24 hour

Project Name: Bois D #001

Project #: 12565401

Project Manager: Christine Mathews

Sampler: CM

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp (including CF): 16.1 - 0 = 16.1 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2207972	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	TPH 8015D/GRO/DRO 1005M	BTEX 8021B	Chloride 300			
7-20-22	0930	S	Bois 1-SW	1402 Jar		001																
7-20-22	0935		Bois 1-SN			002																
7-20-22	0940		Bois 1-SE			003																
7-20-22	0945		Bois 1-SS			004																
7-20-22	0950		Bois 1-F1			005																
7-20-22	0955		Bois 1-F2			006																
						007																
						ID 7/20																

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
7-2022	1231			CDC	7-20-22	12:31
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
	1-					

Remarks: Direct Bill EOG Resources

Rush 24 hour TAT

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

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

August 22, 2022

Christine Mathews
GHD
6121 Indian School Road, NE #200
Albuquerque, NM 87110
TEL: (505) 884-0672
FAX

RE: Bois 1 OrderNo.: 2208955

Dear Christine Mathews:

Hall Environmental Analysis Laboratory received 1 sample(s) on 8/16/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2208955**
Date Reported: **8/22/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: Bois #1 East
Project: Bois 1
Collection Date: 8/16/2022 10:00:00 AM
Lab ID: 2208955-001 **Matrix:** SOIL **Received Date:** 8/16/2022 12:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	140	60		mg/Kg	20	8/17/2022 12:13:21 PM	69557
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/17/2022 2:52:35 PM	69549
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/17/2022 2:52:35 PM	69549
Surr: DNOP	92.6	21-129		%Rec	1	8/17/2022 2:52:35 PM	69549
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/17/2022 2:27:00 PM	69547
Surr: BFB	104	37.7-212		%Rec	1	8/17/2022 2:27:00 PM	69547
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.025		mg/Kg	1	8/17/2022 2:27:00 PM	69547
Toluene	ND	0.050		mg/Kg	1	8/17/2022 2:27:00 PM	69547
Ethylbenzene	ND	0.050		mg/Kg	1	8/17/2022 2:27:00 PM	69547
Xylenes, Total	ND	0.10		mg/Kg	1	8/17/2022 2:27:00 PM	69547
Surr: 4-Bromofluorobenzene	98.4	70-130		%Rec	1	8/17/2022 2:27:00 PM	69547

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	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2208955**

22-Aug-22

Client: GHD

Project: Bois 1

Sample ID: **MB-69557**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **69557**	RunNo: **90334**
Prep Date: **8/17/2022**	Analysis Date: **8/17/2022**	SeqNo: **3224202** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-69557**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **69557**	RunNo: **90334**
Prep Date: **8/17/2022**	Analysis Date: **8/17/2022**	SeqNo: **3224203** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.4	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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2208955**

22-Aug-22

Client: GHD

Project: Bois 1

Sample ID: **MB-69549**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **69549**	RunNo: **90349**
Prep Date: **8/17/2022**	Analysis Date: **8/17/2022**	SeqNo: **3223174** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	7.9		10.00		78.7	21	129			

Sample ID: **LCS-69549**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **69549**	RunNo: **90349**
Prep Date: **8/17/2022**	Analysis Date: **8/17/2022**	SeqNo: **3223175** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	15	50.00	0	95.9	64.4	127			
Surr: DNOP	3.9		5.000		78.6	21	129			

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2208955**

22-Aug-22

Client: GHD

Project: Bois 1

Sample ID: **lcs-69547**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **69547**	RunNo: **90339**
Prep Date: **8/16/2022**	Analysis Date: **8/17/2022**	SeqNo: **3223657** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	87.5	72.3	137			
Surr: BFB	2000		1000		205	37.7	212			

Sample ID: **mb-69547**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **69547**	RunNo: **90339**
Prep Date: **8/16/2022**	Analysis Date: **8/17/2022**	SeqNo: **3223658** 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		103	37.7	212			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2208955**

22-Aug-22

Client: GHD

Project: Bois 1

Sample ID: **lcs-69547**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **69547**	RunNo: **90339**
Prep Date: **8/16/2022**	Analysis Date: **8/17/2022**	SeqNo: **3223687** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	93.3	80	120			
Toluene	0.96	0.050	1.000	0	96.2	80	120			
Ethylbenzene	0.97	0.050	1.000	0	97.4	80	120			
Xylenes, Total	2.9	0.10	3.000	0	97.2	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	70	130			

Sample ID: **mb-69547**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **69547**	RunNo: **90339**
Prep Date: **8/16/2022**	Analysis Date: **8/17/2022**	SeqNo: **3223688** 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	0.99		1.000		99.5	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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **GHD** Work Order Number: **2208955** RcptNo: **1**

Received By: **John Caldwell** **8/16/2022 12:15:00 PM** John Caldwell

Completed By: **Cheyenne Cason** **8/16/2022 12:44:26 PM** Chey

Reviewed By: JN 8/16/22

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° 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: KPa 8.16.22

Special Handling (if applicable)

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

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.4	Good	Not Present			

Chain-of-Custody Record

Client: EHD

Mailing Address:

Phone #: 505 261 0856

email or Fax#: Christine.Mathews@ghd.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☑ Rush 24 hour

Project Name: Bois #1

Project #: 12575401

Project Manager: Christine Mathews

Sampler: MD

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 3.4 +0=3.4 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2208955
8-16-22	1000	S	Bois #1 - East	1-vr	-	001

Analysis Request

BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	X BTEX	X Chloride	X Full Range TPH			

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
8-16-22	1215			CD	8-16-22	1215
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks:
Direct Bill EOG Resources
24 hour TAT

