

SITE CHARACTERIZATION, REMEDIATION, AND CLOSURE REPORT

JACKSON B #33 FLOWLINE UNIT J, SECTION 01, T17S-R30E EDDY COUNTY, NEW MEXICO 32.860255, -103.922528 RANGER REFERENCE NO. 5375

PREPARED FOR:

EOG RESOURCES, INC.
ARTESIA DIVISION
104 S 4TH STREET
ARTESIA, NEW MEXICO 88210

PREPARED BY:

RANGER ENVIRONMENTAL SERVICES, LLC P.O. BOX 201179 AUSTIN, TEXAS 78720

SEPTEMBER 20, 2023

Patrick K. Finn, P.G. (TX)
Project Geoscientist

William Kierdorf, REM Project Manager

TABLE OF CONTENTS

SITE LOCATION AND BACKGROUND	1
SITE CHARACTERIZATION	2
Depth-to-Groundwater	2
Wellhead Protection Area	2
Distance to Nearest Significant Watercourse	2
Closure Criteria	3
SITE ASSESSMENT, REMEDIATION, AND CONFIRMATION SAMPLING	3
July 25, 2023 – Initial Site Assessment and Sampling Results	3
Site Remediation and Cleanup Confirmation Sampling	4
Waste Disposal	4
SITE CLOSURE	4
Site Backfill and Re-seeding	4
	SITE CHARACTERIZATION Depth-to-Groundwater Wellhead Protection Area Distance to Nearest Significant Watercourse Closure Criteria. SITE ASSESSMENT, REMEDIATION, AND CONFIRMATION SAMPLING July 25, 2023 – Initial Site Assessment and Sampling Results Site Remediation and Cleanup Confirmation Sampling Waste Disposal

FORM C-141

FIGURES

- Topographic Map
- Area Map
- DTGW Information Location Map
- National Wetland Inventory Map
- FEMA Floodplain Map
- Karst Topography Map
- Site Assessment Sample Location Map
- Final Excavation Area and Confirmation Sample Location Map

TABLES

- Site Assessment Soil BTEX, TPH & Chloride Analytical Data
- Confirmation Soil Sample BTEX, TPH & Chloride Analytical Data

ATTACHMENTS

- Attachment 1 Depth-to-Groundwater Data
- Attachment 2 Photographic Documentation
- Attachment 3 Laboratory Analytical Reports
- Attachment 4 NMOCD & BLM Correspondence
- Attachment 5 Seed Mixture for LPC Sand/Shinnery Sites



SITE CHARACTERIZATION, REMEDIATION, AND CLOSURE REPORT
JACKSON B #33 FLOWLINE
UNIT J, SECTION 01, T17S-R30E
EDDY COUNTY, NEW MEXICO
32.860255, -103.922528
RANGER REFERENCE NO. 5375

1.0 SITE LOCATION AND BACKGROUND

The Jackson B #33 Flowline (Site) is located on Bureau of Land Management (BLM) land, approximately 4.5 miles northeast of Loco Hills, within Eddy County, New Mexico. The Site is situated in Unit J, Section 01, T17S-R30E at GPS coordinates 32.860255, -103.922528. The well was historically operated by Burnett Oil Co., Inc. (Burnett) and operations were transferred to EOG Resources, Inc. (EOG) in June 2018. The well was plugged and abandoned in July 2021.

During review of historic well files for the Jackson B #33, a historic release incident lacking closure approval from the New Mexico Oil Conservation Division (NMOCD) was discovered. On February 1, 2016, a release was discovered along the Jackson B #33 flowline. The information regarding the release is limited to an initial Form C-141, prepared and submitted by representatives of Burnett on February 7, 2017, and general release notification correspondence. No information was available regarding whether any remedial efforts had been completed to address the release incident.

Following the discovery that this release incident lacked NMOCD closure approval, EOG representatives conducted a desktop review of the reported release area. During review of historic aerial photographs, a disturbed area lacking vegetation was noted in the immediate vicinity of the reported release location. In July 2023, EOG engaged Ranger Environmental Services, LLC (Ranger) to assist in the assessment of this area and the resolution of the outstanding release incident. On July 25, 2023, Ranger personnel conducted initial assessment activities at the subject site. The initial assessment field observations and soil sample analytical results documented the presence of elevated soil total petroleum hydrocarbon (TPH) concentrations.

The following *Site Characterization, Assessment, Remediation, and Closure Report* has been prepared to document the activities undertaken to address the soil impacts at the Site. The previously submitted Initial C-141 Form Release Notification, as well as current *Site Assessment/Characterization* and *Closure* sections of Form C-141, are attached. A *Topographic Map* and *Area Map* noting the location of the Site and surrounding areas is attached. Additionally, site maps illustrating the site features, sampling locations, and excavation boundaries and depths are also attached.

STATE OF TEXAS PROFESSIONAL GEOSCIENTIST FIRM No. 50140 • STATE OF TEXAS PROFESSIONAL ENGINEERING FIRM No. F-6160

WWW.RANGERENV.COM

2.0 SITE CHARACTERIZATION

2.1 <u>Depth-to-Groundwater</u>

To determine the depth-to-groundwater in the vicinity of the Site, data available from the U.S. Geological Survey (USGS) and the New Mexico Office of the State Engineer (NMOSE) was reviewed. Based upon the reviewed information, recent water well information for the area within a half mile of the Site is not available.

During a review of adjacent release incident sites within a half-mile radius of the subject site, a location where depth-to-groundwater investigation activities were completed was identified. During remediation efforts at this unrelated site, a temporary monitor well was installed by Talon LPE (Talon) in order to obtain NMOCD acceptable depth-to-groundwater information. The temporary well was completed in May 2021 approximately 0.35 miles southwest of the Site at GPS coordinates 32.85697, -103.92703. Based on the reviewed Talon boring log, the soil boring was drilled to a depth of approximately 125 feet below ground surface (bgs) utilizing air rotary drilling techniques and a two-inch diameter temporary monitor well was installed. The monitor well was allowed to equilibrate for 72 hours and a depth-to-groundwater measurement was collected. The temporary monitor well was found to be dry, thus confirming that the area depth-to-groundwater is greater than 100 feet bgs. Upon completion of the depth-to-groundwater investigation activities, the temporary monitor well was properly plugged and abandoned.

Based upon the Talon LPE depth-to-groundwater investigation results, the depth-to-groundwater in the area of the Site was confirmed to be greater than 100 feet bgs.

Copies of the reviewed depth-to-groundwater information and soil boring log completed by Talon are attached.

2.2 Wellhead Protection Area

Based upon the USGS and NMOSE information, there are no water wells or known water sources present within a half-mile of the site.

Upon review of the National Wetland Inventory, the Site is not within 300 feet of a mapped feature.

The Site and impacted area are outside of the FEMA 100-year flood plain and fall in the area of minimal flood hazard.

The Site is noted to be in an area of "Low Karst" probability.

2.3 <u>Distance to Nearest Significant Watercourse</u>

Based upon available online resources, no significant watercourses are present within a half-mile of the Site.



2.4 Closure Criteria

Based upon the site characterization details, the affected soils at the site were remediated to the Table 1 19.15.29.12 NMAC (groundwater >100 feet) criteria (Table 1 Criteria). In addition, the surface to four-foot depth interval was brought into compliance with the Restoration, Reclamation and Re-Vegetation criteria detailed in 19.15.29.13 NMAC (Restoration Criteria). The site closure criteria utilized for the site remediation activities are summarized below:

SITE CLOSURE CRITERIA

REGULATORY STANDARD	CHLORIDE	TPH (GRO+DRO +MRO)	TPH (GRO+DRO)	втех	BENZENE
19.15.29.12 NMAC Table 1 Closure Criteria for Soils Impacted by a Release (GW >100')	20,000	2,500	1,000	50	10
19.15.29.13 NMAC Restoration, Reclamation and Re-Vegetation (Soils 0'-4')	600	100¹		50¹	10 ¹

All Values Presented in Parts Per Million (mg/Kg)

3.0 SITE ASSESSMENT, REMEDIATION, AND CONFIRMATION SAMPLING

3.1 July 25, 2023 – Initial Site Assessment and Sampling Results

On July 25, 2023, Ranger personnel mobilized to the Site to conduct initial assessment activities at the reported area of concern. The assessment activities included the installation of two hand auger soil borings ("HA-1" and "HA-2") and the collection of soil samples for laboratory analysis.

During the soil boring installation process, Ranger personnel conducted field screening of the generated soils using an organic vapor monitor (OVM) and a field chloride titration kit. Field screening of the encountered soils was conducted at the surface and at one-foot increments to the total depth of investigation of four feet bgs. The soil boring locations are illustrated on the attached "Site Assessment Sample Location Map."

During the soil boring installation process a total of four soil samples were collected from the soil borings for laboratory analysis. During the installation of soil boring HA-1, no elevated field OVM readings or chloride titrations were encountered. Soil samples for laboratory analysis were subsequently collected from a depth of two feet and four feet bgs from soil boring HA-1. During the installation of hand auger "HA-2", elevated OVM readings were encountered at the three- and four-foot depth intervals. Soil samples were subsequently collected from this boring in accordance with NMAC 19.15.29.11 at the depth of the highest observed impact (three feet bgs) and from the terminal depth of the soil boring (four feet bgs). Upon collection, the soil samples were submitted to Hall Environmental in Albuquerque, New Mexico for analysis of total petroleum hydrocarbons



^{1.} Value derived from the State of New Mexico Energy, Minerals and Natural Resources Department document "Procedures for the Implementation of the Spill Rule" (19.15.29 NMAC) dated September 6, 2019.

(TPH) using EPA Method 8015; benzene, toluene, ethylbenzene and xylenes (BTEX) using EPA Method 8021; and, total chloride using EPA Method 300. The samples were collected and managed using standard QA/QC and chain-of-custody procedures.

Upon review of the laboratory analytical results, the two soil samples collected from soil boring HA-2 were documented to contain TPH concentrations in exceedance of the site closure criteria. The BTEX and chloride concentrations in these two samples were below the site closure criteria. No exceedances of the site closure criteria were documented in the samples collected from boring HA-1.

The initial assessment soil sample analytical results are summarized in the attached "Site Assessment Soil BTEX, TPH & Chloride (EPA 300) Analytical Data" summary table. Copies of the laboratory analytical reports are also attached.

3.2 Site Remediation and Cleanup Confirmation Sampling

To address the observed impacts at the Site, soil removal operations were conducted in August, 2023. The initial removal operations were completed to depths and boundaries that were anticipated to be within the site closure criteria. During the excavation process, Ranger personnel collected field readings utilizing an OVM and field chloride titration kit to guide the excavation boundaries and depths. Based upon the encountered field chloride concentrations, the area of concern was excavated to greater boundaries than what had been originally anticipated. Upon completion, the excavated area was noted to have maximum dimensions of approximately 81 feet by 77 feet and was completed to maximum depth of approximately seven feet bgs.

On August 29, 2023, Ranger personnel mobilized to the site to collect cleanup confirmation soil samples from the excavated area in order to confirm that the excavated area had been completed to appropriate boundaries. The soil samples were collected as five-part composite samples in accordance with NMAC 19.15.29.12 with each sample representing less than 200 square feet. A total of 19 base soil samples and 12 sidewall soil samples were collected from the excavation.

Upon collection, the soil samples were submitted to Hall Environmental in Albuquerque, New Mexico for analysis of TPH, BTEX, and chloride using the afore-mentioned laboratory methods. The samples were collected and managed using standard QA/QC and chain-of-custody procedures. Upon review of the laboratory analytical report for the samples collected on August 29, 2023, all 31 cleanup confirmation soil samples were noted to be in attainment of the site closure criteria.

3.3 Waste Disposal

All soils generated during the remedial excavation activities were disposed of at Lea Land disposal facility in Lea County, New Mexico.

4.0 SITE CLOSURE

4.1 Site Backfill and Re-seeding

Based on the cleanup confirmation soil sample results, the excavation will be backfilled with clean fill material in accordance with NMAC 19.15.29.12 and NMAC 19.15.29.13. Re-vegetation efforts



will be completed with the "Seed Mixture for LPC Sand/Shinnery Sites," as directed by the BLM. A copy of the seed mixture is attached.

4.2 Closure Request

Based on the cleanup confirmation soil sample results, the site has been properly addressed pursuant to NMAC 19.15.29 and EOG respectfully requests closure of the incident. A Final C-141 Form is attached.



eceived by OCD: 9/20/202.	3 12:48:56 PM	Page 8 o
	FORM C-141	

NM OIL CONSERVATION

ARTESIA DISTRICT

<u>District I</u> 625 N. French Dr., Hobbs, NM 88240 <u>District II</u> 11 S. First St., Artesia, NM 88210

in St., Alesia, Nivi 88210 in Strict III 000 Rio Brazos Road, Aztec, NM 87410 District IV

220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources

FEB **0 2** 2017

Form C-141 Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in **RECEIVED** Cordance with 19.15.29 NMAC.

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DAB!	7038	35/0/01	5			OPE	RATOR	X Ir	itial Report	Final Report			
Name of Co	mpany: E	Burnett Oil C	Co., Inc.	3080		Contact: Johnny Titsworth							
Address: But	nett Plaza-Ste	1500, 801 Cherry	St-Unit 9, Fo	ort Worth, TX 76102		Telephone No. (432) 425-2891							
Facility Nar	ne: Jackso	n B 33				Facility Type: Well Location							
Surface Ow	ner: RIM			Mineral C	Junor	DI M		ADINO	20.016.2290	7			
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				LOCA	TIOI	N OF RE	LEASE						
Unit Letter	Section 13	Township 17S	Range 30E	Feet from the 1980	North FNL	South Line	Feet from the 2080	East/West Line FWL	County Eddy				
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				NAT	URE	OF REL	EASE						
Type of Rele						Volume of	Release: 15/25	Volume I	Recovered: 10/2	0			
Source of Re	lease: flow	line					Four of Occurrence		Hour of Discove	ry 0001/)			
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WAS HIRIERIALE NOBLE CITYER:													
X Yes No Not Required BLM - S. Tucker OCD - M. Bratcher By Whom? Johnny Titsworth Date and Hour: 11/1/16 #2-mail 1/2/10 # 5 Was a Watercourse Reached? If YES, Volume Impacting the Watercourse. 2:44am 1/2/10 # 5 A1/1/7 #													
Was a Watercourse Reached? If YES, Volume Impacting the Watercourse.										111174			
	☐ Yes X No												
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		and Cleanup . 30'x20-30' ar			impact	ed area will b	e sampled and rea	mediated to regulat	ory standards.				
regulations a public health should their or or the enviro	II operators or the envi operations b nment. In a	are required to ronment. The nave failed to	to report and acceptand adequately OCD accep	nd/or file certain in the of a C-141 report investigate and i	release nort by the emediat	notifications and the NMOCD material contaminates and the contaminates are not to the	nd perform correct parked as "Final Ricon that pose a thruste the operator of	inderstand that pur- ctive actions for rel deport" does not rel reat to ground wate responsibility for c	eases which may ieve the operator r, surface water, ompliance with	endanger of liability human health			
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Printed Nam	e: Johnny T	itsworth								(man-			
Title: HSE (Coordinator		······································			Approval Da	te: 27117	Expiration	Date: N/A				
E-mail Addr	ess: įtitswo	rth@burnetto	il.com			Conditions q	f Approval:		America F	1			
Date: 2/2/	'16		Phone: (4	32) 425-2891			ee atta	ched	Attached _	l			
Attach Addi	tional She	ets If Neces	sary				• -		2RI	0-4103			

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 2/2/17 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 2RP-410.3 has been assigned. Please refer to this case number in all future correspondence.

