RANGER
ENVIRONMENTAL SERVICES, INC.

SITE CHARACTERIZATION AND PROPOSED REMEDIATION PLAN

JUDSON AUU STATE COM #2
UNIT O, SECTION 26, TOWNSHIP 10S, RANGE 34E
LEA COUNTY, NEW MEXICO
33.412582, -103.432854
RANGER REFERENCE NO. 5375

PREPARED FOR:

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

PREPARED BY:

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

AUGUST 8, 2022

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Senior Project Manager

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Project Manager

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1.0 SITE LOCATION AND BACKGROUND

The Judson AUU State Com #2 (Site) is an oil and gas well location historically operated by EOG Resources, Inc. (EOG). The Site reportedly supported an oil/gas well and a tank battery noted to be surrounded by an earthen berm. The on-site well has been plugged and abandoned and the associated facility has been decommissioned and removed from the Site. The Site is located approximately 12.5 miles northwest of Tatum, within Lea County, New Mexico. The facility is situated in Unit O, Section 26, T10S-R34E at GPS coordinates 33.412582, -103.432854.

On September 7, 2017, a release was discovered originating from a hole on the bottom of an aboveground storage tank located at the Site. Approximately 26 barrels of condensate were estimated to be released. Due to the location of the release within the tank battery, all released fluids were noted to be within the tank battery containment area. The incident was reported to the New Mexico Oil Conservation Division (NMOCD) on September 27, 2017 (NMOCD Incident 1RP-4826).

Initial response efforts included the dispatching of an emergency vacuum truck; however, upon arrival no fluids were available for recovery. Initial removal operations were completed within the impact area. On November 7, 2017, a Characterization Plan was submitted to the NMOCD which included details of the release, proposed assessment actions, and proposed treatment and re-use of impacted material at the Site. On March 27, 2018, a Remediation Work Plan was prepared and submitted to the NMOCD to address the impacts at the Site. Initial response from the NMCOD regarding the proposed remedial plan requested that additional assessment activities and review of the site characterization details be performed. On July 26, 2018, the NMOCD approved the remedial strategy as presented by EOG, with conditions of a modified site ranking and RRALs. In December 2018, representatives for EOG conducted additional assessment as well as removal and sampling activities at the Site; however, proper documentation and a closure request were not completed and submitted to the NMOCD.

In a desire to complete remediation efforts to the current release criteria, EOG engaged Ranger Environmental Services, Inc. (Ranger) in June 2021 to assist in the outstanding assessment and remediation efforts at the Site.

To assess the historic impact area and determine the appropriate site characterization details, assessment operations were conducted from June 2021 to May 2022. This report has been prepared to provide full site characterization and assessment details and to propose remedial strategies to address the impacts associated with the release incident.

A copy of the previously submitted Form C-141 Release Notification is attached along with current versions of the Site Assessment/Characterization and Remediation Plan sections of Form C-141. A Topographic Map and Area Map noting the location of the subject Site and surrounding areas as well as a Site Map illustrating the Site features and sampling locations, are provided in the Figures section.

2.0 SITE CHARACTERIZATION

2.1 Depth-to-Groundwater

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 within a half mile of the Site is limited.

Due to the lack of area groundwater data, a soil boring/temporary monitor well was installed at the Site in May 2022 in order to obtain the site-specific depth-to-groundwater information. On May 16, 2022, representatives for GHD oversaw HCI drilling install the soil boring/temporary monitor well at approximate GPS coordinates 33.412612, -103.432885 to maximum depth of approximately 56 feet below ground surface (bgs) utilizing air rotary drilling techniques. Once the boring was completed, a two-inch diameter temporary monitor well was installed. The temporary monitor well was allowed to equilibrate for four days and was then gauged with a Solinst water level meter on May 20, 2022. The temporary monitor well was found to contain water at a depth of 36.48 feet bgs. To confirm the accuracy of encountered groundwater levels, the temporary monitor well was again gauged on May 27, 2022, and was found to contain water at a depth of approximately 33.57 feet bgs. Upon completion of the gauging activities on May 27, 2022, the temporary monitor well was properly plugged and abandoned.

Based upon the GHD depth-to-groundwater investigation results and the reviewed NMOSE information, the depth-to-groundwater in the area of the Site is believed to be less than 50 feet bgs.

A copy of the soil boring/temporary monitor well boring log is attached.

2.2 Wellhead Protection Area

Based upon the USGS and NMOSE information, no known water sources were identified within a half-mile of the Site. It should be noted that the temporary monitor well installed at the site was completed for investigation purposes, was not utilized as a water source, and has been properly plugged and abandoned.

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 undetermined flood hazard.

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

2.3 Distance to Nearest Significant Watercourse

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

2.4 Closure Criteria

Based upon the Site characterization details, the Site will be remediated to Table 1 19.15.29.12 NMAC (groundwater >50' feet) criteria. Additionally, the remediation activities will be completed to bring the surface to four-foot depth interval into compliance with the Restoration, Reclamation and Re-Vegetation criteria detailed in 19.15.29.13 NMAC. The proposed closure criteria are detailed below:

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

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

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.