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

Attachment C

Bois Exploratory Drilling Report

envirotech

July 20, 2022 Project #19034-0013

Mr. Chase Settle
EOG Resources
104 S. 4th Street
Artesia, New Mexico, 88210
Phone: (575) 703-6537
E-mail: chase_settle@eogresources.com

RE: Exploratory Drilling located on the Bois D Arc Divide 22 #003 Well Site in Sandoval County, New Mexico

Dear Mr. Settle,

Envirotech, Inc. (Envirotech) of Farmington, New Mexico, was retained by EOG Resources (EOG), to provide drilling oversight activities for an exploratory soil boring. The soil boring was advanced to provide a reference depth to groundwater for EOG well sites within the subject lease. The soil boring was completed on the Bois D Arc Divide 22 #003 (API:30-043-20983) well site located within Section 22, Township 21 North, Range 05 West, Sandoval County, New Mexico. The boring was located at latitude: 36.032715 and longitude: -107.348549 and is illustrated in the enclosed **Figure 1**, ***Vicinity Map.***

Activities Performed

Prior to installing the soil boring, an *Application for Permit to Drill a Well with No Water Right* was submitted to New Mexico Office of the State Engineer (NMOSE) and was approved on June 24, 2022. The NMOSE assigned OSE POD number: RG-A0616 POD1; see enclosed **Appendix A, *Permitting Documentation***. The soil boring was installed utilizing a track mounted drill rig equipped with a hollow stem auger and was located on the south side of the well pad; see **Figure 2, *Site Map***.

From June 30 to July 8, 2022, one (1) soil boring was advanced. The soil boring was completed to a depth of 144.30 feet below ground surface (bgs). Once total depth had been reached, the augers were removed, and 2-inch polyvinyl chloride (PVC) screened-casing was placed into the boring to total depth. The casing was left in place for a minimum of 72 hours. On July 13, 2022, using a water level meter, depth to groundwater was measured at 100.45 feet bgs. Envirotech returned to the site on July 14, 2022 to plug and abandon the well. Using a tremie pipe, the boring was plugged and abandoned (P&A) with bentonite slurry. The boring was filled with the slurry from the bottom to the surface. The drill cuttings were then used to recontour the area. Soil boring activities are illustrated in **Appendix B*, Field Notes.***

Bois Lease Estimated Depth to Groundwater

Based on the measured depth to groundwater at the Bois D Arc Divide 22 #003, depth to groundwater estimates for the EOG well sites within the lease were determined. Site elevations for the remaining well sites were obtained from Google Earth Pro and were not professionally surveyed. The following table illustrates the elevation differentials and depth to groundwater:

Site Name (API)	Site Elevation (feet above mean sea level)	Elevation Differential	Estimated Depth to Groundwater (feet below ground surface)
Bois D Arc Divide 22 #003 (30-043-20983)	7,242	Not Applicable	100.45
Bois D Arc Divide 22 #001 (30-043-20952)	7,309	67 ft higher	167.45
Bois D Arc Divide 22 #002 (30-043-20982)	7,244	2 ft higher	102.45
Bois D Arc Divide 22 #004 (30-043-20980)	7,302	60 ft higher	160.45
Bois D Arc Divide 22 #005 (30-043-20979)	7,219	23 ft lower	77.45
Bois D Arc SWD #001 (30-043-20981)	7,213	29 ft lower	71.45

We appreciate the opportunity to be of service. If you have any questions or if you need additional information, please contact our office at (505) 632-0615.

Sincerely,
ENVIROTECH INC.

Brittany Hall
Environmental Staff Scientist
bhall@envirotech-inc.com

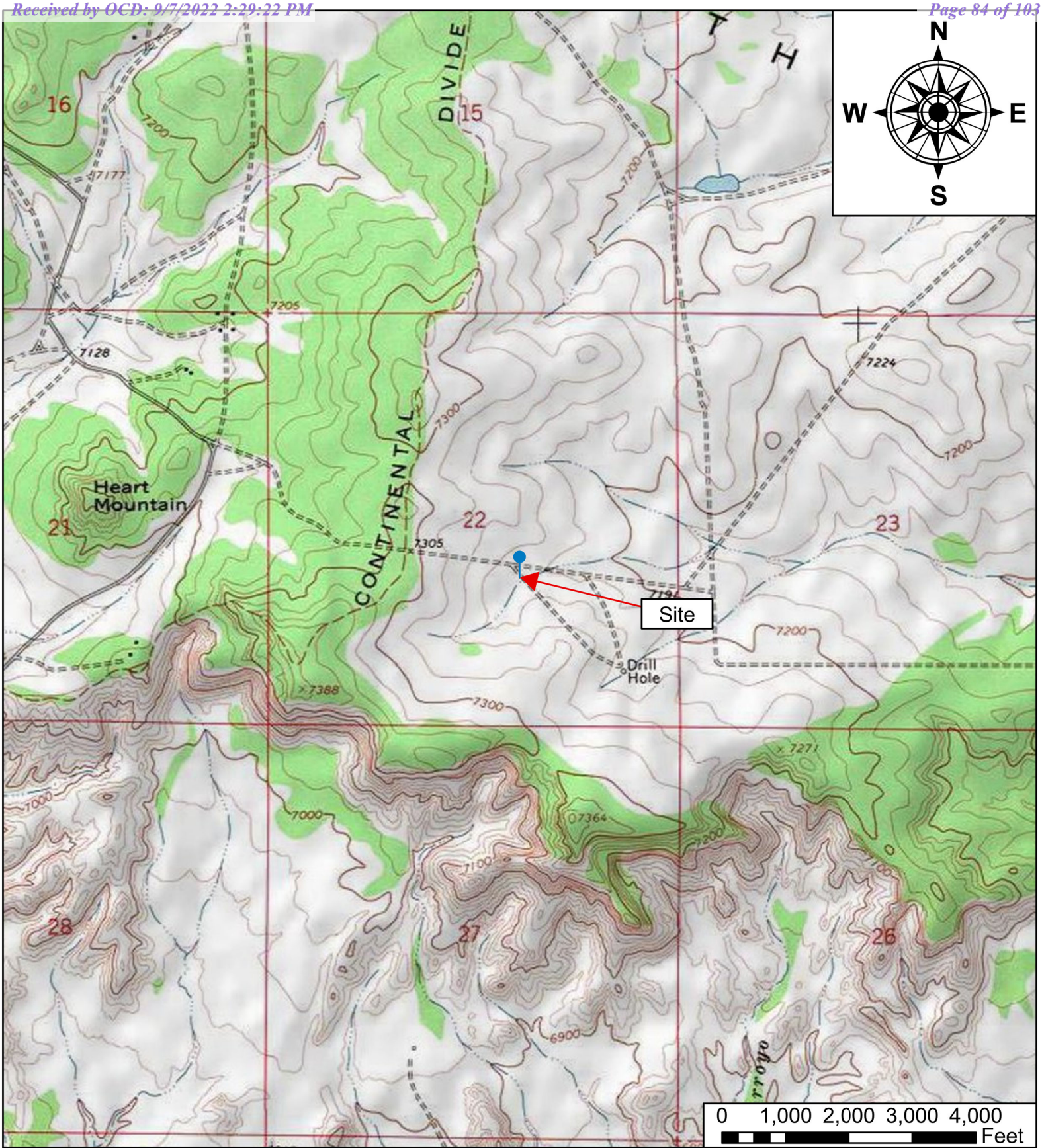
Figures: Figure 1, *Vicinity Map*
Figure 2, *Site Map*