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

The responsible person shall complete <u>division-approved corrective action</u> for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC. [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District of office in Artesia on or before 3/17/1. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.
- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.
- Nominal detection limits for field and laboratory analyses must be provided.
- Composite sampling is not generally allowed.
- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

- •Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.
- If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.
- Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold OCD Environmental Bureau Chief 1220 South St. Francis Drive Santa Fe, New Mexico 87505 505-476-3465 jim.griswold@state.nm.us

Bratcher, Mike, EMNRD

From: Johnny Titsworth < jtitsworth@burnettoil.com>

Sent: Thursday, February 2, 2017 2:26 PM

To: Bratcher, Mike, EMNRD; Weaver, Crystal, EMNRD; Tucker, Shelly

Cc: Kyle Adams; Leslie Garvis **Subject:** Jackson B 33 release

Attachments: JB 33 C-141 initial.pdf

All,

Attached is the C-141 for the release we found yesterday at the Jackson B 33 flowline. if there are any questions or concerns, feel free to contact us. Thanks

Johnny Titsworth

HSE COORDINATOR

BURNETT OIL CO., INC.

P.O. Box 188 CR 220 North

Loco Hills, NM 88255 MOBILE: (432)-425-2891

EMAIL: jtitsworth@burnettoil.com

This message is intended only for the person(s) to which it is addressed and may contain privileged, confidential and/or insider information. If you have received this communication in error, please notify us immediately by replying to the message and deleting it from your computer. Any disclosure, copying, distribution, or the taking of any action concerning the contents of this message and any attachment(s) by anyone other than the named recipient(s) is strictly prohibited.

Bratcher, Mike, EMNRD

From: Johnny Titsworth < jtitsworth@burnettoil.com>

Sent: Wednesday, February 1, 2017 12:12 PM

To: Bratcher, Mike, EMNRD; Weaver, Crystal, EMNRD; Tucker, Shelly

Cc: Kyle Adams; Leslie Garvis

Subject: Jackson B 33 release

All,

We found a release today on the flowline going from the Jackson B 33 well to the Jackson B 5 TB. We have a vac truck on location to pick up all standing fluid. When I have all information, I will submit the C-141

Johnny Titsworth

HSE COORDINATOR

BURNETT OIL CO., INC.

P.O. Box 188 CR 220 North Loco Hills, NM 88255 MOBILE: (432)-425-2891

EMAIL: jtitsworth@burnettoil.com

This message is intended only for the person(s) to which it is addressed and may contain privileged, confidential and/or insider information. If you have received this communication in error, please notify us immediately by replying to the message and deleting it from your computer. Any disclosure, copying, distribution, or the taking of any action concerning the contents of this message and any attachment(s) by anyone other than the named recipient(s) is strictly prohibited.

Bratcher, Mike, EMNRD

From: Johnny Titsworth < jtitsworth@burnettoil.com>

Sent: Wednesday, November 02, 2016 9:44 AM

To: Bratcher, Mike, EMNRD; Patterson, Heather, EMNRD; stucker@blm.gov

Cc: Kyle Adams; Leslie Garvis

Subject: Jackson B 33

All

We had a release at the Jackson B 33 location yesterday. The release was approx 4 BBLS of total fluid, and was in the pasture. The flow line has been repaired and the unit is back in service. The C-141 will be filed shortly. Let us know if you have any questions.

Johnny Titsworth HSE Coordinator 432-425-2891

Sent from my iPhone

This message is intended only for the person(s) to which it is addressed and may contain privileged, confidential and/or insider information. If you have received this communication in error, please notify us immediately by replying to the message and deleting it from your computer. Any disclosure, copying, distribution, or the taking of any action concerning the contents of this message and any attachment(s) by anyone other than the named recipient(s) is strictly prohibited.

e of New Mexico

Incident ID		
District RP	2RP-4103	
Facility ID		
Application ID		

Site Assessment/Characterization

 $This information \ must \ be \ provided \ to \ the \ appropriate \ district \ of fice \ no \ later \ than \ 90 \ days \ after \ the \ release \ discovery \ date.$

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>>125'</u> (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 vercontamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.	tical extents of soil
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 well 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 	ls.
☐ 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.

Received by OCD: 9/20/2023 12:48:56 PM Form C-141 State of New Mexico Oil Conservation Division Page 4

Page 16 of 97

Incident ID	nAB1703856615
District RP	2RP-4103
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 email: Chase_Settle@eogresources.com	Date: 09/20/2023_ Telephone: 575-748-1471
OCD Only Received by:	Date:

Page 17 of 97

Incident ID	nAB1703856615
District RP	2RP-4103
Facility ID	
Application ID	

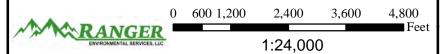
Closure

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.

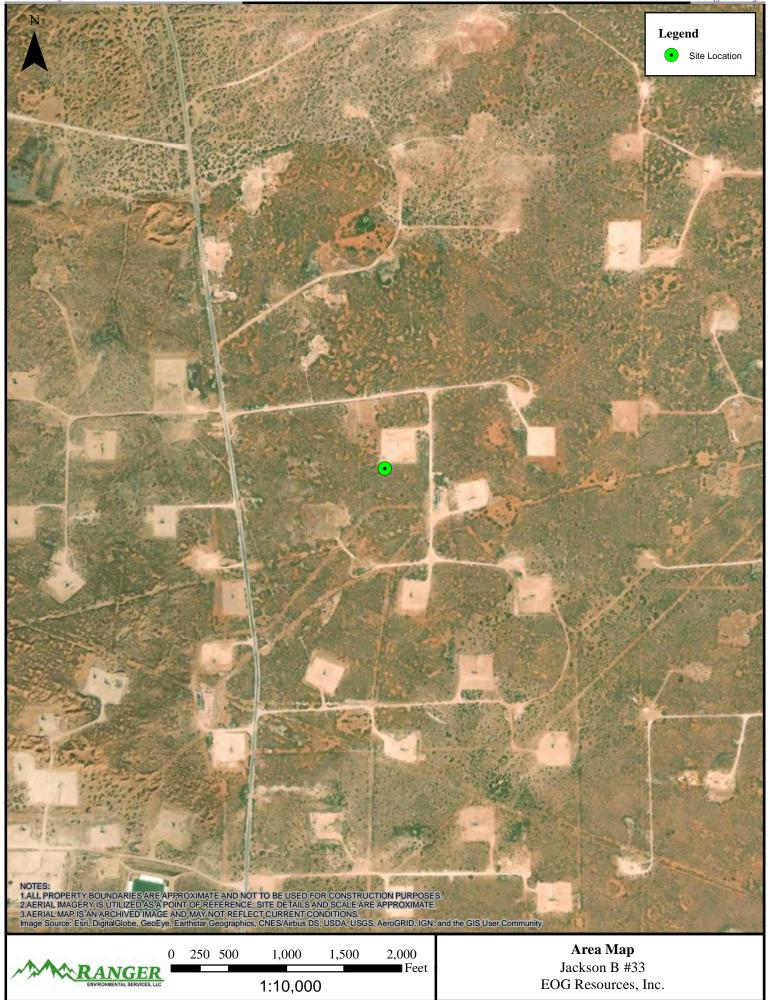
Closure Report Attachment Checklist: Each of the following is	tems must be included in the closure report.
	1 NMAC
□ Photographs of the remediated site prior to backfill or photos must be notified 2 days prior to liner inspection)	of the liner integrity if applicable (Note: appropriate OCD District office
☐ Laboratory analyses of final sampling (Note: appropriate ODC	C District office must be notified 2 days prior to final sampling)
Description of remediation activities	
and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of should their operations have failed to adequately investigate and rerhuman health or the environment. In addition, OCD acceptance of	ntions. The responsible party acknowledges they must substantially nditions that existed prior to the release or their final land use in
Printed Name: Chase Settle	Title: Rep Safety & Environmental Sr
Signature: Chase Settle	
email: Chase_Settle@eogresources.com	Telephone: <u>575-748-1471</u>
OCD Only	
Received by:	Date:
	of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible or regulations.
Closure Approved by:Ashley Maxwell	Date: 9/26/2023
Closure Approved by: Ashley Mafwell Printed Name: Ashley Maxwell	Title: Environmental Specialist

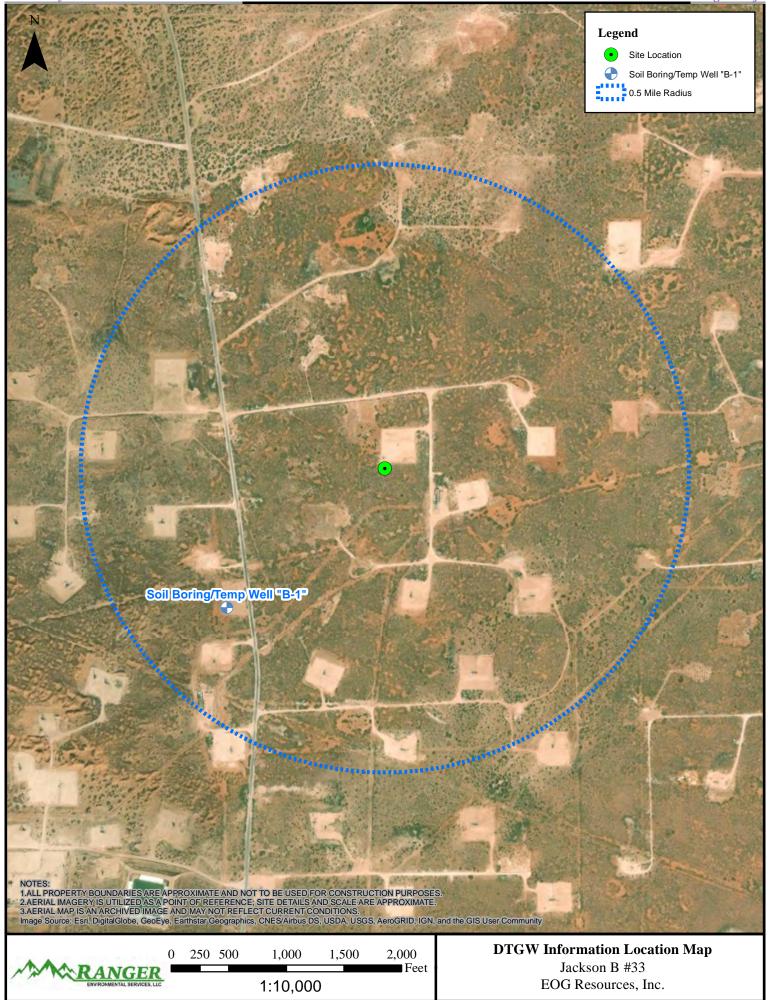
FIGURES

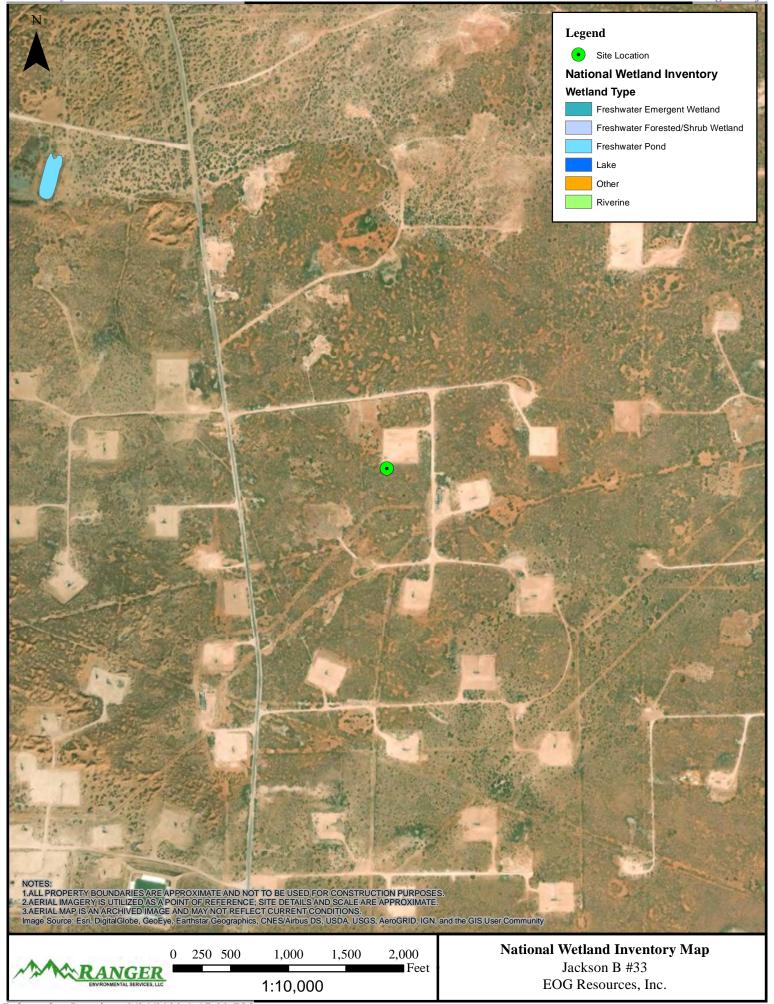
Topographic Map
Area Map
DTGW Information Location Map
National Wetland Inventory Map
FEMA Floodplain Map
Karst Topography Map
Site Assessment Sample Location Map
Final Excavation Area and Confirmation Sample Location

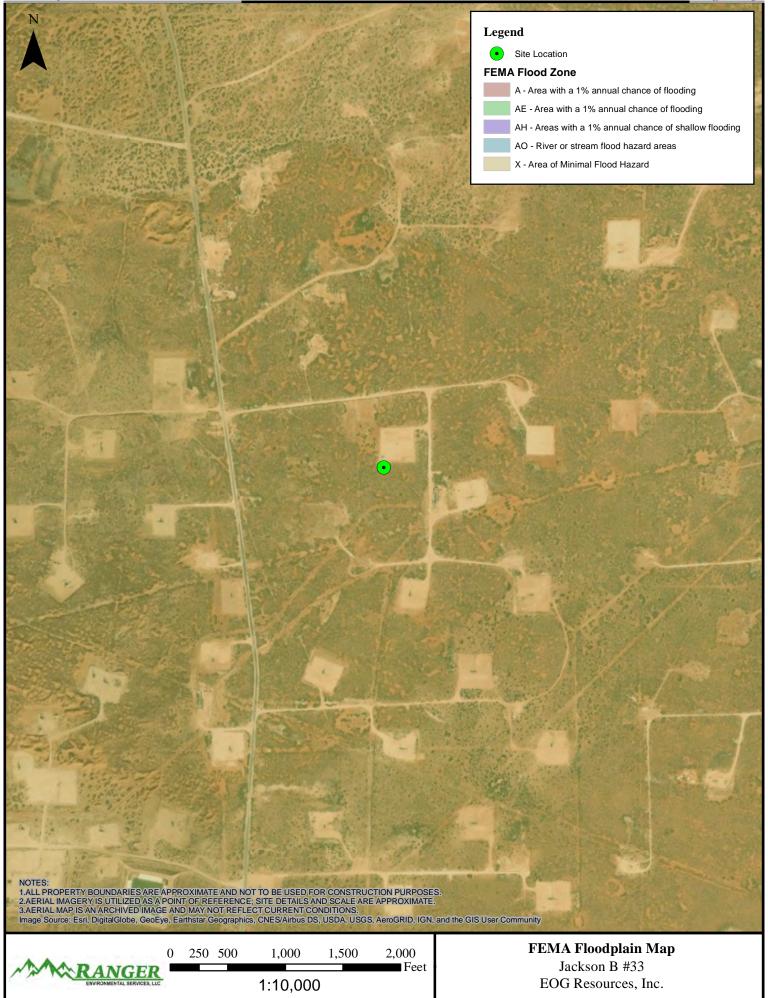


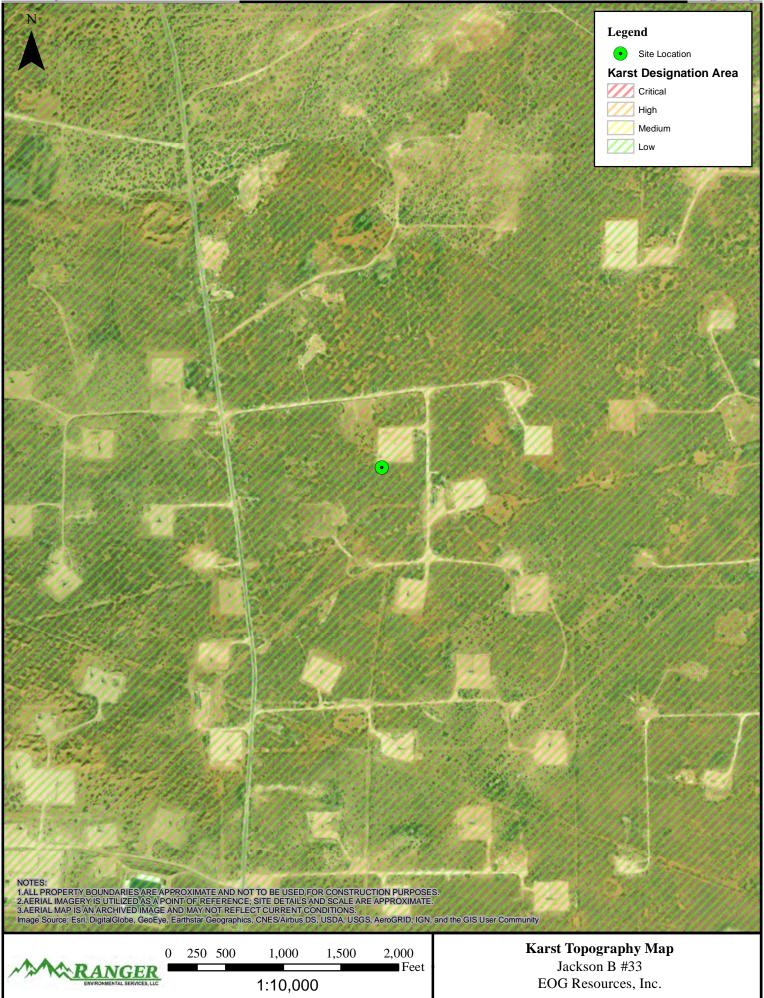
Topographic Map Jackson B #33 EOG Resources, Inc.