Appendices: Appendix A, *Permitting Documentation*
Appendix B, *Field Notes*

Cc: Client File 19034

Figures

Figure 1, Vicinity Map
Figure 2, Site Map



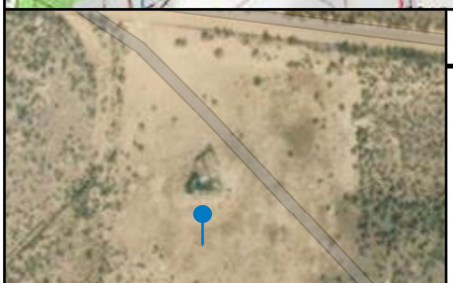
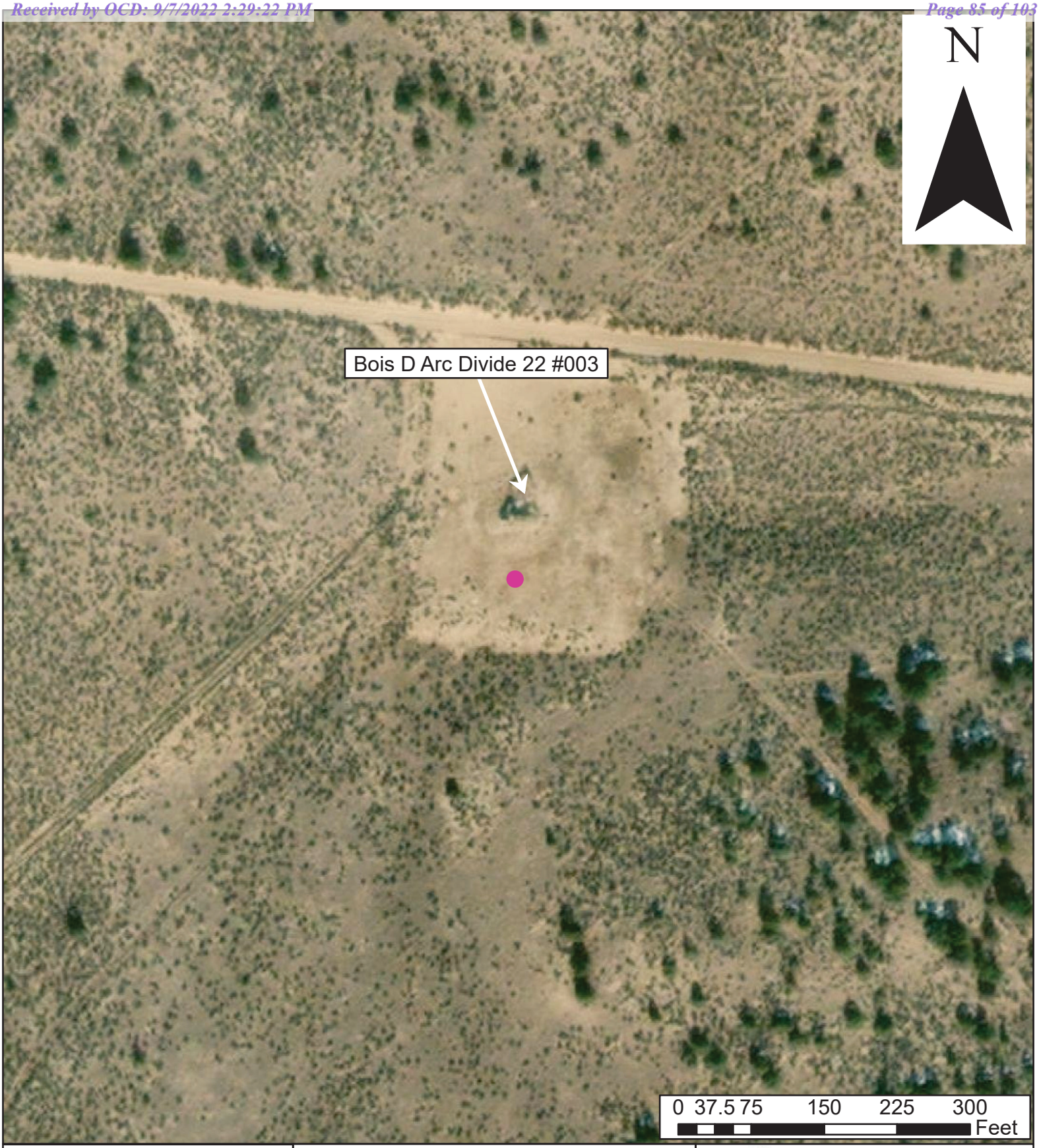