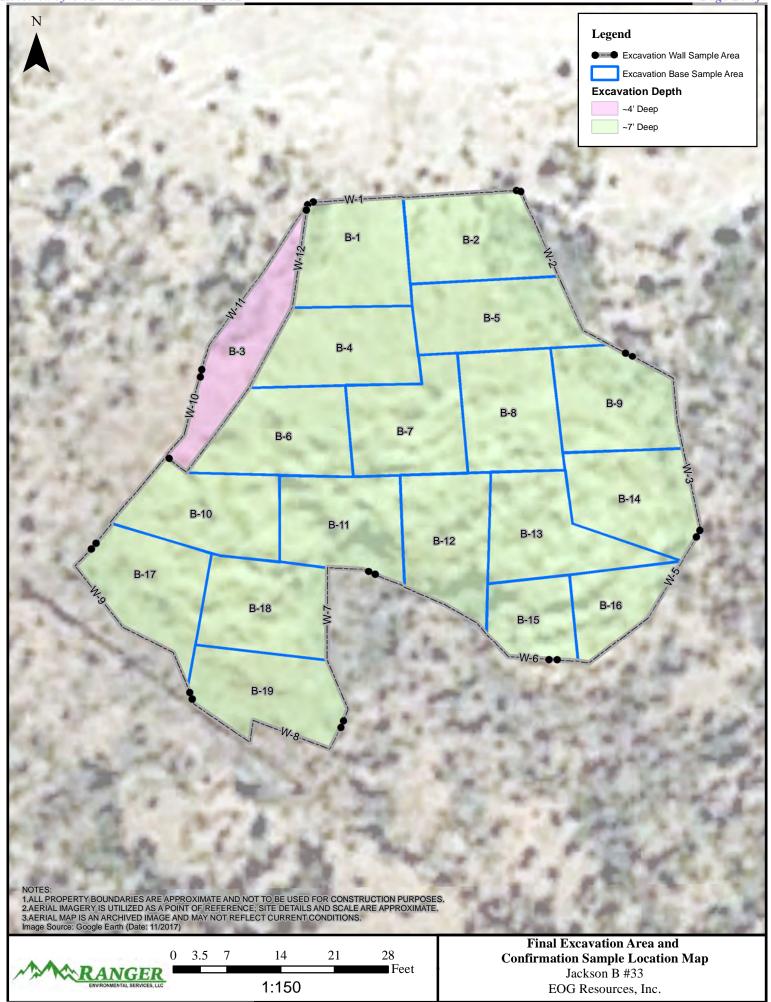












TABLES

Site Assessment Soil BTEX (EPA 8260), TPH (EPA 8015) & Chloride (EPA 300) Analytical Data

Confirmation Soil Sample BTEX (EPA 8260), TPH (EPA 8015) & Chloride (EPA 300) Analytical Data

Received by OCD: 9/20/2023 12:48:56 PM

SITE ASSESSMENT SOIL SAMPLE BTEX (EPA 8021), TPH (SW 8015) & CHLORIDE (EPA 300) ANALYTICAL DATA EOG RESOURCES, INC. JACKSON B #33

All values presented in parts per million (mg/Kg)

7 iii valade procentea iii parte per million (mg/tg)													
SAMPLE ID	DATE	DEPTH (FT)	BENZENE	TOLUENE	ETHYL- BENZENE	TOTAL XYLENES	TOTAL BTEX	TPH GRO C6-C10	TPH DRO C10-C28	TPH MRO C28-C36	TPH (GRO+DRO)	TPH (GRO+DRO+ MRO)	CHLORIDE
Initial Assessment Hand Auger S	Samples												
HA-1/2	7/25/2023	2'	<0.025	<0.050	<0.050	<0.099	<0.10	<5.0	<9.6	<48	<9.6	<48	<60
HA-1/4	7/25/2023	4'	<0.024	<0.048	<0.048	<0.096	<0.10	<4.8	<9.1	<45	<9.1	<45	180
HA-2/3	7/25/2023	3'	<0.025	< 0.050	< 0.050	<0.10	<0.10	<5.0	5,500	5,100	5,500	11,000	<60
HA-2/4	7/25/2023	4'	<0.025	<0.050	<0.050	<0.099	<0.10	9.4	6,900	3,500	6,900	10,000	<60
19.15.29.12 NMAC Table 1 C Impacted by a Relea			10				50				1,000	2,500	20,000
19.15.29.13 NMAC Red (0'-4' Soils		teria	10 ³				50 ³					100 ³	600

Notes:

- 1. Results exceeding the Table 1 Closure Criteria are presented in bold type and are highlighted yellow.
- 2. Results exceeding the NMAC Restoration, Reclamation and re-vegetation chloride concentration requirements are presented in bold red type.
- 3. Value derived from the State of New Mexico Energy, Minerals and Natural Resources Department document Procedures for the Implementation of the Spill Rule (19.15.29 NMAC) dated September 6, 2019.

Page 29 of 97

Received by OCD: 9/20/2023 12:48:56 PM

CONFIRMATION SOIL SAMPLE BTEX (EPA 8021), TPH (SW 8015) & CHLORIDE (EPA 300) ANALYTICAL DATA EOG RESOURCES, INC. JACKSON B #33

All values presented in parts per million (mg/Kg)

SAMPLE ID	DATE	DEPTH (FT)	BENZENE	TOLUENE	ETHYL- BENZENE	TOTAL XYLENES	TOTAL BTEX	TPH GRO C6-C10	TPH DRO C10-C28	TPH MRO C28-C36	TPH (GRO+DRO)	TPH (GRO+DRO+ MRO)	CHLORIDE
Excavation Wall Samples												ivii (O)	
W-1	8/29/2023	0-7'	< 0.025	< 0.050	< 0.050	< 0.099	<0.10	<5.0	<9.2	<46	<9.2	<46	290
W-2	8/29/2023	0-7'	< 0.25	< 0.49	< 0.49	<0.98	< 0.09	<49	<9.2	<46	<49	<46	110
W-3	8/29/2023	0-7'	< 0.025	< 0.050	< 0.050	<0.099	<0.10	<5.0	<9.5	<48	<9.5	<48	<60
W-4	8/29/2023	0-7'	< 0.024	< 0.049	< 0.049	< 0.097	<0.10	<4.9	<9.4	<47	<9.4	<47	97
W-5	8/29/2023	0-7'	< 0.025	< 0.049	< 0.049	< 0.099	<0.10	<4.9	<9.3	<46	<9.3	<46	<60
W-6	8/29/2023	0-7'	< 0.025	< 0.049	< 0.049	<0.098	<0.10	<4.9	<9.8	<49	<9.8	<49	<60
W-7	8/29/2023	0-7'	< 0.024	< 0.047	< 0.047	< 0.094	<0.09	<4.7	<9.9	<49	<9.9	<49	250
W-8	8/29/2023	0-4'	< 0.025	< 0.049	< 0.049	<0.098	<0.10	<4.9	<9.1	<45	<9.1	<45	<60
W-9	8/29/2023	0-4'	< 0.024	<0.048	<0.048	< 0.096	<0.10	<4.8	18	<46	18	18	<60
W-10	8/29/2023	0-4'	< 0.023	<0.046	< 0.046	< 0.093	< 0.09	<4.6	<9.5	<48	<9.5	<48	81
W-11	8/29/2023	0-4'	< 0.025	< 0.050	< 0.050	<0.10	<0.10	<5.0	<9.9	<49	<9.9	<49	160
W-12	8/29/2023	0-4'	<0.024	<0.049	<0.049	<0.098	<0.10	<4.9	<9.3	<47	<9.3	<47	140
Excavation Base Samples	1 - / /												
B-1	8/29/2023	4'	<0.024	<0.048	<0.048	<0.096	<0.10	<4.8	12	<49	12	12	180
B-2	8/29/2023	7'	<0.024	<0.049	<0.049	<0.098	<0.10	<4.9	49	<47	49	49	200
B-3	8/29/2023	7'	<0.024	<0.048	<0.048	<0.095	<0.10	<4.8	26	<49	26	26	160
B-4	8/29/2023	7'	<0.024	<0.049	<0.049	<0.097	<0.10	<4.9	<9.2	<46	<9.2	<46	68
B-5	8/29/2023	7'	<0.024	<0.049	<0.049	<0.098	<0.10	<4.9	12	<48	12	12	170
B-6	8/29/2023	7'	<0.024	<0.047	<0.047	<0.095	<0.09	<4.7	14	<49	14	14	210
B-7	8/29/2023	7'	<0.024	<0.048	<0.048	<0.097	<0.10	<4.8	68	<48	68	68	370
B-8	8/29/2023	7'	<0.025	<0.050	<0.050	<0.099	<0.10	<5.0	<9.6	<48	<9.6	<48	98
B-9	8/29/2023	7'	<0.024	<0.048	<0.048	<0.095	<0.10	<4.8	10	<48	10	10	130
B-10	8/29/2023	7'	<0.024	<0.047	<0.047	<0.095	<0.09	<4.7	<9.7	<48	<9.7	<48	110
B-11	8/29/2023	7'	<0.024	<0.047	<0.047	<0.095	<0.09	<4.7	25	<46	25	25	130
B-12	8/29/2023	7'	<0.024	<0.049	<0.049	<0.097	<0.10	<4.9	74	64	74	140	320
B-13	8/29/2023	7'	<0.025	<0.049	<0.049	<0.099	<0.10	<4.9	56	<46	56	56	340
B-14	8/29/2023	7'	<0.024	<0.048	<0.048	<0.096	<0.10	<4.8	50	<46	50	50	240
B-15	8/29/2023	7'	<0.024	<0.047	<0.047	<0.095	<0.09	<4.7	34	<49	34	34	220
B-16	8/29/2023	7'	<0.024	<0.048	<0.048	<0.096	<0.10	<4.8	<9.9	<49	<9.9	<49	110
B-17	8/29/2023	7'	<0.025	<0.050	<0.050	<0.099	<0.10	<5.0	59	61	59	120	310
B-18	8/29/2023	7'	<0.024	<0.047	<0.047	<0.095	<0.09	<4.7	56	<47	56	56	360
B-19	8/29/2023	7'	<0.024	<0.048	<0.048	<0.096	<0.10	<4.8	14	<47	14	14	180
19.15.29.12 NMAC Table 1 Impacted by a Rel			10				50				1,000	2,500	20,000
19.15.29.13 NMAC R (0'-4' Soil		teria	10 ³		-		50 ³				_	100 ³	600

Notes:

- 1. Results exceeding the Table 1 Closure Criteria are presented in bold type and are highlighted yellow.
- 2. Results exceeding the NMAC Restoration, Reclamation and re-vegetation chloride concentration requirements are presented in bold red type.
- 3. Value derived from the State of New Mexico Energy, Minerals and Natural Resources Department document Procedures for the Implementation of the Spill Rule (19.15.29 NMAC) dated September 6, 2019.

ATTACHMENT 1 – DEPTH-TO-GROUNDWATER DATA

Location: Eddy County, New Mexico

BORING LOG

Project No.: 700438.238.01

Weather: Clear, Temp.: 75°F

Driller: D. Londagin

Site Name: Jackson B #59

Logger: D. Adkins

Rig Type: Reich Drill

Bit Size: 5-7/8"

Date: 5/18/2021

Field Instrument: NA

Boring Number: B-1

Latitude: 32.85697 N **Drilling Method: Air Rotary**

Longitude: -103.92703 W Sample Retrieval Method: Drill Cuttings

Time	Lab Sample Collected	Sample Interval (ft)	Sample Recovery (ft)	nscs	Composition (%)	Sample Material/Comments Include composition, color, grain size, moisture, hardness, plasticity, density	Hydrocarbon Odor	PID (ppm)
		0-30′				Red/brown fine Sand (SP)	None Slight Mod. Strong	
		30-40'				Red/brown fine Sand (SP) with varying amounts of silt and caliche	None Slight Mod. Strong	
		40-80'				Dry, dark red/brown sandy Silts (SM)	None Slight Mod. Strong	
		80-125′				Red/brown fine Sand (SP)	None Slight Mod. Strong	
						TD 125′	None Slight Mod. Strong	
							None Slight Mod. Strong	
							None Slight Mod. Strong	
							None Slight Mod. Strong	
							None Slight Mod. Strong	
							None Slight Mod. Strong	
							None Slight Mod. Strong	
							None Slight Mod. Strong	
Surface Elevation: Notes: Groundwater Not Encountered @ 125' BGS – 72 hr. Logger Initials: DJA								

Page _____ of ____

ATTACHMENT 2 - PHOTOGRAPHIC DOCUMENTATION

Released to Imaging: 9/26/2023 1:17:29 PM



PHOTOGRAPH NO. 1 – A general view of the subject area during the initial assessment activities completed on July 25, 2023. The view is towards the northeast.

(Approximate GPS Coordinates: 32.860190, -103.922693)



PHOTOGRAPH NO. 2 – A view of the Excavation activities during the remedial process. The view is towards the southeast.

(Approximate GPS Coordinates: 32.860327, -103.922684)



PHOTOGRAPH NO. 3 – A view of the excavated area upon completion of the remediation activities at the Site. The view is towards the southwest.

(Approximate GPS Coordinates: 32.860236, -103.922351)



PHOTOGRAPH NO. 4 – An additional view of the completed remediation area. The view is towards the southeast.

(Approximate GPS Coordinates: 32.860364, -103.922617)

ATTACHMENT	3 - LABORATORY	ANALYTICAL
	REPORTS	



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

August 03, 2023

Will Kierdorf
EOG
105 South Fourth Street
Artesia, NM 88210
TEL:
FAX:

RE: Jackson B 33 OrderNo.: 2307B92

Dear Will Kierdorf:

Hall Environmental Analysis Laboratory received 4 sample(s) on 7/26/2023 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

and st

4901 Hawkins NE

Albuquerque, NM 87109

Jackson B 33

2307B92-001

CLIENT: EOG

Xylenes, Total

Surr: 4-Bromofluorobenzene

Project:

Lab ID:

Analytical Report

Lab Order **2307B92**Date Reported: **8/3/2023**

8/1/2023 2:17:00 PM

8/1/2023 2:17:00 PM

76505

76505

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: HA-1/2

mg/Kg

%Rec

Collection Date: 7/25/2023 10:26:00 AM Received Date: 7/26/2023 7:15:00 AM

Result **RL Qual Units DF** Date Analyzed Batch Analyses **EPA METHOD 300.0: ANIONS** Analyst: SNS Chloride ND 60 mg/Kg 20 8/1/2023 3:36:53 PM 76595 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: SB Diesel Range Organics (DRO) 9.6 mg/Kg 7/28/2023 3:55:58 PM 76511 Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 7/28/2023 3:55:58 PM 76511 Surr: DNOP 105 69-147 %Rec 1 7/28/2023 3:55:58 PM 76511 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: KMN Gasoline Range Organics (GRO) ND 8/1/2023 2:17:00 PM 76505 5.0 mg/Kg Surr: BFB 98.8 %Rec 8/1/2023 2:17:00 PM 76505 15-244 **EPA METHOD 8021B: VOLATILES** Analyst: KMN ND 0.025 8/1/2023 2:17:00 PM 76505 Benzene mg/Kg Toluene ND 0.050 mg/Kg 8/1/2023 2:17:00 PM 76505 Ethylbenzene ND 0.050 mg/Kg 1 8/1/2023 2:17:00 PM 76505

ND

96.2

0.099

39.1-146

Matrix: SOIL

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 8

Jackson B 33

2307B92-002

CLIENT: EOG

Project:

Lab ID:

Analytical Report

Lab Order **2307B92**Date Reported: **8/3/2023**

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: HA-1/4

Collection Date: 7/25/2023 10:46:00 AM

Received Date: 7/26/2023 7:15:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: SNS
Chloride	180	60	mg/Kg	20	8/1/2023 3:49:18 PM	76595
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analys	t: SB
Diesel Range Organics (DRO)	ND	9.1	mg/Kg	1	7/28/2023 5:09:08 PM	76511
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	7/28/2023 5:09:08 PM	76511
Surr: DNOP	92.8	69-147	%Rec	1	7/28/2023 5:09:08 PM	76511
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: KMN
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	8/1/2023 3:22:00 PM	76505
Surr: BFB	97.3	15-244	%Rec	1	8/1/2023 3:22:00 PM	76505
EPA METHOD 8021B: VOLATILES					Analys	t: KMN
Benzene	ND	0.024	mg/Kg	1	8/1/2023 3:22:00 PM	76505
Toluene	ND	0.048	mg/Kg	1	8/1/2023 3:22:00 PM	76505
Ethylbenzene	ND	0.048	mg/Kg	1	8/1/2023 3:22:00 PM	76505
Xylenes, Total	ND	0.096	mg/Kg	1	8/1/2023 3:22:00 PM	76505
Surr: 4-Bromofluorobenzene	95.2	39.1-146	%Rec	1	8/1/2023 3:22:00 PM	76505

Matrix: SOIL

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 2 of 8

Analytical Report Lab Order 2307B92

Date Reported: 8/3/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG Client Sample ID: HA-2/3

 Project:
 Jackson B 33
 Collection Date: 7/25/2023 11:24:00 AM

 Lab ID:
 2307B92-003
 Matrix: SOIL
 Received Date: 7/26/2023 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analys	t: SNS
Chloride	ND	60		mg/Kg	20	8/1/2023 4:01:42 PM	76595
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS					Analys	t: SB
Diesel Range Organics (DRO)	5500	190		mg/Kg	20	7/28/2023 5:33:28 PM	76511
Motor Oil Range Organics (MRO)	5100	950		mg/Kg	20	7/28/2023 5:33:28 PM	76511
Surr: DNOP	0	69-147	S	%Rec	20	7/28/2023 5:33:28 PM	76511
EPA METHOD 8015D: GASOLINE RANGE						Analys	t: KMN
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/1/2023 4:27:00 PM	76505
Surr: BFB	99.1	15-244		%Rec	1	8/1/2023 4:27:00 PM	76505
EPA METHOD 8021B: VOLATILES						Analys	t: KMN
Benzene	ND	0.025		mg/Kg	1	8/1/2023 4:27:00 PM	76505
Toluene	ND	0.050		mg/Kg	1	8/1/2023 4:27:00 PM	76505
Ethylbenzene	ND	0.050		mg/Kg	1	8/1/2023 4:27:00 PM	76505
Xylenes, Total	ND	0.10		mg/Kg	1	8/1/2023 4:27:00 PM	76505
Surr: 4-Bromofluorobenzene	94.0	39.1-146		%Rec	1	8/1/2023 4:27:00 PM	76505

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

pie pri Not in Range
Page 3 of 8

Analytical Report Lab Order 2307B92

Date Reported: 8/3/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG Client Sample ID: HA-2/4

 Project:
 Jackson B 33
 Collection Date: 7/25/2023 11:30:00 AM

 Lab ID:
 2307B92-004
 Matrix: SOIL
 Received Date: 7/26/2023 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analys	t: SNS
Chloride	ND	60		mg/Kg	20	8/1/2023 4:14:07 PM	76595
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS					Analys	t: SB
Diesel Range Organics (DRO)	6900	200		mg/Kg	20	7/28/2023 6:22:55 PM	76511
Motor Oil Range Organics (MRO)	3500	990		mg/Kg	20	7/28/2023 6:22:55 PM	76511
Surr: DNOP	0	69-147	S	%Rec	20	7/28/2023 6:22:55 PM	76511
EPA METHOD 8015D: GASOLINE RANGE						Analys	t: KMN
Gasoline Range Organics (GRO)	9.4	5.0		mg/Kg	1	8/1/2023 4:49:00 PM	76505
Surr: BFB	150	15-244		%Rec	1	8/1/2023 4:49:00 PM	76505
EPA METHOD 8021B: VOLATILES						Analys	t: KMN
Benzene	ND	0.025		mg/Kg	1	8/1/2023 4:49:00 PM	76505
Toluene	ND	0.050		mg/Kg	1	8/1/2023 4:49:00 PM	76505
Ethylbenzene	ND	0.050		mg/Kg	1	8/1/2023 4:49:00 PM	76505
Xylenes, Total	ND	0.099		mg/Kg	1	8/1/2023 4:49:00 PM	76505
Surr: 4-Bromofluorobenzene	104	39.1-146		%Rec	1	8/1/2023 4:49:00 PM	76505

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 4 of 8

Hall Environmental Analysis Laboratory, Inc.

WO#: **2307B92** *03-Aug-23*

Client: EOG

Project: Jackson B 33

Sample ID: MB-76595 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 76595 RunNo: 98664

Prep Date: 8/1/2023 Analysis Date: 8/1/2023 SeqNo: 3593632 Units: mg/Kg

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

Chloride ND 0.50

Sample ID: LCS-76595 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 76595 RunNo: 98664

Prep Date: 8/1/2023 Analysis Date: 8/1/2023 SeqNo: 3593633 Units: mg/Kg

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

Chloride 15 1.5 15.00 0 101 90 110

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 5 of 8

Hall Environmental Analysis Laboratory, Inc.

WO#: **2307B92** *03-Aug-23*

Client: EOG

Project: Jackson B 33

Sample ID: MB-76511 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 76511 RunNo: 98568 Prep Date: 7/27/2023 Analysis Date: 7/28/2023 SeqNo: 3590172 Units: mg/Kg Analyte PQL SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Qual Result LowLimit Diesel Range Organics (DRO) ND 10 Motor Oil Range Organics (MRO) ND 50 Surr: DNOP 10 10.00 101 69 147

Sample ID: LCS-76511 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics RunNo: 98568 Client ID: LCSS Batch ID: 76511 Prep Date: 7/27/2023 Analysis Date: 7/28/2023 SeqNo: 3590173 Units: mg/Kg %REC Analyte PQL SPK value SPK Ref Val LowLimit HighLimit %RPD **RPDLimit** Qual

 Diesel Range Organics (DRO)
 51
 10
 50.00
 0
 102
 61.9
 130

 Surr: DNOP
 5.0
 5.000
 99.7
 69
 147

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

Page 6 of 8

Hall Environmental Analysis Laboratory, Inc.

2307B92 03-Aug-23

Qual

WO#:

Client: EOG

Project: Jackson B 33

Sample ID: Ics-76505 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range Client ID: LCSS Batch ID: 76505 RunNo: 98640 Prep Date: 7/27/2023 Analysis Date: 8/1/2023 SeqNo: 3592408 Units: mg/Kg PQL SPK value SPK Ref Val %REC %RPD **RPDLimit**

HighLimit Analyte Result LowLimit Gasoline Range Organics (GRO) 25 5.0 25.00 0 98.9 70 130 Surr: BFB 2100 1000 209 15 244

Sample ID: mb-76505 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 76505 RunNo: 98640

Prep Date: Analysis Date: 8/1/2023 SeqNo: 3592409 7/27/2023 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual

Gasoline Range Organics (GRO) ND 5.0

980 Surr: BFB 1000 98.4 15 244

Qualifiers:

- Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated.
- Analyte detected in the associated Method Blank
- Above Quantitation Range/Estimated Value
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

Page 7 of 8

Hall Environmental Analysis Laboratory, Inc.

2307B92 03-Aug-23

WO#:

Client: EOG

Project: Jackson B 33

Sample ID: Ics-76505	Samp	Гуре: LC	s	Tes	tCode: EF	PA Method	8021B: Volati	les				
Client ID: LCSS	Batcl	h ID: 765	505	RunNo: 98640								
Prep Date: 7/27/2023	Analysis [Date: 8/	1/2023	SeqNo: 3592421			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	0.85	0.025	1.000	0	84.8	70	130					
Toluene	0.86	0.050	1.000	0	86.0	70	130					
Ethylbenzene	0.88	0.050	1.000	0	88.1	70	130					
Xylenes, Total	2.6	0.10	3.000	0	88.1	70	130					
Surr: 4-Bromofluorobenzene	0.95		1.000		95.4	39.1	146					

Sample ID: mb-76505	Samp ¹	Гуре: МЕ	BLK	Tes	tCode: EF	PA Method	d 8021B: Volatiles					
Client ID: PBS	Batc	h ID: 76	505	RunNo: 98640								
Prep Date: 7/27/2023	Analysis [Date: 8/	1/2023	5	SeqNo: 3	592422	Units: mg/K	g				
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	0.96		1.000		95.6	39.1	146					

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

Page 8 of 8

Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque. NM 87109

Sample Log-In Check List

Released to Imaging: 9/26/2023 1:17:29 PM

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Client Name: EOG Work Order Nu	mber: 2307B92		RcptNo: 1	
Received By: Tracy Casarrubias 7/26/2023 7:15:00	0 AM			
Completed By: Tracy Casarrubias 7/26/2023 9:19:58	8 AM			
Reviewed By: 7/24/23				
Chain of Custody				
1. Is Chain of Custody complete?	Yes 🗹	No 🗌	Not Present	
2. How was the sample delivered?	Courier			
<u>Log In</u> 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 🔽	# of preserved	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes 🗹	No 🗌	bottles checked for pH: (<2 or >12 unless noted)	d)
2. Are matrices correctly identified on Chain of Custody?	Yes 🗹	No 🗌	Adjusted?	
3. Is it clear what analyses were requested?	Yes 🗹	No 🗌	100000	Λ
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes 🗹	No 🗌	Checked/by: Checked/by:	J
Special Handling (if applicable)				
15. Was client notified of all discrepancies with this order?	Yes 🗌	No 🗌	NA 🗹	
Person Notified: Da	te:			
By Whom: Via	a: eMail F	hone 🗌 Fax	☐ In Person	
Regarding:			NAME OF THE PARTY	
Client Instructions:		AND THE RESERVE OF THE PARTY OF		
16. Additional remarks:				
17. Cooler Information				

0.5

Good

Yes

Morty

ceived	1000	2000 10 00 00 00 00 00 00 00 00 00 00 00		HALL ENVIRONMEN Marie 46 of 9
Client: E(OG-Arte	Client: EOG-Artesia / Ranger Env.	Standard Rush 5 DUM	ANALYSIS LABORATORY
			Project Name:	www.hallenvironmental.com
Vailing Ac	Idress: E	Mailing Address: EOG - 105 S 4th St, Artesia NM, 88210	Jackson B # 33	37109
Ranger: P	O Box 2(Ranger: PO Box 201179, Austin TX 78720	Project #: 5375	Tel. 505-345-3975 Fax 505-345-4107
Phone #: 521-335-1785	521-33	35-1785		Analysis Request
email or	Fax#: W	email or Fax#: Will@RangerEnv.com	Project Manager: W. Kierdorf	(c
QA/QC Package:	ackage:) MRG
■ Standard		☐ Level 4 (Full Validation)		OH
Accreditation:		☐ Az Compliance ☐ Other	Sampler: J. Martine 2. On Ice: A Yes D No Mortal	(00E
■ EDD	EDD (Type)_	Excel	olers:	สอ)
			Cooler Temp(including CP): () (0 - 0 1 > 0 S C	12D
			Container Preservative HEAI No.	
Date	Time	Matrix Sample Name	Type and # Type 2307892	МТ
7-25-43	مالاوا	Soil HA-7 / 2	1x 402 SOV 16E 001	XXX
1	1046	4/I-A1/	200	
	451	/ C-V#	003	
1	021	-	7	7 7 7
	1126	b		
\Box			No. No. Oata Time	Bemarks: Rill to EOG Artesia
Date:	Time:	Relinquished by:	Dy. Vid:	
1-2-1	500	\rightarrow	MAA	
Date:	Time:	Relinddished by:	CLOSE CALL	
			117011	Any sub-contracted data will be clearly notated on the analytical repol

If necessary, samples submitted to Hall Environmental may be sercontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-Released to Imaging: 9/26/2023 1:17:29 P.M.