Figure 1, Vicinity Map

EOG Resources
Bois Exploratory Boring
Bois D Arc Divide 33 #003 Well Site
API: 30-043-20983
Section 22, Township 21N, Range 05W
Sandoval County, New Mexico
36.032715, -107.348549

envirotech
Environmental Scientists and Engineers
5796 U.S Highway 64
Farmington, New Mexico 87401
505.632.0615

Date Drawn: 06/16/2022
Drawn by: B.Hall



Legend

- RG-A0616 POD1

Figure 2, Site Map

EOG Resources
Bois Exploratory Boring
Bois D Arc Divide 33 #003 Well Site
API: 30-043-20983
Section 22, Township 21 N, Range 05W
Sandoval County, New Mexico
36.032715, -107 .348549

envirotech
Environmental Scientists and Engineers
5796 U.S Highway 64
Farmington, New Mexico 87401
505.632.0615

Date Drawn: 07/19/2022
Drawn by: B.Hall

Appendix A

Permitting Documentation

envirotech

Practical Solutions for a Better Tomorrow

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER

DISTRICT I

MIKE A. HAMMAN, P.E.
STATE ENGINEER

5550 San Antonio Dr. NE
Albuquerque, NM 87109-4127
(505) 383-4000

June 24, 2022

Permit No: RG-A0616 POD1

EOG Resources
c/o Brittany Hall, Envirotech, Inc.
5796 US Highway 64
Farmington, NM 87401

Greetings:

Your copy of Permit to Drill A Well With No Water Right, which has been approved in accordance with the attached Conditions of Approval, is enclosed. If you have any questions, please do not hesitate to contact this office.

Sincerely,

Amy Clyde

Amy Clyde
Water Resource Professional I

Enclosure

NEW MEXICO OFFICE OF THE STATE ENGINEER
PERMIT TO DRILL EXPLORATORY WELL
CONDITIONS OF APPROVAL

This Application is approved provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare of the state; and further subject to the following conditions of approval:

Permittee: EOG Resources

Permit Number: RG-A0616

Exploratory Well/Point of Diversion (POD):

OSE POD No.	Location (Lat/Long (WGS84)
RG-A0616 POD1	36° 1' 57.77" N / -107° 20' 54.78" W

1. No water shall be appropriated and beneficially used under this permit.

2. Water shall be used from well for exploratory/test purposes only unless and until a permit for a specific use has been issued by the State Engineer.

3. The well shall be drilled by a driller licensed in the State of New Mexico in accordance with Section 72-12-12 NMSA and the well shall be constructed in accordance with 19.27.4 NMAC.

4. If artesian water is encountered, the Permittee shall comply with Subsection C of 19.27.4.31 NMAC.

5. The well shall be drilled and completed within one year of issuance of this permit. Well Record shall be filed no later than thirty (30) days after completion of well in accordance with Subsection N of 19.27.4.29 NMAC (i.e. due by July 31, 2023).

6. Upon completion of permitted use, the well shall be plugged under State Engineer-approved Plugging Plan, and Plugging Record shall be filed with the State Engineer within thirty (30) days after the well is plugged in accordance with Subsection C of 19.27.4.30 NMAC.

Witness my hand and seal this 24th day of June 2022.

Mike A. Hamman, P.E., State Engineer

By: Amy Clyde
Amy Clyde, Water Resources Professional I

File No. RG-A0616

NEW MEXICO OFFICE OF THE STATE ENGINEER

WR-07 APPLICATION FOR PERMIT TO DRILL

A WELL WITH NO WATER RIGHT

(check applicable box):

For fees, see State Engineer website: http://www.ose.state.nm.us/

Purpose:	☐ Pollution Control And/Or Recovery	☐ Ground Source Heat Pump
☐ Exploratory Well (Pump test)	☐ Construction Site/Public Works Dewatering	☒ Other(Describe): exploratory soil boring
☐ Monitoring Well	☐ Mine Dewatering	

A separate permit will be required to apply water to beneficial use regardless if use is consumptive or nonconsumptive.

☐ Temporary Request - Requested Start Date: June 30, 2022 Requested End Date: July 5, 2022

Plugging Plan of Operations Submitted? ☐ Yes ☒ No

2022 JUN 27 PM 1:30

1. APPLICANT(S)

Name: EOG Resources	Name: Envirotech, Inc
Contact or Agent: check here if Agent ☐ Chase Settle	Contact or Agent: check here if Agent ☒ Brittany Hall
Mailing Address: 104 South 4th Street	Mailing Address: 5796 US Highway 64
City: Artesia	City: Farmington
State: New Mexico Zip Code: 88210	State: New Mexico Zip Code: 87401
Phone: ☐ Home ☐ Cell Phone (Work):	Phone: 505-947-9179 ☐ Home ☐ Cell Phone (Work):
E-mail (optional): chase_settle@eogresources.com	E-mail (optional): bhall@envirotech-inc.com

FOR OSE INTERNAL USE Application for Permit, Form WR-07, Rev 11/17/16

File No.:	Trn. No.:	Receipt No.: 1-63722 $ 5.00
Trans Description (optional):		
Sub-Basin:	PCW/LOG Due Date:	

2. WELL(S) Describe the well(s) applicable to this application.

Location Required: Coordinate location must be reported in NM State Plane (NAD 83), UTM (NAD 83), or Latitude/Longitude (Lat/Long - WGS84).
District II (Roswell) and District VII (Cimarron) customers, provide a PLSS location in addition to above.

☐ NM State Plane (NAD83) (Feet)
☐ NM West Zone
☐ NM East Zone
☐ NM Central Zone

☐ UTM (NAD83) (Meters)
☐ Zone 12N
☐ Zone 13N

■ Lat/Long (WGS84) (to the nearest 1/10th of second)

Well Number (if known):	X or Easting or Longitude:	Y or Northing or Latitude:	Provide if known: -Public Land Survey System (PLSS) (*Quarters or Halves , Section, Township, Range*) OR - Hydrographic Survey Map & Tract; OR - Lot, Block & Subdivision; OR - Land Grant Name
SB-1	-107.348549	36.032715	Section 22, Township 21N, Range 5W

2022 JUN 21 PM 1:30

NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions)
Additional well descriptions are attached: ☐ Yes ■ No **If yes, how many**_____

Other description relating well to common landmarks, streets, or other:
Will be located on/near the well pad of the EOG Resources Inc. Bois D Arc Divide 22 #003 (API 30-043-20983) well site.

Well is on land owned by: Leased by EOG Resources Inc.

Well Information: NOTE: If more than one (1) well needs to be described, provide attachment. Attached? ☐ Yes ■ No
If yes, how many_____

Approximate depth of well (feet): 140	Outside diameter of well casing (inches):
Driller Name: HRL Compliance Solutions	Driller License Number: WD #1789

3. ADDITIONAL STATEMENTS OR EXPLANATIONS

Exploratory soil boring used to determine if depth to groundwater is shallower that 140 feet. The boring will be drilled, 2" pvc casing will be installed, and the boring will be left open for at least 72 hours prior to checking for groundwater. Once the boring has been gauged for groundwater, it will be plugged and abandoned.

FOR OSE INTERNAL USE — Application for Permit, Form WR-07

File No.:	Trn No.:

4. SPECIFIC REQUIREMENTS: The applicant must include the following, as applicable to each well type. Please check the appropriate boxes, to indicate the information has been included and/or attached to this application:

Exploratory:	**Pollution Control and/or Recovery:**	**Construction De-Watering:**	**Mine De-Watering:**
■ Include a description of any proposed pump test, if applicable.	☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for the pollution control or recovery operation. ☐ The estimated maximum period of time for completion of the operation. ☐ The annual diversion amount. ☐ The annual consumptive use amount. ☐ The maximum amount of water to be diverted and injected for the duration of the operation. ☐ The method and place of discharge.	☐ Include a description of the proposed dewatering operation, ☐ The estimated duration of the operation, ☐ The maximum amount of water to be diverted, ☐ A description of the need for the dewatering operation, and, ☐ A description of how the diverted water will be disposed of.	☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for mine dewatering. ☐ The estimated maximum period of time for completion of the operation. ☐ The source(s) of the water to be diverted. ☐ The geohydrologic characteristics of the aquifer(s). ☐ The maximum amount of water to be diverted per annum. ☐ The maximum amount of water to be diverted for the duration of the operation. ☐ The quality of the water. ☐ The method of measurement of water diverted. ☐ The recharge of water to the aquifer. ☐ Description of the estimated area of hydrologic effect of the project. ☐ The method and place of discharge. ☐ An estimation of the effects on surface water rights and underground water rights from the mine dewatering project. ☐ A description of the methods employed to estimate effects on surface water rights and underground water rights. ☐ Information on existing wells, rivers, springs, and wetlands within the area of hydrologic effect.
Monitoring: ☐ Include the reason for the monitoring well, and, ☐ The duration of the planned monitoring.	☐ The method of measurement of water produced and discharged. ☐ The source of water to be injected. ☐ The method of measurement of water injected. ■ The characteristics of the aquifer. ☐ The method of determining the resulting annual consumptive use of water and depletion from any related stream system. ☐ Proof of any permit required from the New Mexico Environment Department. ☐ An access agreement if the applicant is not the owner of the land on which the pollution plume control or recovery well is to be located.	**Ground Source Heat Pump:** ☐ Include a description of the geothermal heat exchange project, ☐ The number of boreholes for the completed project and required depths. ☐ The time frame for constructing the geothermal heat exchange project, and, ☐ The duration of the project. ☐ Preliminary surveys, design data, and additional information shall be included to provide all essential facts relating to the request.	

ACKNOWLEDGEMENT

I, We (name of applicant(s)), Brittany Hall
Print Name(s)

affirm that the foregoing statements are true to the best of (my, our) knowledge and belief.

Brittany Hall
Applicant Signature

Applicant Signature

2022 JUN 27 PM 1:30

ACTION OF THE STATE ENGINEER

This application is:

☒ approved ☐ partially approved ☐ denied

provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare and further subject to the attached conditions of approval.