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

September 13, 2023

Will Kierdorf
EOG
105 South Fourth Street
Artesia, NM 88210
TEL:
FAX:

RE: Jackson B 33 OrderNo.: 2309019

Dear Will Kierdorf:

Hall Environmental Analysis Laboratory received 31 sample(s) on 9/1/2023 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

and st

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 9/13/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG Client Sample ID: W-1

 Project:
 Jackson B 33
 Collection Date: 8/29/2023 10:10:00 AM

 Lab ID:
 2309019-001
 Matrix: SOIL
 Received Date: 9/1/2023 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analysi	: SNS
Chloride	290	60	mg/Kg	20	9/10/2023 1:38:07 PM	77386
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	:: PRD
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	9/7/2023 12:56:22 PM	77335
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	9/7/2023 12:56:22 PM	77335
Surr: DNOP	105	69-147	%Rec	1	9/7/2023 12:56:22 PM	77335
EPA METHOD 8015D: GASOLINE RANGE					Analyst	:: JJP
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	9/7/2023 4:23:13 PM	77329
Surr: BFB	103	15-244	%Rec	1	9/7/2023 4:23:13 PM	77329
EPA METHOD 8021B: VOLATILES					Analyst	:: JJP
Benzene	ND	0.025	mg/Kg	1	9/7/2023 4:23:13 PM	77329
Toluene	ND	0.050	mg/Kg	1	9/7/2023 4:23:13 PM	77329
Ethylbenzene	ND	0.050	mg/Kg	1	9/7/2023 4:23:13 PM	77329
Xylenes, Total	ND	0.099	mg/Kg	1	9/7/2023 4:23:13 PM	77329
Surr: 4-Bromofluorobenzene	111	39.1-146	%Rec	1	9/7/2023 4:23:13 PM	77329

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 35

Analytical Report

Lab Order **2309019**Date Reported: **9/13/2023**

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: W-2

 Project:
 Jackson B 33
 Collection Date: 8/29/2023 10:12:00 AM

 Lab ID:
 2309019-002
 Matrix: SOIL
 Received Date: 9/1/2023 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: SNS
Chloride	110	60	mg/Kg	20	9/10/2023 1:50:31 PM	77386
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analys	t: PRD
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	9/7/2023 1:28:39 PM	77335
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	9/7/2023 1:28:39 PM	77335
Surr: DNOP	113	69-147	%Rec	1	9/7/2023 1:28:39 PM	77335
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: JJP
Gasoline Range Organics (GRO)	ND	49	mg/Kg	1	9/7/2023 4:47:08 PM	77329
Surr: BFB	102	15-244	%Rec	1	9/7/2023 4:47:08 PM	77329
EPA METHOD 8021B: VOLATILES					Analys	t: JJP
Benzene	ND	0.25	mg/Kg	1	9/7/2023 4:47:08 PM	77329
Toluene	ND	0.49	mg/Kg	1	9/7/2023 4:47:08 PM	77329
Ethylbenzene	ND	0.49	mg/Kg	1	9/7/2023 4:47:08 PM	77329
Xylenes, Total	ND	0.98	mg/Kg	1	9/7/2023 4:47:08 PM	77329
Surr: 4-Bromofluorobenzene	110	39.1-146	%Rec	1	9/7/2023 4:47:08 PM	77329

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 2 of 35

Analytical Report

Lab Order **2309019**Date Reported: **9/13/2023**

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: W-3

 Project:
 Jackson B 33
 Collection Date: 8/29/2023 10:14:00 AM

 Lab ID:
 2309019-003
 Matrix: SOIL
 Received Date: 9/1/2023 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: SNS
Chloride	ND	60	mg/Kg	20	9/10/2023 2:02:55 PM	77386
EPA METHOD 8015M/D: DIESEL RANGE ORG	15M/D: DIESEL RANGE ORGANICS Analys				t: PRD	
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	9/7/2023 1:39:23 PM	77335
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	9/7/2023 1:39:23 PM	77335
Surr: DNOP	98.5	69-147	%Rec	1	9/7/2023 1:39:23 PM	77335
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: JJP
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	9/7/2023 5:10:59 PM	77329
Surr: BFB	102	15-244	%Rec	1	9/7/2023 5:10:59 PM	77329
EPA METHOD 8021B: VOLATILES					Analys	t: JJP
Benzene	ND	0.025	mg/Kg	1	9/7/2023 5:10:59 PM	77329
Toluene	ND	0.050	mg/Kg	1	9/7/2023 5:10:59 PM	77329
Ethylbenzene	ND	0.050	mg/Kg	1	9/7/2023 5:10:59 PM	77329
Xylenes, Total	ND	0.099	mg/Kg	1	9/7/2023 5:10:59 PM	77329
Surr: 4-Bromofluorobenzene	110	39.1-146	%Rec	1	9/7/2023 5:10:59 PM	77329

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

orting I imit Page 3 of 35

Date Reported: 9/13/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG Client Sample ID: W-4

 Project:
 Jackson B 33
 Collection Date: 8/29/2023 10:16:00 AM

 Lab ID:
 2309019-004
 Matrix: SOIL
 Received Date: 9/1/2023 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	: SNS
Chloride	97	60	mg/Kg	20	9/10/2023 2:15:19 PM	77386
PA METHOD 8015M/D: DIESEL RANGE ORGANICS Ar				Analys	:: PRD	
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	9/7/2023 1:50:09 PM	77335
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	9/7/2023 1:50:09 PM	77335
Surr: DNOP	103	69-147	%Rec	1	9/7/2023 1:50:09 PM	77335
EPA METHOD 8015D: GASOLINE RANGE					Analys	:: JJP
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/7/2023 5:34:46 PM	77329
Surr: BFB	101	15-244	%Rec	1	9/7/2023 5:34:46 PM	77329
EPA METHOD 8021B: VOLATILES					Analys	:: JJP
Benzene	ND	0.024	mg/Kg	1	9/7/2023 5:34:46 PM	77329
Toluene	ND	0.049	mg/Kg	1	9/7/2023 5:34:46 PM	77329
Ethylbenzene	ND	0.049	mg/Kg	1	9/7/2023 5:34:46 PM	77329
Xylenes, Total	ND	0.097	mg/Kg	1	9/7/2023 5:34:46 PM	77329
Surr: 4-Bromofluorobenzene	109	39.1-146	%Rec	1	9/7/2023 5:34:46 PM	77329

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

rting Limit Page 4 of 35

Date Reported: 9/13/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG Client Sample ID: W-5

 Project:
 Jackson B 33
 Collection Date: 8/29/2023 10:18:00 AM

 Lab ID:
 2309019-005
 Matrix: SOIL
 Received Date: 9/1/2023 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: SNS
Chloride	ND	60	mg/Kg	20	9/10/2023 2:27:44 PM	77386
EPA METHOD 8015M/D: DIESEL RANGE ORG	EL RANGE ORGANICS Analys				t: PRD	
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	9/7/2023 2:00:57 PM	77335
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	9/7/2023 2:00:57 PM	77335
Surr: DNOP	103	69-147	%Rec	1	9/7/2023 2:00:57 PM	77335
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: JJP
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/7/2023 6:22:20 PM	77329
Surr: BFB	102	15-244	%Rec	1	9/7/2023 6:22:20 PM	77329
EPA METHOD 8021B: VOLATILES					Analys	t: JJP
Benzene	ND	0.025	mg/Kg	1	9/7/2023 6:22:20 PM	77329
Toluene	ND	0.049	mg/Kg	1	9/7/2023 6:22:20 PM	77329
Ethylbenzene	ND	0.049	mg/Kg	1	9/7/2023 6:22:20 PM	77329
Xylenes, Total	ND	0.099	mg/Kg	1	9/7/2023 6:22:20 PM	77329
Surr: 4-Bromofluorobenzene	110	39.1-146	%Rec	1	9/7/2023 6:22:20 PM	77329

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 5 of 35

Analytical Report

Lab Order **2309019**Date Reported: **9/13/2023**

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: W-6

 Project:
 Jackson B 33
 Collection Date: 8/29/2023 10:20:00 AM

 Lab ID:
 2309019-006
 Matrix: SOIL
 Received Date: 9/1/2023 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: SNS
Chloride	ND	60	mg/Kg	20	9/10/2023 2:40:09 PM	77386
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analys	t: PRD
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	9/7/2023 2:11:45 PM	77335
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	9/7/2023 2:11:45 PM	77335
Surr: DNOP	96.4	69-147	%Rec	1	9/7/2023 2:11:45 PM	77335
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: JJP
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/7/2023 6:46:06 PM	77329
Surr: BFB	101	15-244	%Rec	1	9/7/2023 6:46:06 PM	77329
EPA METHOD 8021B: VOLATILES					Analys	t: JJP
Benzene	ND	0.025	mg/Kg	1	9/7/2023 6:46:06 PM	77329
Toluene	ND	0.049	mg/Kg	1	9/7/2023 6:46:06 PM	77329
Ethylbenzene	ND	0.049	mg/Kg	1	9/7/2023 6:46:06 PM	77329
Xylenes, Total	ND	0.098	mg/Kg	1	9/7/2023 6:46:06 PM	77329
Surr: 4-Bromofluorobenzene	110	39.1-146	%Rec	1	9/7/2023 6:46:06 PM	77329

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 6 of 35

Analytical Report

Lab Order **2309019**Date Reported: **9/13/2023**

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: W-7

 Project:
 Jackson B 33
 Collection Date: 8/29/2023 10:22:00 AM

 Lab ID:
 2309019-007
 Matrix: SOIL
 Received Date: 9/1/2023 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: SNS
Chloride	250	60	mg/Kg	20	9/10/2023 2:52:33 PM	77386
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analys	t: PRD
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	9/7/2023 2:22:44 PM	77335
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	9/7/2023 2:22:44 PM	77335
Surr: DNOP	115	69-147	%Rec	1	9/7/2023 2:22:44 PM	77335
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: JJP
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	9/7/2023 7:09:45 PM	77329
Surr: BFB	102	15-244	%Rec	1	9/7/2023 7:09:45 PM	77329
EPA METHOD 8021B: VOLATILES					Analys	t: JJP
Benzene	ND	0.024	mg/Kg	1	9/7/2023 7:09:45 PM	77329
Toluene	ND	0.047	mg/Kg	1	9/7/2023 7:09:45 PM	77329
Ethylbenzene	ND	0.047	mg/Kg	1	9/7/2023 7:09:45 PM	77329
Xylenes, Total	ND	0.094	mg/Kg	1	9/7/2023 7:09:45 PM	77329
Surr: 4-Bromofluorobenzene	110	39.1-146	%Rec	1	9/7/2023 7:09:45 PM	77329

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 7 of 35

Analytical Report

Lab Order **2309019**Date Reported: **9/13/2023**

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: W-8

 Project:
 Jackson B 33
 Collection Date: 8/29/2023 10:24:00 AM

 Lab ID:
 2309019-008
 Matrix: SOIL
 Received Date: 9/1/2023 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: SNS
Chloride	ND	60	mg/Kg	20	9/10/2023 3:04:58 PM	77386
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analys	t: PRD
Diesel Range Organics (DRO)	ND	9.1	mg/Kg	1	9/7/2023 2:33:41 PM	77335
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	9/7/2023 2:33:41 PM	77335
Surr: DNOP	106	69-147	%Rec	1	9/7/2023 2:33:41 PM	77335
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: JJP
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/7/2023 7:33:24 PM	77329
Surr: BFB	101	15-244	%Rec	1	9/7/2023 7:33:24 PM	77329
EPA METHOD 8021B: VOLATILES					Analys	t: JJP
Benzene	ND	0.025	mg/Kg	1	9/7/2023 7:33:24 PM	77329
Toluene	ND	0.049	mg/Kg	1	9/7/2023 7:33:24 PM	77329
Ethylbenzene	ND	0.049	mg/Kg	1	9/7/2023 7:33:24 PM	77329
Xylenes, Total	ND	0.098	mg/Kg	1	9/7/2023 7:33:24 PM	77329
Surr: 4-Bromofluorobenzene	111	39.1-146	%Rec	1	9/7/2023 7:33:24 PM	77329

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 8 of 35

Analytical Report

Lab Order 2309019 Date Reported: 9/13/2023

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: W-9

Project: Jackson B 33 Collection Date: 8/29/2023 10:26:00 AM 2309019-009 Lab ID: Matrix: SOIL Received Date: 9/1/2023 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: SNS
Chloride	ND	60	mg/Kg	20	9/10/2023 3:17:23 PM	77386
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analys	t: PRD
Diesel Range Organics (DRO)	18	9.3	mg/Kg	1	9/7/2023 2:55:20 PM	77335
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	9/7/2023 2:55:20 PM	77335
Surr: DNOP	94.3	69-147	%Rec	1	9/7/2023 2:55:20 PM	77335
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: JJP
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	9/7/2023 7:56:58 PM	77329
Surr: BFB	100	15-244	%Rec	1	9/7/2023 7:56:58 PM	77329
EPA METHOD 8021B: VOLATILES					Analys	t: JJP
Benzene	ND	0.024	mg/Kg	1	9/7/2023 7:56:58 PM	77329
Toluene	ND	0.048	mg/Kg	1	9/7/2023 7:56:58 PM	77329
Ethylbenzene	ND	0.048	mg/Kg	1	9/7/2023 7:56:58 PM	77329
Xylenes, Total	ND	0.096	mg/Kg	1	9/7/2023 7:56:58 PM	77329
Surr: 4-Bromofluorobenzene	109	39.1-146	%Rec	1	9/7/2023 7:56:58 PM	77329

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
- % Recovery outside of standard limits. If undiluted results may be estimated.
- Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- Analyte detected below quantitation limits Sample pH Not In Range
- RL Reporting Limit

Page 9 of 35

Analytical Report

Lab Order **2309019**Date Reported: **9/13/2023**

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: W-10

 Project:
 Jackson B 33
 Collection Date: 8/29/2023 10:28:00 AM

 Lab ID:
 2309019-010
 Matrix: SOIL
 Received Date: 9/1/2023 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	st: JTT
Chloride	81	60	mg/Kg	20	9/8/2023 7:16:28 PM	77389
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analys	t: PRD
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	9/7/2023 3:06:17 PM	77335
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	9/7/2023 3:06:17 PM	77335
Surr: DNOP	103	69-147	%Rec	1	9/7/2023 3:06:17 PM	77335
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: JJP
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	9/7/2023 8:20:30 PM	77329
Surr: BFB	99.4	15-244	%Rec	1	9/7/2023 8:20:30 PM	77329
EPA METHOD 8021B: VOLATILES					Analys	it: JJP
Benzene	ND	0.023	mg/Kg	1	9/7/2023 8:20:30 PM	77329
Toluene	ND	0.046	mg/Kg	1	9/7/2023 8:20:30 PM	77329
Ethylbenzene	ND	0.046	mg/Kg	1	9/7/2023 8:20:30 PM	77329
Xylenes, Total	ND	0.093	mg/Kg	1	9/7/2023 8:20:30 PM	77329
Surr: 4-Bromofluorobenzene	109	39.1-146	%Rec	1	9/7/2023 8:20:30 PM	77329

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 10 of 35

Jackson B 33

2309019-011

CLIENT: EOG

Project:

Lab ID:

Analytical Report

Lab Order **2309019**Date Reported: **9/13/2023**

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: W-11

Collection Date: 8/29/2023 10:30:00 AM

Matrix: SOIL Received Date: 9/1/2023 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	st: JTT
Chloride	160	60	mg/Kg	20	9/8/2023 7:53:42 PM	77389
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analys	st: PRD
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	9/7/2023 3:17:12 PM	77335
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	9/7/2023 3:17:12 PM	77335
Surr: DNOP	84.9	69-147	%Rec	1	9/7/2023 3:17:12 PM	77335
EPA METHOD 8015D: GASOLINE RANGE					Analys	st: JJP
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	9/7/2023 8:44:09 PM	77329
Surr: BFB	97.5	15-244	%Rec	1	9/7/2023 8:44:09 PM	77329
EPA METHOD 8021B: VOLATILES					Analys	st: JJP
Benzene	ND	0.025	mg/Kg	1	9/7/2023 8:44:09 PM	77329
Toluene	ND	0.050	mg/Kg	1	9/7/2023 8:44:09 PM	77329
Ethylbenzene	ND	0.050	mg/Kg	1	9/7/2023 8:44:09 PM	77329
Xylenes, Total	ND	0.10	mg/Kg	1	9/7/2023 8:44:09 PM	77329
Surr: 4-Bromofluorobenzene	107	39.1-146	%Rec	1	9/7/2023 8:44:09 PM	77329

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 11 of 35

Date Reported: 9/13/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG Client Sample ID: W-12

Project: Jackson B 33 Collection Date: 8/29/2023 10:32:00 AM 2309019-012 Lab ID: Matrix: SOIL Received Date: 9/1/2023 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: JTT
Chloride	140	60	mg/Kg	20	9/8/2023 8:30:56 PM	77389
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analys	t: PRD
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	9/7/2023 3:28:08 PM	77335
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	9/7/2023 3:28:08 PM	77335
Surr: DNOP	76.0	69-147	%Rec	1	9/7/2023 3:28:08 PM	77335
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: JJP
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/7/2023 9:31:11 PM	77329
Surr: BFB	96.2	15-244	%Rec	1	9/7/2023 9:31:11 PM	77329
EPA METHOD 8021B: VOLATILES					Analys	t: JJP
Benzene	ND	0.024	mg/Kg	1	9/7/2023 9:31:11 PM	77329
Toluene	ND	0.049	mg/Kg	1	9/7/2023 9:31:11 PM	77329
Ethylbenzene	ND	0.049	mg/Kg	1	9/7/2023 9:31:11 PM	77329
Xylenes, Total	ND	0.098	mg/Kg	1	9/7/2023 9:31:11 PM	77329
Surr: 4-Bromofluorobenzene	107	39.1-146	%Rec	1	9/7/2023 9:31:11 PM	77329

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
- % Recovery outside of standard limits. If undiluted results may be estimated.
- Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

Page 12 of 35

Date Reported: 9/13/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG Client Sample ID: B-1

 Project:
 Jackson B 33
 Collection Date: 8/29/2023 11:30:00 AM

 Lab ID:
 2309019-013
 Matrix: SOIL
 Received Date: 9/1/2023 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: JTT
Chloride	180	60	mg/Kg	20	9/8/2023 8:43:20 PM	77389
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analys	t: PRD
Diesel Range Organics (DRO)	12	9.8	mg/Kg	1	9/7/2023 3:39:04 PM	77335
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	9/7/2023 3:39:04 PM	77335
Surr: DNOP	103	69-147	%Rec	1	9/7/2023 3:39:04 PM	77335
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: JJP
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	9/7/2023 9:54:38 PM	77329
Surr: BFB	96.1	15-244	%Rec	1	9/7/2023 9:54:38 PM	77329
EPA METHOD 8021B: VOLATILES					Analys	t: JJP
Benzene	ND	0.024	mg/Kg	1	9/7/2023 9:54:38 PM	77329
Toluene	ND	0.048	mg/Kg	1	9/7/2023 9:54:38 PM	77329
Ethylbenzene	ND	0.048	mg/Kg	1	9/7/2023 9:54:38 PM	77329
Xylenes, Total	ND	0.096	mg/Kg	1	9/7/2023 9:54:38 PM	77329
Surr: 4-Bromofluorobenzene	107	39.1-146	%Rec	1	9/7/2023 9:54:38 PM	77329

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 13 of 35

Date Reported: 9/13/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG Client Sample ID: B-2

 Project:
 Jackson B 33
 Collection Date: 8/29/2023 11:32:00 AM

 Lab ID:
 2309019-014
 Matrix: SOIL
 Received Date: 9/1/2023 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: JTT
Chloride	200	60	mg/Kg	20	9/8/2023 8:55:45 PM	77389
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analys	t: PRD
Diesel Range Organics (DRO)	49	9.4	mg/Kg	1	9/7/2023 3:50:00 PM	77335
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	9/7/2023 3:50:00 PM	77335
Surr: DNOP	122	69-147	%Rec	1	9/7/2023 3:50:00 PM	77335
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: JJP
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/7/2023 10:18:02 PM	77329
Surr: BFB	94.5	15-244	%Rec	1	9/7/2023 10:18:02 PM	77329
EPA METHOD 8021B: VOLATILES					Analys	t: JJP
Benzene	ND	0.024	mg/Kg	1	9/7/2023 10:18:02 PM	77329
Toluene	ND	0.049	mg/Kg	1	9/7/2023 10:18:02 PM	77329
Ethylbenzene	ND	0.049	mg/Kg	1	9/7/2023 10:18:02 PM	77329
Xylenes, Total	ND	0.098	mg/Kg	1	9/7/2023 10:18:02 PM	77329
Surr: 4-Bromofluorobenzene	105	39.1-146	%Rec	1	9/7/2023 10:18:02 PM	77329

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 14 of 35

Jackson B 33

2309019-015

CLIENT: EOG

Project:

Lab ID:

Analytical Report

Lab Order **2309019**Date Reported: **9/13/2023**

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: B-3

Collection Date: 8/29/2023 11:34:00 AM

Matrix: SOIL Received Date: 9/1/2023 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: JTT
Chloride	160	60	mg/Kg	20	9/8/2023 9:08:09 PM	77389
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analys	t: PRD
Diesel Range Organics (DRO)	26	9.9	mg/Kg	1	9/7/2023 4:00:55 PM	77335
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	9/7/2023 4:00:55 PM	77335
Surr: DNOP	103	69-147	%Rec	1	9/7/2023 4:00:55 PM	77335
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: JJP
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	9/7/2023 11:04:46 PM	77329
Surr: BFB	94.9	15-244	%Rec	1	9/7/2023 11:04:46 PM	77329
EPA METHOD 8021B: VOLATILES					Analys	t: JJP
Benzene	ND	0.024	mg/Kg	1	9/7/2023 11:04:46 PM	77329
Toluene	ND	0.048	mg/Kg	1	9/7/2023 11:04:46 PM	77329
Ethylbenzene	ND	0.048	mg/Kg	1	9/7/2023 11:04:46 PM	77329
Xylenes, Total	ND	0.095	mg/Kg	1	9/7/2023 11:04:46 PM	77329
Surr: 4-Bromofluorobenzene	105	39.1-146	%Rec	1	9/7/2023 11:04:46 PM	77329

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 15 of 35

Date Reported: 9/13/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG Client Sample ID: B-4

 Project:
 Jackson B 33
 Collection Date: 8/29/2023 11:36:00 AM

 Lab ID:
 2309019-016
 Matrix: SOIL
 Received Date: 9/1/2023 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: JTT
Chloride	68	60	mg/Kg	20	9/8/2023 9:45:23 PM	77389
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analys	t: PRD
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	9/7/2023 4:11:47 PM	77335
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	9/7/2023 4:11:47 PM	77335
Surr: DNOP	96.3	69-147	%Rec	1	9/7/2023 4:11:47 PM	77335
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: JJP
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/7/2023 11:28:08 PM	77329
Surr: BFB	94.0	15-244	%Rec	1	9/7/2023 11:28:08 PM	77329
EPA METHOD 8021B: VOLATILES					Analys	t: JJP
Benzene	ND	0.024	mg/Kg	1	9/7/2023 11:28:08 PM	77329
Toluene	ND	0.049	mg/Kg	1	9/7/2023 11:28:08 PM	77329
Ethylbenzene	ND	0.049	mg/Kg	1	9/7/2023 11:28:08 PM	77329
Xylenes, Total	ND	0.097	mg/Kg	1	9/7/2023 11:28:08 PM	77329
Surr: 4-Bromofluorobenzene	104	39.1-146	%Rec	1	9/7/2023 11:28:08 PM	77329

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 16 of 35

Date Reported: 9/13/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG Client Sample ID: B-5

 Project:
 Jackson B 33
 Collection Date: 8/29/2023 11:38:00 AM

 Lab ID:
 2309019-017
 Matrix: SOIL
 Received Date: 9/1/2023 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: JTT
Chloride	170	61	mg/Kg	20	9/8/2023 9:57:47 PM	77389
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analys	t: PRD
Diesel Range Organics (DRO)	12	9.6	mg/Kg	1	9/7/2023 4:22:39 PM	77335
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	9/7/2023 4:22:39 PM	77335
Surr: DNOP	101	69-147	%Rec	1	9/7/2023 4:22:39 PM	77335
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: JJP
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/7/2023 11:51:27 PM	77329
Surr: BFB	94.2	15-244	%Rec	1	9/7/2023 11:51:27 PM	77329
EPA METHOD 8021B: VOLATILES					Analys	t: JJP
Benzene	ND	0.024	mg/Kg	1	9/7/2023 11:51:27 PM	77329
Toluene	ND	0.049	mg/Kg	1	9/7/2023 11:51:27 PM	77329
Ethylbenzene	ND	0.049	mg/Kg	1	9/7/2023 11:51:27 PM	77329
Xylenes, Total	ND	0.098	mg/Kg	1	9/7/2023 11:51:27 PM	77329
Surr: 4-Bromofluorobenzene	104	39.1-146	%Rec	1	9/7/2023 11:51:27 PM	77329

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 17 of 35

Date Reported: 9/13/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG Client Sample ID: B-6

 Project:
 Jackson B 33
 Collection Date: 8/29/2023 11:40:00 AM

 Lab ID:
 2309019-018
 Matrix: SOIL
 Received Date: 9/1/2023 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: JTT
Chloride	210	61	mg/Kg	20	9/8/2023 10:10:12 PM	77389
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analys	t: PRD
Diesel Range Organics (DRO)	14	9.8	mg/Kg	1	9/7/2023 4:33:31 PM	77335
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	9/7/2023 4:33:31 PM	77335
Surr: DNOP	91.2	69-147	%Rec	1	9/7/2023 4:33:31 PM	77335
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: JJP
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	9/8/2023 12:14:50 AM	77329
Surr: BFB	96.2	15-244	%Rec	1	9/8/2023 12:14:50 AM	77329
EPA METHOD 8021B: VOLATILES					Analys	t: JJP
Benzene	ND	0.024	mg/Kg	1	9/8/2023 12:14:50 AM	77329
Toluene	ND	0.047	mg/Kg	1	9/8/2023 12:14:50 AM	77329
Ethylbenzene	ND	0.047	mg/Kg	1	9/8/2023 12:14:50 AM	77329
Xylenes, Total	ND	0.095	mg/Kg	1	9/8/2023 12:14:50 AM	77329
Surr: 4-Bromofluorobenzene	107	39.1-146	%Rec	1	9/8/2023 12:14:50 AM	77329

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 18 of 35

Analytical Report

Lab Order **2309019**Date Reported: **9/13/2023**

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: B-7

 Project:
 Jackson B 33
 Collection Date: 8/29/2023 11:42:00 AM

 Lab ID:
 2309019-019
 Matrix: SOIL
 Received Date: 9/1/2023 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analysi	t: JTT
Chloride	370	60	mg/Kg	20	9/8/2023 10:22:37 PM	77389
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	t: PRD
Diesel Range Organics (DRO)	68	9.6	mg/Kg	1	9/7/2023 4:44:20 PM	77335
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	9/7/2023 4:44:20 PM	77335
Surr: DNOP	99.7	69-147	%Rec	1	9/7/2023 4:44:20 PM	77335
EPA METHOD 8015D: GASOLINE RANGE					Analyst	t: JJP
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	9/8/2023 12:38:17 AM	77329
Surr: BFB	93.1	15-244	%Rec	1	9/8/2023 12:38:17 AM	77329
EPA METHOD 8021B: VOLATILES					Analyst	t: JJP
Benzene	ND	0.024	mg/Kg	1	9/8/2023 12:38:17 AM	77329
Toluene	ND	0.048	mg/Kg	1	9/8/2023 12:38:17 AM	77329
Ethylbenzene	ND	0.048	mg/Kg	1	9/8/2023 12:38:17 AM	77329
Xylenes, Total	ND	0.097	mg/Kg	1	9/8/2023 12:38:17 AM	77329
Surr: 4-Bromofluorobenzene	105	39.1-146	%Rec	1	9/8/2023 12:38:17 AM	77329

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 19 of 35

Analytical Report

Lab Order 2309019 Date Reported: 9/13/2023

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: B-8

Project: Jackson B 33 **Collection Date: 8/29/2023 11:46:00 AM** 2309019-020 Lab ID: Matrix: SOIL Received Date: 9/1/2023 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	:: JTT
Chloride	98	60	mg/Kg	20	9/8/2023 10:35:02 PM	77389
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					Analys	: JME
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	9/8/2023 5:14:19 PM	77350
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	9/8/2023 5:14:19 PM	77350
Surr: DNOP	95.3	69-147	%Rec	1	9/8/2023 5:14:19 PM	77350
EPA METHOD 8015D: GASOLINE RANGE					Analys	: KMN
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	9/8/2023 7:53:00 PM	77334
Surr: BFB	103	15-244	%Rec	1	9/8/2023 7:53:00 PM	77334
EPA METHOD 8021B: VOLATILES					Analys	: KMN
Benzene	ND	0.025	mg/Kg	1	9/8/2023 7:53:00 PM	77334
Toluene	ND	0.050	mg/Kg	1	9/8/2023 7:53:00 PM	77334
Ethylbenzene	ND	0.050	mg/Kg	1	9/8/2023 7:53:00 PM	77334
Xylenes, Total	ND	0.099	mg/Kg	1	9/8/2023 7:53:00 PM	77334
Surr: 4-Bromofluorobenzene	90.1	39.1-146	%Rec	1	9/8/2023 7:53:00 PM	77334

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
- % Recovery outside of standard limits. If undiluted results may be estimated.
- Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

Page 20 of 35

Analytical Report

Lab Order 2309019 Date Reported: 9/13/2023

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: B-9

Project: Jackson B 33 **Collection Date:** 8/29/2023 12:30:00 PM 2309019-021 Lab ID: Matrix: SOIL Received Date: 9/1/2023 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	:: JTT
Chloride	130	60	mg/Kg	20	9/8/2023 10:47:26 PM	77389
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					Analys	: JME
Diesel Range Organics (DRO)	10	9.6	mg/Kg	1	9/8/2023 5:25:13 PM	77350
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	9/8/2023 5:25:13 PM	77350
Surr: DNOP	94.6	69-147	%Rec	1	9/8/2023 5:25:13 PM	77350
EPA METHOD 8015D: GASOLINE RANGE					Analys	: KMN
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	9/8/2023 8:58:00 PM	77334
Surr: BFB	98.4	15-244	%Rec	1	9/8/2023 8:58:00 PM	77334
EPA METHOD 8021B: VOLATILES					Analys	: KMN
Benzene	ND	0.024	mg/Kg	1	9/8/2023 8:58:00 PM	77334
Toluene	ND	0.048	mg/Kg	1	9/8/2023 8:58:00 PM	77334
Ethylbenzene	ND	0.048	mg/Kg	1	9/8/2023 8:58:00 PM	77334
Xylenes, Total	ND	0.095	mg/Kg	1	9/8/2023 8:58:00 PM	77334
Surr: 4-Bromofluorobenzene	88.5	39.1-146	%Rec	1	9/8/2023 8:58:00 PM	77334

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
- % Recovery outside of standard limits. If undiluted results may be estimated.
- Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

Page 21 of 35

Date Reported: 9/13/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG Client Sample ID: B-10

Project: Jackson B 33 **Collection Date:** 8/29/2023 12:32:00 PM 2309019-022 Lab ID: Matrix: SOIL Received Date: 9/1/2023 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analysi	:: JTT
Chloride	110	60	mg/Kg	20	9/8/2023 10:59:51 PM	77389
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					Analyst	:: JME
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	9/8/2023 5:36:07 PM	77350
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	9/8/2023 5:36:07 PM	77350
Surr: DNOP	94.4	69-147	%Rec	1	9/8/2023 5:36:07 PM	77350
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: KMN
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	9/8/2023 10:03:00 PM	77334
Surr: BFB	95.5	15-244	%Rec	1	9/8/2023 10:03:00 PM	77334
EPA METHOD 8021B: VOLATILES					Analyst	: KMN
Benzene	ND	0.024	mg/Kg	1	9/8/2023 10:03:00 PM	77334
Toluene	ND	0.047	mg/Kg	1	9/8/2023 10:03:00 PM	77334
Ethylbenzene	ND	0.047	mg/Kg	1	9/8/2023 10:03:00 PM	77334
Xylenes, Total	ND	0.095	mg/Kg	1	9/8/2023 10:03:00 PM	77334
Surr: 4-Bromofluorobenzene	89.0	39.1-146	%Rec	1	9/8/2023 10:03:00 PM	77334

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
- % Recovery outside of standard limits. If undiluted results may be estimated.
- Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

Page 22 of 35

Analytical Report

Lab Order 2309019 Date Reported: 9/13/2023

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: B-11

Project: Jackson B 33 **Collection Date:** 8/29/2023 12:34:00 PM 2309019-023 Lab ID: Matrix: SOIL Received Date: 9/1/2023 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analysi	:: JTT
Chloride	130	60	mg/Kg	20	9/8/2023 11:12:16 PM	77389
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					Analyst	: JME
Diesel Range Organics (DRO)	25	9.2	mg/Kg	1	9/8/2023 5:47:08 PM	77350
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	9/8/2023 5:47:08 PM	77350
Surr: DNOP	90.7	69-147	%Rec	1	9/8/2023 5:47:08 PM	77350
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: KMN
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	9/8/2023 10:25:00 PM	77334
Surr: BFB	103	15-244	%Rec	1	9/8/2023 10:25:00 PM	77334
EPA METHOD 8021B: VOLATILES					Analyst	: KMN
Benzene	ND	0.024	mg/Kg	1	9/8/2023 10:25:00 PM	77334
Toluene	ND	0.047	mg/Kg	1	9/8/2023 10:25:00 PM	77334
Ethylbenzene	ND	0.047	mg/Kg	1	9/8/2023 10:25:00 PM	77334
Xylenes, Total	ND	0.095	mg/Kg	1	9/8/2023 10:25:00 PM	77334
Surr: 4-Bromofluorobenzene	88.9	39.1-146	%Rec	1	9/8/2023 10:25:00 PM	77334

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
- % Recovery outside of standard limits. If undiluted results may be estimated.
- Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