Witness my hand and seal this 24th day of June 20 22, for the State Engineer,

Mike A. Hamman, P.E., State Engineer

By: Amy Clyde
Signature

Amy Clyde
Print

Title: Water Resources Professional I
Print

FOR OSE INTERNAL USE Application for Permit, Form WR-07

File No.:	Trn No.:

OFFICE OF THE STATE ENGINEER/INTERSTATE STREAM COMMISSION – ALBUQUERQUE OFFICE

OFFICIAL RECEIPT NUMBER: 1 - 63722 DATE: 6 - 21 - 2022 FILE NO.: _____

TOTAL: 5 . 00 RECEIVED: FIVE DOLLARS CHECK NO.: 109517 CASH: _____

PAYOR: ENVIROTECH INC ADDRESS: 5796 US Hwy 64 CITY: FARMINGTON STATE: NM

ZIP: 87401 RECEIVED BY: JA

INSTRUCTIONS: Indicate the number of actions to the left of the appropriate type of filing. Complete the receipt information. **Original** to payor; **pink** copy to Program Support/ASD; and **yellow** copy for Water Rights. If a mistake is made, void the original and all copies and submit to Program Support/ASD as part of your daily deposit.

A. Ground Water Filing Fees

___	1. Change of Ownership of Water Right	$ 2.00
___	2. Application to Appropriate or Supplement Domestic 72-12-1 Well	$ 125.00
___	3. Application to Repair or Deepen 72-12-1 Well	$ 75.00
___	4. Application for Replacement 72-12-1 Well	$ 75.00
___	5. Application to Change Purpose of Use 72-12-1 Well	$ 75.00
___	6. Application for Stock Well	$ 5.00
___	7. Application to Appropriate Irrigation, Municipal, or Commercial Use	$ 25.00
___	8. Declaration of Water Right	$ 1.00
___	9. Application for Supplemental Non 72-12-1 Well	$ 25.00
___	10. Application to Change Place or Purpose of Use Non 72-12-1 Well	$ 25.00
___	11. Application to Change Point of Diversion and Place and/or Purpose of Use from Surface Water to Ground Water	$ 50.00
___	12. Application to Change Point of Diversion and Place and/or Purpose of Use from Ground Water to Ground Water	$ 50.00
___	13. Application to Change Point of Diversion of Non 72-12-1 Well	$ 25.00
___	14. Application to Repair or Deepen Non 72-12-1 Well	$ 5.00
1	15. Application for Test, Expl. Observ. Well	$ 5.00
___	16. Application for Extension of Time	$ 25.00
___	17. Proof of Application to Beneficial Use	$ 25.00
___	18. Notice of Intent to Appropriate	$ 25.00

B. Surface Water Filing Fees

___	1. Change of Ownership of a Water Right	$ 5.00
___	2. Declaration of Water Right	$ 10.00
___	3. Amended Declaration	$ 25.00
___	4. Application to Change Point of Diversion and Place and/or Purpose of Use from Surface Water to Surface Water	$ 200.00
___	5. Application to Change Point of Diversion and Place and/or Purpose of Use from Ground Water to Surface Water	$ 200.00
___	6. Application to Change Point of Diversion	$ 100.00
___	7. Application to Change Place and/or Purpose of Use	$ 100.00
___	8. Application to Appropriate	$ 25.00
___	9. Notice of Intent to Appropriate	$ 25.00
___	10. Application for Extension of Time	$ 50.00
___	11. Supplemental Well to a Surface Right	$ 100.00
___	12. Return Flow Credit	$ 100.00
___	13. Proof of Completion of Works	$ 25.00
___	14. Proof of Application of Water to Beneficial Use	$ 25.00
___	15. Water Development Plan	$ 100.00
___	16. Declaration of Livestock Water Impoundment	$ 10.00
___	17. Application for Livestock Water Impoundment	$ 10.00

C. Well Driller Fees

___	1. Application for Well Driller's License	$ 50.00
___	2. Application for Renewal of Well Driller's License	$ 50.00
___	3. Application to Amend Well Driller's License	$ 50.00

D. Reproduction of Documents

___ @ 0.25¢ $_____

___ Map(s) $_____

E. Certification $_____

F. Other $_____

G. Comments:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

All fees are non-refundable.

Appendix B

Field Notes

SOIL BORING
LITHOLOGY LOG

SB 2

DEPTH (FEET)	TIME	USCS	SAMPLE TYPE	HEADSPACE (PPM)/TIME	LITHOLOGY	SAMPLE DESCRIPTION	DEPTH (FEET)
7-5 ~~S-7~~							
	15:20					BROWN SAND. NO ODOR	20
	16:20					BROWN SAND, NO ODOR	
7-6 ~~S-8~~						TAN SAND	
	9:00					DARK BROWN SAND	40
	10:00					LARGE GRANULAR TAN SAND	
						"	
	10:14					BROWN CLAYEY SAND - HITTING REFUSAL	
	11:16					GRANULAR BROWN SANDSTONE	60
	13:09					DARK BROWN CLAYEY SAND	
						LIGHT TAN SAND	
	14:04					HIT CO @ 389 ppm. VENTING BORE HOLE OFF	80
	16:19					BROWN/LIGHT BROWN SAND	
7-7	18:09					LIGHT BROWN SAND, HIT WATER W/ AIR ROTARY	100
	9:50					WATER IN RETURNS, STOPPED @ 103' TD OF WATER (7')	
						NO RETURNS	
	12:52					GREY GRANULAR	
	13:04					WATER @ 115'	120
	14:06					NO RETURNS/GREY	▽127'
						"	
	17:55					"	
						"	
7-8	17:58					"	140