Page 23 of 35

Analytical Report

Lab Order 2309019 Date Reported: 9/13/2023

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: B-12

Project: Jackson B 33 **Collection Date:** 8/29/2023 12:36:00 PM 2309019-024 Lab ID: Matrix: SOIL Received Date: 9/1/2023 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analysi	t: JTT
Chloride	320	59	mg/Kg	20	9/8/2023 11:24:40 PM	77389
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	t: JME
Diesel Range Organics (DRO)	74	9.3	mg/Kg	1	9/8/2023 5:58:18 PM	77350
Motor Oil Range Organics (MRO)	64	47	mg/Kg	1	9/8/2023 5:58:18 PM	77350
Surr: DNOP	94.0	69-147	%Rec	1	9/8/2023 5:58:18 PM	77350
EPA METHOD 8015D: GASOLINE RANGE					Analyst	t: KMN
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/8/2023 10:47:00 PM	77334
Surr: BFB	102	15-244	%Rec	1	9/8/2023 10:47:00 PM	77334
EPA METHOD 8021B: VOLATILES					Analyst	t: KMN
Benzene	ND	0.024	mg/Kg	1	9/8/2023 10:47:00 PM	77334
Toluene	ND	0.049	mg/Kg	1	9/8/2023 10:47:00 PM	77334
Ethylbenzene	ND	0.049	mg/Kg	1	9/8/2023 10:47:00 PM	77334
Xylenes, Total	ND	0.097	mg/Kg	1	9/8/2023 10:47:00 PM	77334
Surr: 4-Bromofluorobenzene	85.8	39.1-146	%Rec	1	9/8/2023 10:47:00 PM	77334

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
- % Recovery outside of standard limits. If undiluted results may be estimated.
- Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

Page 24 of 35

Date Reported: 9/13/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG Client Sample ID: B-13

 Project:
 Jackson B 33
 Collection Date: 8/29/2023 1:00:00 PM

 Lab ID:
 2309019-025
 Matrix: SOIL
 Received Date: 9/1/2023 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: JTT
Chloride	340	60	mg/Kg	20	9/8/2023 11:37:05 PM	77389
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analys	t: JME
Diesel Range Organics (DRO)	56	9.3	mg/Kg	1	9/8/2023 6:20:29 PM	77350
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	9/8/2023 6:20:29 PM	77350
Surr: DNOP	88.0	69-147	%Rec	1	9/8/2023 6:20:29 PM	77350
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: KMN
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/8/2023 11:08:00 PM	77334
Surr: BFB	102	15-244	%Rec	1	9/8/2023 11:08:00 PM	77334
EPA METHOD 8021B: VOLATILES					Analys	t: KMN
Benzene	ND	0.025	mg/Kg	1	9/8/2023 11:08:00 PM	77334
Toluene	ND	0.049	mg/Kg	1	9/8/2023 11:08:00 PM	77334
Ethylbenzene	ND	0.049	mg/Kg	1	9/8/2023 11:08:00 PM	77334
Xylenes, Total	ND	0.099	mg/Kg	1	9/8/2023 11:08:00 PM	77334
Surr: 4-Bromofluorobenzene	89.7	39.1-146	%Rec	1	9/8/2023 11:08:00 PM	77334

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 25 of 35

Analytical Report

Lab Order **2309019**Date Reported: **9/13/2023**

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: B-14

 Project:
 Jackson B 33
 Collection Date: 8/29/2023 1:02:00 PM

 Lab ID:
 2309019-026
 Matrix: SOIL
 Received Date: 9/1/2023 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	t: JTT
Chloride	240	60	mg/Kg	20	9/9/2023 12:14:19 AM	77389
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst	t: JME
Diesel Range Organics (DRO)	50	9.3	mg/Kg	1	9/8/2023 6:31:35 PM	77350
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	9/8/2023 6:31:35 PM	77350
Surr: DNOP	103	69-147	%Rec	1	9/8/2023 6:31:35 PM	77350
EPA METHOD 8015D: GASOLINE RANGE					Analyst	t: KMN
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	9/8/2023 11:30:00 PM	77334
Surr: BFB	97.6	15-244	%Rec	1	9/8/2023 11:30:00 PM	77334
EPA METHOD 8021B: VOLATILES					Analyst	t: KMN
Benzene	ND	0.024	mg/Kg	1	9/8/2023 11:30:00 PM	77334
Toluene	ND	0.048	mg/Kg	1	9/8/2023 11:30:00 PM	77334
Ethylbenzene	ND	0.048	mg/Kg	1	9/8/2023 11:30:00 PM	77334
Xylenes, Total	ND	0.096	mg/Kg	1	9/8/2023 11:30:00 PM	77334
Surr: 4-Bromofluorobenzene	90.0	39.1-146	%Rec	1	9/8/2023 11:30:00 PM	77334

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 26 of 35

Analytical Report Lab Order 2309019

Date Reported: 9/13/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG Client Sample ID: B-15

 Project:
 Jackson B 33
 Collection Date: 8/29/2023 1:04:00 PM

 Lab ID:
 2309019-027
 Matrix: SOIL
 Received Date: 9/1/2023 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	:: JTT
Chloride	220	60	mg/Kg	20	9/9/2023 12:26:44 AM	77389
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analys	: JME
Diesel Range Organics (DRO)	34	9.7	mg/Kg	1	9/8/2023 6:42:36 PM	77350
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	9/8/2023 6:42:36 PM	77350
Surr: DNOP	93.9	69-147	%Rec	1	9/8/2023 6:42:36 PM	77350
EPA METHOD 8015D: GASOLINE RANGE					Analys	: KMN
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	9/8/2023 11:52:00 PM	77334
Surr: BFB	97.1	15-244	%Rec	1	9/8/2023 11:52:00 PM	77334
EPA METHOD 8021B: VOLATILES					Analys	: KMN
Benzene	ND	0.024	mg/Kg	1	9/8/2023 11:52:00 PM	77334
Toluene	ND	0.047	mg/Kg	1	9/8/2023 11:52:00 PM	77334
Ethylbenzene	ND	0.047	mg/Kg	1	9/8/2023 11:52:00 PM	77334
Xylenes, Total	ND	0.095	mg/Kg	1	9/8/2023 11:52:00 PM	77334
Surr: 4-Bromofluorobenzene	88.1	39.1-146	%Rec	1	9/8/2023 11:52:00 PM	77334

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 27 of 35

Analytical Report

Lab Order **2309019**Date Reported: **9/13/2023**

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: B-16

 Project:
 Jackson B 33
 Collection Date: 8/29/2023 1:06:00 PM

 Lab ID:
 2309019-028
 Matrix: SOIL
 Received Date: 9/1/2023 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: JTT
Chloride	110	60	mg/Kg	20	9/9/2023 12:39:08 AM	77389
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analys	t: JME
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	9/8/2023 6:53:34 PM	77350
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	9/8/2023 6:53:34 PM	77350
Surr: DNOP	94.6	69-147	%Rec	1	9/8/2023 6:53:34 PM	77350
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: KMN
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	9/9/2023 12:13:00 AM	77334
Surr: BFB	102	15-244	%Rec	1	9/9/2023 12:13:00 AM	77334
EPA METHOD 8021B: VOLATILES					Analys	t: KMN
Benzene	ND	0.024	mg/Kg	1	9/9/2023 12:13:00 AM	77334
Toluene	ND	0.048	mg/Kg	1	9/9/2023 12:13:00 AM	77334
Ethylbenzene	ND	0.048	mg/Kg	1	9/9/2023 12:13:00 AM	77334
Xylenes, Total	ND	0.096	mg/Kg	1	9/9/2023 12:13:00 AM	77334
Surr: 4-Bromofluorobenzene	91.0	39.1-146	%Rec	1	9/9/2023 12:13:00 AM	77334

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 28 of 35

Analytical Report

Lab Order 2309019 Date Reported: 9/13/2023

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: B-17

Project: Jackson B 33 Collection Date: 8/29/2023 1:12:00 PM 2309019-029 Lab ID: Matrix: SOIL **Received Date:** 9/1/2023 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analysi	:: JTT
Chloride	310	60	mg/Kg	20	9/9/2023 12:51:33 AM	77389
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst	: JME
Diesel Range Organics (DRO)	59	9.4	mg/Kg	1	9/8/2023 7:04:31 PM	77350
Motor Oil Range Organics (MRO)	61	47	mg/Kg	1	9/8/2023 7:04:31 PM	77350
Surr: DNOP	104	69-147	%Rec	1	9/8/2023 7:04:31 PM	77350
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: KMN
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	9/9/2023 12:35:00 AM	77334
Surr: BFB	103	15-244	%Rec	1	9/9/2023 12:35:00 AM	77334
EPA METHOD 8021B: VOLATILES					Analyst	: KMN
Benzene	ND	0.025	mg/Kg	1	9/9/2023 12:35:00 AM	77334
Toluene	ND	0.050	mg/Kg	1	9/9/2023 12:35:00 AM	77334
Ethylbenzene	ND	0.050	mg/Kg	1	9/9/2023 12:35:00 AM	77334
Xylenes, Total	ND	0.099	mg/Kg	1	9/9/2023 12:35:00 AM	77334
Surr: 4-Bromofluorobenzene	89.7	39.1-146	%Rec	1	9/9/2023 12:35:00 AM	77334

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
- % Recovery outside of standard limits. If undiluted results may be estimated.
- Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

Page 29 of 35

Analytical Report

Lab Order 2309019 Date Reported: 9/13/2023

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: B-18

Project: Jackson B 33 **Collection Date:** 8/29/2023 1:14:00 PM 2309019-030 Lab ID: Matrix: SOIL **Received Date:** 9/1/2023 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	st: JMT
Chloride	360	60	mg/Kg	20	9/9/2023 3:17:31 AM	77395
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analys	st: JME
Diesel Range Organics (DRO)	56	9.4	mg/Kg	1	9/8/2023 7:15:26 PM	77350
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	9/8/2023 7:15:26 PM	77350
Surr: DNOP	89.1	69-147	%Rec	1	9/8/2023 7:15:26 PM	77350
EPA METHOD 8015D: GASOLINE RANGE					Analys	st: KMN
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	9/9/2023 1:18:00 AM	77334
Surr: BFB	98.7	15-244	%Rec	1	9/9/2023 1:18:00 AM	77334
EPA METHOD 8021B: VOLATILES					Analys	st: KMN
Benzene	ND	0.024	mg/Kg	1	9/9/2023 1:18:00 AM	77334
Toluene	ND	0.047	mg/Kg	1	9/9/2023 1:18:00 AM	77334
Ethylbenzene	ND	0.047	mg/Kg	1	9/9/2023 1:18:00 AM	77334
Xylenes, Total	ND	0.095	mg/Kg	1	9/9/2023 1:18:00 AM	77334
Surr: 4-Bromofluorobenzene	89.4	39.1-146	%Rec	1	9/9/2023 1:18:00 AM	77334

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
- % Recovery outside of standard limits. If undiluted results may be estimated.
- Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

Page 30 of 35

Analytical Report Lab Order 2309019

Date Reported: 9/13/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG Client Sample ID: B-19

 Project:
 Jackson B 33
 Collection Date: 8/29/2023 1:16:00 PM

 Lab ID:
 2309019-031
 Matrix: SOIL
 Received Date: 9/1/2023 7:35:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: JMT
Chloride	180	60	mg/Kg	20	9/9/2023 3:29:55 AM	77395
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analys	t: JME
Diesel Range Organics (DRO)	14	9.4	mg/Kg	1	9/8/2023 7:26:23 PM	77350
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	9/8/2023 7:26:23 PM	77350
Surr: DNOP	92.5	69-147	%Rec	1	9/8/2023 7:26:23 PM	77350
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: KMN
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	9/9/2023 1:40:00 AM	77334
Surr: BFB	105	15-244	%Rec	1	9/9/2023 1:40:00 AM	77334
EPA METHOD 8021B: VOLATILES					Analys	t: KMN
Benzene	ND	0.024	mg/Kg	1	9/9/2023 1:40:00 AM	77334
Toluene	ND	0.048	mg/Kg	1	9/9/2023 1:40:00 AM	77334
Ethylbenzene	ND	0.048	mg/Kg	1	9/9/2023 1:40:00 AM	77334
Xylenes, Total	ND	0.096	mg/Kg	1	9/9/2023 1:40:00 AM	77334
Surr: 4-Bromofluorobenzene	90.2	39.1-146	%Rec	1	9/9/2023 1:40:00 AM	77334

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 31 of 35

Hall Environmental Analysis Laboratory, Inc.

WO#: 2309019

13-Sep-23

Client: EOG

Project: Jackson B 33

Sample ID: MB-77386 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 77386 RunNo: 99555

Prep Date: 9/8/2023 Analysis Date: 9/8/2023 SeqNo: 3636065 Units: mq/Kq

SPK value SPK Ref Val %RPD **RPDLimit** Analyte Result PQL %REC LowLimit HighLimit Qual

Chloride ND 1.5

Sample ID: LCS-77386 SampType: LCS TestCode: EPA Method 300.0: Anions Client ID: LCSS Batch ID: 77386 RunNo: 99555 Prep Date: 9/8/2023 Analysis Date: 9/8/2023 SeqNo: 3636066 Units: mg/Kg **RPDLimit** Result PQL SPK value SPK Ref Val %REC LowLimit %RPD Qual

Analyte HighLimit Chloride 14 1.5 15.00 94.5 110

Sample ID: MB-77395 SampType: mblk TestCode: EPA Method 300.0: Anions Client ID: PBS Batch ID: 77395 RunNo: 99586 Prep Date: Analysis Date: 9/8/2023 9/8/2023 SeqNo: 3637418 Units: mg/Kg

Result PQL SPK value SPK Ref Val %REC %RPD **RPDLimit** Qual Analyte I owl imit HighLimit

Chloride ND 1.5

Sample ID: MB-77389 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: **PBS** Batch ID: 77389 RunNo: 99587

Prep Date: Analysis Date: 9/10/2023 9/8/2023 SeqNo: 3637487 Units: mg/Kg

Analyte Result **PQL** SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Qual LowLimit

Chloride ND 1.5

Sample ID: LCS-77389 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: Batch ID: 77389 RunNo: 99587 LCSS

14

Prep Date: 9/8/2023 Analysis Date: 9/10/2023 SeqNo: 3637488 Units: mg/Kg

RPDLimit Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD Qual

Chloride 15.00

Qualifiers:

- Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix
- Η Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated.
- Analyte detected in the associated Method Blank

92.4

110

- Above Quantitation Range/Estimated Value
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

Page 32 of 35

Hall Environmental Analysis Laboratory, Inc.

WO#: **2309019**

13-Sep-23

Client: EOG

Project: Jackson B 33

Project: Jackson	D 33								
Sample ID: LCS-77335	SampType: L (s	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics	
Client ID: LCSS	Batch ID: 77	335	F	RunNo: 99	9538				
Prep Date: 9/6/2023	Analysis Date: 9	7/2023	S	SeqNo: 30	634980	Units: mg/K	g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47 10	50.00	0	94.9	61.9	130			
Surr: DNOP	4.8	5.000		96.1	69	147			
Sample ID: MB-77335	SampType: M	BLK	TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 77	335	F	RunNo: 99	9538				
Prep Date: 9/6/2023	Analysis Date: 9	7/2023	5	SeqNo: 30	634983	Units: mg/K	g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND 10								
Motor Oil Range Organics (MRO)	ND 50								
Surr: DNOP	11	10.00		111	69	147			
Sample ID: MB-77350	SampType: M	BLK	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics	
Client ID: PBS	Batch ID: 77	350	F	RunNo: 99	9545				
Prep Date: 9/7/2023	Analysis Date: 9	/8/2023	5	SeqNo: 30	636488	Units: mg/K	g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND 10								
Motor Oil Range Organics (MRO)	ND 50								
Surr: DNOP	9.8	10.00		98.4	69	147			
Sample ID: LCS-77350	SampType: L0	s	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics	
Client ID: LCSS	Batch ID: 77	350	F	RunNo: 99	9545				
Prep Date: 9/7/2023	Analysis Date: 9	/8/2023	5	SeqNo: 30	636491	Units: mg/K	g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48 10	50.00	0	96.9	61.9	130			_
Surr: DNOP	4.7	5.000		95.0	69	147			

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

Page 33 of 35

Hall Environmental Analysis Laboratory, Inc.

2309019

WO#:

13-Sep-23

Client: EOG

Project. Jackson B 33

Project: Jackson	B 33								
Sample ID: Ics-77329	SampType: LCS		Tes	Code: EF	A Method	8015D: Gasol	ine Range		
Client ID: LCSS	Batch ID: 77329		R	unNo: 9 9	515				
Prep Date: 9/6/2023	Analysis Date: 9/7/202	23	S	eqNo: 36	33581	Units: mg/K	g		
Analyte	Result PQL SP	K value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24 5.0	25.00	0	95.7	70	130			
Surr: BFB	2100	1000		206	15	244			
Sample ID: mb-77329	SampType: MBLK		Tes	Code: EF	A Method	8015D: Gasol	ine Range		
Client ID: PBS	Batch ID: 77329		R	unNo: 9 9	515				
Prep Date: 9/6/2023	Analysis Date: 9/7/202	23	S	eqNo: 36	33582	Units: mg/K	g		
Analyte	Result PQL SPI	K value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND 5.0								
Surr: BFB	990	1000		99.4	15	244			
Sample ID: Ics-77334	SampType: LCS		Tes	Code: EF	PA Method	8015D: Gasol	ine Range		
Client ID: LCSS	Batch ID: 77334		R	unNo: 9 9	543				
Prep Date: 9/6/2023	Analysis Date: 9/8/202	23	S	eqNo: 36	36750	Units: mg/K	g		
Analyte	Result PQL SPI	K value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22 5.0	25.00	0	89.4	70	130			
Surr: BFB	2100	1000		208	15	244			
Sample ID: mb-77334	SampType: MBLK		Tes	Code: EF	PA Method	8015D: Gasol	ine Range		
Client ID: PBS	Batch ID: 77334		R	unNo: 9 9	543				
Prep Date: 9/6/2023	Analysis Date: 9/8/202	23	S	eqNo: 36	36751	Units: mg/K	g		
Analyte	Result PQL SPI	K value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND 5.0		_	_	_				
Surr: BFB	1000	1000		103	15	244			

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated.
- Analyte detected in the associated Method Blank
- Above Quantitation Range/Estimated Value
- Analyte detected below quantitation limits
- Sample pH Not In Range
- Reporting Limit

Page 34 of 35

Hall Environmental Analysis Laboratory, Inc.

WO#: **2309019** *13-Sep-23*

Client: EOG

Project: Jackson B 33

Sample ID: LCS-77329	SampT	Гуре: LC :	S	Tes	tCode: EF	PA Method	8021B: Volati	les		
Client ID: LCSS	Batch	h ID: 773	329	F	RunNo: 99	9515				
Prep Date: 9/6/2023	Analysis D	Date: 9/7	7/2023	9	SeqNo: 36	33591	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	101	70	130			
Toluene	1.0	0.050	1.000	0	103	70	130			
Ethylbenzene	1.0	0.050	1.000	0	104	70	130			
Xylenes, Total	3.2	0.10	3.000	0	106	70	130			
Surr: 4-Bromofluorobenzene	1.1		1.000		111	39.1	146			

Sample ID: mb-77329	SampT	уре: МЕ	BLK	Tes	tCode: EF	PA Method	8021B: Volati	les		
Client ID: PBS	Batch	n ID: 773	329	F	9515					
Prep Date: 9/6/2023	Analysis D	Date: 9/ 7	7/2023	5	SeqNo: 30	633592	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		108	39.1	146			

Sample ID: Ics-77334	Samp	Type: LC	S	Tes	tCode: EF	PA Method	8021B: Volati	les		
Client ID: LCSS	Batcl	h ID: 773	334	F	RunNo: 99	9543				
Prep Date: 9/6/2023	Analysis [Date: 9/8	8/2023	5	SeqNo: 36	36810	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.86	0.025	1.000	0	86.5	70	130			
Toluene	0.87	0.050	1.000	0	86.6	70	130			
Ethylbenzene	0.89	0.050	1.000	0	89.3	70	130			
Xylenes, Total	2.7	0.10	3.000	0	89.2	70	130			
Surr: 4-Bromofluorobenzene	0.93		1.000		92.9	39.1	146			

Sample ID: mb-77334	SampT	уре: МЕ	BLK	Tes	tCode: EF	PA Method	8021B: Volati	les		
Client ID: PBS	Batch	n ID: 773	334	F	RunNo: 9	9543				
Prep Date: 9/6/2023	Analysis D	Date: 9/8	8/2023	5	SeqNo: 30	636811	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.91		1.000		91.4	39.1	146			

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 standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 35 of 35

Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque. NM 87109

TEL: 505-345-3975 FAX: 505-345-4107

Sample Log-In Check List

Released to Imaging: 9/26/2023 1:17:29 PM

Website: www.hallenvironmental.com Client Name: **EOG** Work Order Number: 2309019 RcptNo: 1 Received By: 9/1/2023 7:35:00 AM Steve McQuiston Completed By: 9/1/2023 9:21:26 AM Cheyenne Cason Reviewed By: Jna/123 Chain of Custody No 🗌 Not Present Yes 🗹 1. Is Chain of Custody complete? 2. How was the sample delivered? Courier Log In No 🗌 NA 🗌 Yes 🔽 3. Was an attempt made to cool the samples? NA 🗌 4. Were all samples received at a temperature of >0° C to 6.0°C Yes 🗸 No 🗌 5. Sample(s) in proper container(s)? Yes 🗹 Yes 🗸 No 🗌 6. Sufficient sample volume for indicated test(s)? No 🔲 Yes 🗹 7. Are samples (except VOA and ONG) properly preserved? No 🗹 NA 🗌 Yes 🗌 8. Was preservative added to bottles? No 🗔 NA 🔽 Yes 🗌 9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes □ No 🗹 10. Were any sample containers received broken? # of preserved bottles checked No 🗌 for pH: 11. Does paperwork match bottle labels? Yes 🔽 2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted No 🗌 Yes 🗹 12. Are matrices correctly identified on Chain of Custody? No 🗌 13. Is it clear what analyses were requested? Yes 🔽 No 🔲 Yes 🗹 14. Were all holding times able to be met? (If no, notify customer for authorization.) Special Handling (if applicable) Yes No 🗌 NA 🗸 15. Was client notified of all discrepancies with this order? Person Notified: Date: eMail Phone Fax In Person By Whom: Via: Regarding: Client Instructions: Additional remarks:

1	1	1	١.	Cooler	Infor	mation

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.9	Good	Not Present	Yogi		

HALL FNVTRONMEN	ANALYSIS LABORATORY	www.hallenvironmental.com	4901 Hawkins NE - Albuquerque, NM 87109 $\stackrel{\textstyle \star}{2}$ of $\stackrel{\textstyle \star}{S}$	Tel. 505-345-3975 Fax 505-345-4107	Analysis Request	(C	DAM / C		ев	2D(PH:801	1 ×											777	Remarks: Bill to EOG Artesia			1/1/93 0735
יפווי מספות ווווסי	□ Standard \ Rush S 0Ay TAT	Project Name:	Jockson B # 33	Project #: 5375		Project Manager: W. Kierdorf		Sampler: J. Martine C. On loe: S.Yes 🗆 No	olers:	Cooler Temp(including CF): $4.9-0=4.9$	Container Preservative HEAL No.		-	200	400	500	200	Œſ	8,00	900	010	110		Time	8/31/23	Via. Date Til	3 SCM COURIER 9/1/39 0735
Received W 100 DI 19 PW 100 Style 18 Style 18 Burecord	ia / Ranger Env.		Mailing Address: EOG - 105 S 4th St, Artesia NM, 88210	Ranger: PO Box 201179, Austin TX 78720	-1785	ngerEnv.com	□ Level 4 (Full Validation)	☐ Az Compliance						2 2 2	7-73	%-3	9-N	N-7	8-M	P-W	W-10	W-11	71-50	Relinquished by:	Jan	Relinquished by:	Marrains
Received W. Och D. 19/91	Client: EOG-Artesia / Ranger Env.		Mailing Address: EO	Ranger: PO Box 201	Phone #: 521-335-1785	email or Fax#: Will	QA/QC Package: Standard	Accreditation:	/pe)_	\vdash	, 1		4	250	9101	8101	0691	2001	P601	गुरुवा	201	0801	1033	Time:	940 52.0E.8	Time:	9/2/1900

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 repo

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13	Ranger:	PO Box 2	:01179, AL	ustin TX 78720	Project #: 53	75		Tel. 5(5-345-3975 Fax 505-345-4107
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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 Released to Imaging: 9/26/2023 1:17:29 PM

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If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as no Released to Imaging: 9/26/2023 1:17:29 PM





Will Kierdorf <will@rangerenv.com>

FW: Jackson B 33 (nAB1703856615) Sampling Notification

Chase Settle < Chase_Settle@eogresources.com>
To: Will Kierdorf < will@rangerenv.com>

Thu, Aug 24, 2023 at 9:36 AM

From: Tina Huerta <Tina_Huerta@eogresources.com>

Sent: Thursday, August 24, 2023 8:26 AM

To: ocd.enviro@emnrd.nm.gov

Cc: Artesia S&E Spill Remediation Artesia_S&E_Spill_Remediation@eogresources.com; Artesia Regulatory

<a href="mailto: Artesia Regulatory@eogresources.com>

Subject: Jackson B 33 (nAB1703856615) Sampling Notification

Good morning,

EOG Resources, Inc. respectfully submits notification (2) business days prior to conducting sampling on the following location.

Jackson B 33

F-1-17S-30E

Eddy County, NM

nAB1703856615

Sampling will begin at 8:00 a.m. on Tuesday, August 29, 2023, and continue through Friday, September 1, 2023.

Thank you,

Tina Huerta

Regulatory Specialist

Direct: 575.748.4168

Cell: 575.703.3121

Email: tina huerta@eogresources.com

Released to Imaging: 9/26/2023 1:17:29 PM

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My Environmental Impact Review is as follows:

BLM surface/minerals

No Arch survey will be needed as long as you stay within your highlighted area (>100ft of the pad)

No hydrology, cave/karst, realty, botany, potash, range, recreation, or special area stipulations.

This area does fall within Dunes Sagebrush Lizard and Lesser Prairie- Chicken habitats.

This area will require BLM seed mixture #2 for sandy sites. I have attached a copy for your records.

Please consider this the BLM's approval to move forward with delineation and clean up of this location. I will work in AFMSS to get your NOI Sundry accepted for record.

Please let me know if you need anything else.

Thank you,

Crisha A. Morgan | Certified - Environmental Protection Specialist | Program Officer | COR | Spills Coordinator | Orphaned Well POC Lead

Bureau of Land Management | Carlsbad Field Office

620 E. Greene Street Carlsbad, NM 88220

Cell 575-200-8648 | Office 575-234-5987 | camorgan@blm.gov



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From: Yolanda Ybarra < Yolanda Ybarra@eogresources.com>

Sent: Tuesday, August 15, 2023 8:43 AM **To:** Morgan, Crisha A camorgan@blm.gov

Cc: Amos, James A <jamos@blm.gov>; Artesia Regulatory <<u>Artesia_Regulatory@eogresources.com</u>> **Subject:** RE: [EXTERNAL] Jackson B #73 Flowline Disturbance Area

Good morning,

I wanted to follow up on this request to see if you had a chance to review for clearance.

Thank you,



Yolanda Ybarra

Artesia Regulatory Division

(575) 703-1882 Cell

From: Yolanda Ybarra

Sent: Wednesday, August 9, 2023 8:16 AM **To:** Morgan, Crisha A camorgan@blm.gov

Cc: Amos, James A <jamos@blm.gov>; Artesia Regulatory <Artesia_Regulatory@eogresources.com>

Subject: FW: [EXTERNAL] Jackson B #73 Flowline Disturbance Area

Good morning Crisha,

The release occurred in 2017 during the time period that Burnett Oil Company owned the Jackson B #33. Burnett submitted the C-141 Initial (attached) with the site being assigned Incident # nAB1703856615. Also attached is the NOI submitted this morning as requested.

EOG is requesting clearance for the following work plan:

Work needed

- complete delineation activities to determine what remediation activities may or may not need to be completed. Equipment may include a backhoe, excavator, dump trucks, belly dumps, and field pickups as needed.

^		
Access	naada	•
	HEEUE	L

-Access will be from the Jackson B #73 pad.

Please let me know if you need anything more for this request.

Thank you,



Yolanda Ybarra

Artesia Regulatory Division

(575) 703-1882 Cell

From: Morgan, Crisha A <camorgan@blm.gov>

Sent: Tuesday, August 8, 2023 8:21 AM

To: Yolanda Ybarra <Yolanda_Ybarra@eogresources.com>; Amos, James A <jamos@blm.gov>

Cc: Artesia Regulatory <artesia_Regulatory@eogresources.com>
Subject: Re: [EXTERNAL] Jackson B #73 Flowline Disturbance Area

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Yolanda,

I will need a notice of intent sundry with the estimated additional surface needed for remediation, as well as the work plan for clean up activities. Has the area been fully delineated vertically and horizontally? Is there an approximate amount of fluids that was released? An open C-141? Just trying to get all of the information I can gather to better assist with getting proper approval.

I will complete my Environmental Impact Review and let you know if there are any other stipulations before doing any earth work.

Thank you,

Crisha A. Morgan | Certified - Environmental Protection Specialist | Program Officer | COR | Spills Coordinator | Orphaned Well POC Lead

Bureau of Land Management | Carlsbad Field Office

620 E. Greene Street Carlsbad, NM 88220

Cell 575-200-8648 | Office 575-234-5987 | camorgan@blm.gov

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From: Yolanda Ybarra < Yolanda Ybarra@eogresources.com>

Sent: Tuesday, August 8, 2023 8:06:06 AM

To: Amos, James A <jamos@blm.gov>; Morgan, Crisha A <camorgan@blm.gov>

Cc: Artesia Regulatory <artesia_Regulatory@eogresources.com>
Subject: [EXTERNAL] Jackson B #73 Flowline Disturbance Area

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Good morning,

We have a federal surface disturbance area for a historical Burnett Oil release on the Jackson B #33 Flowline off pad of the Jackson B #73 location (kmz attached). Our S&E needs clearance to begin the excavation activities due to the release occurring off pad and remediation will create further disturbance.

Please let us know if you have questions or concerns with this request.

Well Details

API: 30-015-42214

Well Name: JACKSON B #073

Operator: BURNETT OIL CO INC

Pools: [96831] CEDAR LAKE; GLORIETA-YESO

ULSTR: J-1-17S-30E

Footages: 1650 FSL & 1650 FEL

County: Eddy

District: Artesia

Thank you,



Yolanda Ybarra

Artesia Regulatory Division (575) 703-1882 Cell





Artesia Division

ATTACHMENT 5 - SEED MIXTURE FOR LPC SAND/SHINNERY SITES

Seed Mixture for LPC Sand/Shinnery Sites

Holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be <u>no</u> primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed shall be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed shall be either certified or registered seed. The seed container shall be tagged in accordance with State law(s) and available for inspection by the Authorized Officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). Holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. Seeding shall be repeated until a satisfactory stand is established as determined by the Authorized Officer. Evaluation of growth may not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

<u>Species</u>	<u>lb/acre</u>
Plains Bristlegrass	5lbs/A
Sand Bluestem	5lbs/A
Little Bluestem	3lbs/A
Big Bluestem	6lbs/A
Plains Coreopsis	2lbs/A
Sand Dropseed	1lbs/A

^{*}Pounds of pure live seed:

Pounds of seed **x** percent purity **x** percent germination = pounds pure live seed

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

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 267451

CONDITIONS

Operator:	OGRID:
EOG RESOURCES INC	7377
P.O. Box 2267	Action Number:
Midland, TX 79702	267451
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	None	9/26/2023