DRILLER: BEN
HELPER: SHAWN
DRILLING COMPANY: HRL
DRILLING METHOD: ~~Hollow Stem~~

BIT SIZE: 7 7/8 ID
TOTAL BORING DEPTH:
DATE STARTED: 7-5-22

LOCATION: DIVIDE 22 #003
GPS COORDINATES: 36.032759, -107.348836
DATE COMPLETED
SCIENTIST: ~~BAH~~ KS

Note: SS = Split Spoon A = Auger c5 = 5 foot composite from air cuttings

envirotech

ENVIRONMENTAL SCIENTISTS & ENGINEERS
5796 U.S. HIGHWAY 64
FARMINGTON, NEW MEXICO 87401
(505) 632-0615

REVISIONS
BY ___ DATE ___
BY ___ DATE ___

Project # ___

DATE ___ DRAWN ___
SCALE NTS APPROVED ___

PAGE ___ OF ___

SOIL BORING
LITHOLOGY LOG

SB 1

DEPTH (FEET)	TIME	USCS	SAMPLE TYPE	HEADSPACE (PPM)/TIME	LITHOLOGY	SAMPLE DESCRIPTION	DEPTH (FEET)
	9:00						
	9:40					NO RETURNS, LIGHT BROWN	20
	10:10					NO RETURN, DARK BROWN NO RETURNS, LIGHT BROWN	46
	11:16					NO RETURNS, WHITE SAND	60
	11:42					NO RETURNS, LIGHT BROWN SAND	80
						HIT CAVERN @90-95'	
	14:05					NO RETURNS, POSSIBLY IN CAVERN	100
							126
							140

DRILLER: Ben
HELPER: Shawn
DRILLING COMPANY: HRL
DRILLING METHOD: Air Rotary
Note: SS = Split Spoon A = Auger

BIT SIZE: 7 1/2
TOTAL BORING DEPTH: ~~Air Rotary~~ 140'
DATE STARTED: 6-30-22
SAMPLER TYPE: —
c5 = 5 foot composite from air cuttings

LOCATION: Divide 22 #003
GPS COORDINATES: 36.02268 -107.37847
DATE COMPLETED
SCIENTIST: ~~BAH~~ KS

envirotech
ENVIRONMENTAL SCIENTISTS & ENGINEERS
5796 U.S. HIGHWAY 64
FARMINGTON, NEW MEXICO 87401
(505) 632-0615

REVISIONS
BY ___ DATE ___
BY ___ DATE ___

Project # ___

DATE ___ DRAWN ___
SCALE NTS APPROVED ___

PAGE ___ OF ___

MONITORING WELL DATA FORM

WELL ID: SB-1

Location: Divide 22 #003 Project No.: 96341-0013

Project: Bois Exploratory Boring Date: 7/13/2022

Sampling Technician: A. Garcia Start/End Time:

Air Temp: 73°

Purge Device: Well Diameter (in): 2"

Total Well Depth (ft): 144.3 Water Column (ft): 43.85

Initial D.T.W. (ft): 100.45 Time: 10:57 *(taken at initial gauging of all wells)*

Final D.T.W. (ft): Time: *(taken after sample collection)*

If NAPL Present: D.T.P.: D.T.W.: Thickness: Time:

Water Quality Parameters - Recorded During Well Purging

Time	Static Water Level	Temp (deg C)	Conductivity (µS/cm)	DO (mg/L)	pH s.u.	ORP (mV)	Purged Volume (see reverse for calc.)	Observations (sheen, odor, organic etc.)
Stabilzation Parameters		*2°C*	*3%*	*10%*	*1 s.u.*	*10 mV*		
See reverse for notes on purging and stabilization procedures								
								water to silty
								unable to pump.

Disposal of Purged Water: Evaporation ☐ Containerized ☐

Collected Samples Stored on Ice in Cooler: Yes ☐ No ☐

Chain of Custody Record Complete: Yes ☐ No ☐

Analytical Laboratory:

Equipment Used During Sampling:

Notes/Comments *(use this area to document well condition and/or other site maitenance issues):*

envirotech

Practical Solutions for a Better Tomorrow

Water quality parameters are consider stable when three (3) consecutive measurements meet the following: temperature is within 2°C; pH is within one (1) standard unit; specific conductance/conductivity is within 3%; dissolved oxygen (DO) is within 10%; and oxidation reduction potential (ORP) is within 10 mV.

The parameters should be recorded approximately every well volume when using a bailer and every 2 minutes when using a pump.

If it is necessary to calculate the volume of the monitoring well to determine what volume of groundwater will need to be purged from the well prior to collecting the samples, use the following equation:

Well Volume = (h)(cf)

where:

h = height of water column (feet)
cf = gallons/foot based on well diameter shown below

The gallons/foot for common size monitoring wells are as follows:

Well Diameter (inches)	2"	3"	4"	6"
Volume (gallons/foot)	0.1632	0.3672	0.6528	1.4688

The well volume is typically tripled to determine the volume to be purged.

Show purge volume calculation below:

h = Total Well Depth - Depth To Water = _____ - _____ =

Well Volume = (h)(cf) = ( )(0.1632) =

Total Purge Volume = 3(Well Volume) = _____

envirotech

Practical Solutions for a Better Tomorrow

MONITORING WELL DATA FORM

WELL ID: SB-2

Location: Divide 22 #003 Project No.: 19034-0013

Project: Bois Exploratory Boring Date: 7/13/2022

Sampling Technician: G. Garcia Start/End Time: 10:45

Air Temp: 73°

Purge Device: Well Diameter (in): 2

Total Well Depth (ft): 65.8' Water Column (ft): Ø

Initial D.T.W. (ft): Time: *(taken at initial gauging of all wells)*

Final D.T.W. (ft): Time: *(taken after sample collection)*

If NAPL Present: D.T.P.: D.T.W.: Thickness: Time:

Water Quality Parameters - Recorded During Well Purging

Time	Static Water Level	Temp (deg C)	Conductivity (µS/cm)	DO (mg/L)	pH s.u.	ORP (mV)	Purged Volume (see reverse for calc.)	Observations (sheen, odor, organic etc.)
Stabilzation Parameters		*2°C*	*3%*	*10%*	*1 s.u.*	*10 mV*		
See reverse for notes on purging and stabilization procedures								
								Well was dry

Disposal of Purged Water: Evaporation ☐ Containerized ☐

Collected Samples Stored on Ice in Cooler: Yes ☐ No ☐

Chain of Custody Record Complete: Yes ☐ No ☐

Analytical Laboratory:

Equipment Used During Sampling:

Notes/Comments *(use this area to document well condition and/or other site maitenance issues):*

envirotech

Practical Solutions for a Better Tomorrow

Water quality parameters are consider stable when three (3) consecutive measurements meet the following: temperature is within 2°C; pH is within one (1) standard unit; specific conductance/conductivity is within 3%; dissolved oxygen (DO) is within 10%; and oxidation reduction potential (ORP) is within 10 mV.

The parameters should be recorded approximately every well volume when using a bailer and every 2 minutes when using a pump.

If it is necessary to calculate the volume of the monitoring well to determine what volume of groundwater will need to be purged from the well prior to collecting the samples, use the following equation:

Well Volume = (h)(cf)

where:

h = height of water column (feet)
cf = gallons/foot based on well diameter shown below

The gallons/foot for common size monitoring wells are as follows:

Well Diameter (inches)	2"	3"	4"	6"
Volume (gallons/foot)	0.1632	0.3672	0.6528	1.4688

The well volume is typically tripled to determine the volume to be purged.

Show purge volume calculation below:

h = Total Well Depth - Depth To Water = _____ - _____ =

Well Volume = (h)(cf) = ( )(0.1632) =

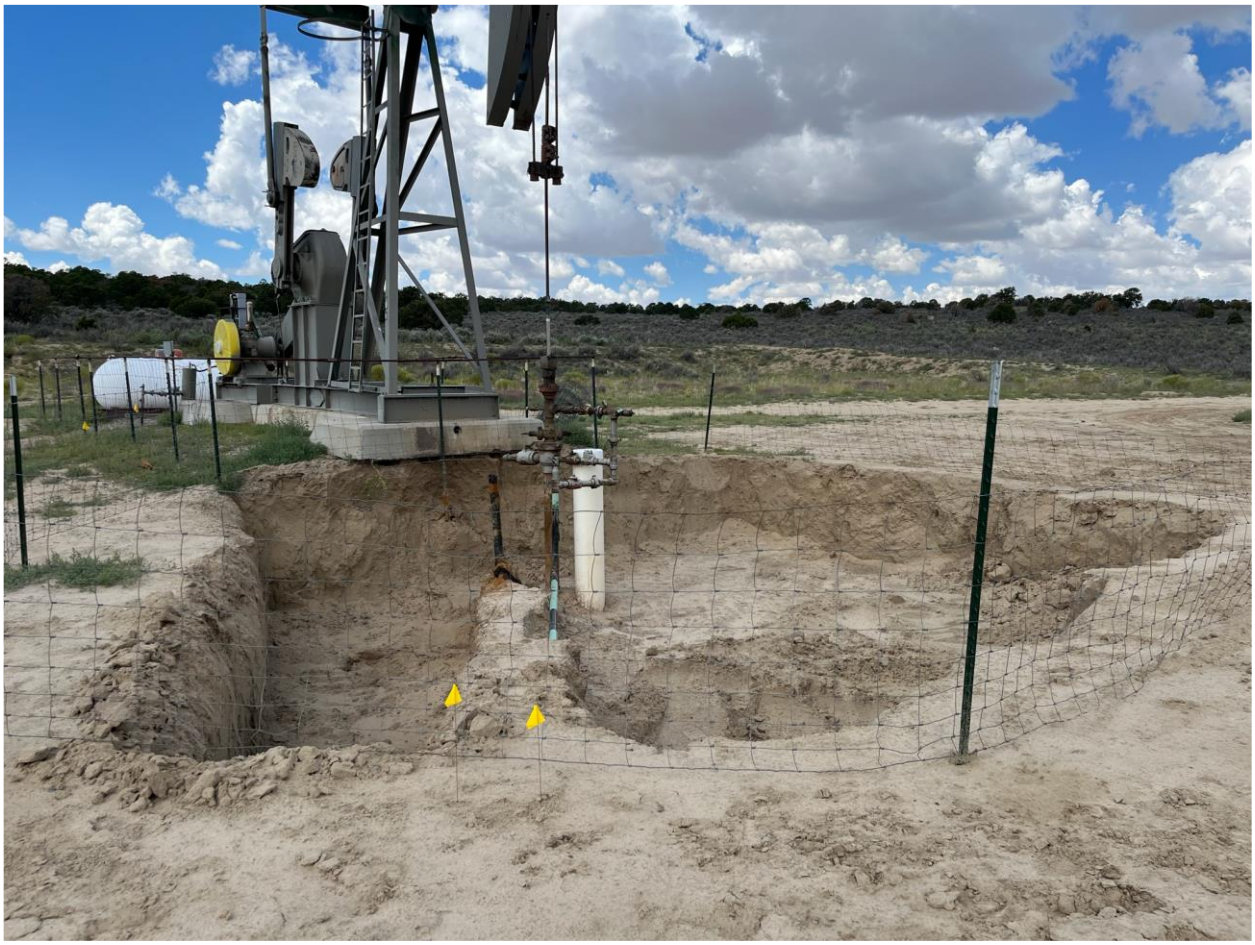
Total Purge Volume = 3(Well Volume) = _____

envirotech

Practical Solutions for a Better Tomorrow

Attachment D

Photographic Log



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 141344

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 141344
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	11/17/2022