3.0 SITE IMPACT AND CHARACTERIZATION ASSESSMENTS (June 2021 – May 2022)

3.1 Initial Site Assessment (June 22 & 23, 2021)

On June 22, 2021, Ranger personnel mobilized to the Site to conduct a precursory review of the impact/excavation area at the Site. Upon arrival at the Site, Ranger reviewed and documented the extent of the completed excavation. Upon inspection, the Site excavation was noted to have dimensions of approximately 27 feet by 12 feet and was completed to depths varying from one to four and one-half feet bgs. The excavated material generated during these initial response efforts was noted to be removed from the Site. During the inspection process, Ranger personnel field screened soils from various locations in the excavated area using an organic vapor monitor (OVM) and a field chloride titration kit to assist in evaluating the soil conditions and/or levels of impacts in the area. Field OVM readings at the Site indicated that hydrocarbon impacts were still present

at various locations within the excavated area. Field chloride readings indicated that soil chloride concentrations were within the most stringent Table 1 Criteria.

Based on the conditions documented at the Site, it was determined that additional assessment and delineation efforts were warranted. On June 23, 2021, Ranger personnel and representatives of EOG returned to the Site to conduct additional assessment activities. Utilizing earth moving equipment (backhoe), an initial test excavation was completed in the base of the excavation area in an attempt to vertically delineate the observed impacts in the area. Additionally, test excavation trenches were completed into the excavation sidewalls in each cardinal direction to assist in the horizontal delineation of impacts in the area. During the assessment process Ranger personnel once again collected field OVM and chloride readings to assist in evaluating the level of impacts and to identify appropriate sample locations. Due to the lithology at the Site, further assessment of multiple locations was limited. Within the excavation, the depth of investigation was limited to approximately 12 feet bgs, where field OVM readings indicated that elevated soil concentrations were still present. Along the northern wall of the excavation, elevated soil concentrations were observed and documented; however, due to the presence of production equipment in the area, additional trenching assessment could not safely be completed. During the assessment process, soil samples for laboratory analysis were collected from the test excavation locations. It should be noted, due to field readings collected along the north wall of the excavation and Site constraints limiting the ability to complete additional assessment further north, no additional samples were collected from the area.

Upon collection, the soil samples were submitted to Hall Environmental Laboratory, Inc. in Albuquerque, New Mexico for analysis of total petroleum hydrocarbons (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 collected during the June 2021 assessment activities, it was determined that additional assessment operations were necessary at the Site.

3.2 Additional Site Assessment (July 14, 2021)

On July 14, 2022, Ranger personnel and representatives for EOG returned to the Site to conduct additional assessment operations utilizing equipment more capable of conducting assessment within the Site lithology (track hoe).

Based on the results of the samples collected from the test excavation completed in the base of the excavated area, an additional test excavation was completed to a depth of approximately 22 feet bgs, which was the maximum extent of the on-site equipment.

At the time of the July 14, 2022 assessment activities, the production equipment located immediately north of the excavated area, that limited assessment activities during the July 2021 activities had been removed making the area available for assessment. Thus, an excavation test trench was completed at the location.

During the assessment process, soil samples were collected from each test excavation area for laboratory analysis. Upon collection the samples were submitted to Hall Environmental Laboratory, Inc. in Albuquerque, New Mexico for analysis of TPH, BTEX, and total chloride using the aforementioned laboratory methods. The samples were collected and managed using standard QA/QC and chain-of-custody procedures.

3.3 Site Assessment Sample Results

Upon review of the sample results collected during the initial assessment process, additional vertical delineation assessment was necessary. Additionally, due to the lack of NMOCD acceptable depth-to-groundwater information, confirmation of the appropriate NMAC 19.15.29.12 Table 1 Criteria was needed.

3.4 Soil Boring/Temporary Monitor Well Installation (May 2022)

In May 2022, a soil boring/temporary monitor well was installed at the Site for the purpose of completing vertical delineation of the impacts and to obtain site-specific depth-to-groundwater information.

On May 16, 2022, representatives for GHD oversaw HCI Drilling install a soil boring/temporary monitor well at approximate GPS coordinates 33.412612 -103.432885. Utilizing air rotary drilling techniques, the soil boring was completed to a maximum depth of approximately 56 feet bgs. During the installation process, GHD personnel assessed the generated soil cuttings for lithologic composition and for evidence of hydrocarbon impacts. During the installation process, soil samples for laboratory analysis were collected from various encountered depth intervals. A total of four soil samples were collected for laboratory analysis. Upon collection, the soil samples were submitted to Hall Environmental Laboratory, Inc. in Albuquerque, New Mexico for analysis of TPH, BTEX, and total chloride using the aforementioned laboratory methods.

Upon completion of the boring installation process, the boring was converted into a two-inch diameter temporary monitor well. As detailed above, the monitor well was allowed to equilibrate and investigated for the presence of water on May 20, 2022 and May 27, 2022, and was found to contain water. Upon completion of the gauging activities on May 27, 2022, the temporary monitor well was properly plugged and abandoned.

Based on review of the laboratory analytical results for the samples collected by GHD personnel during the installation of the soil boring/temporary monitor well, the vertical delineation of impacts at the Site were successfully completed. The sample collected at a depth of approximately 30 feet bgs was documented to have concentrations within the applicable Table 1 Criteria.

4.0 PROPOSED REMEDIATION PLAN

4.1 Impacted Soil Excavation

To address the elevated soil concentrations documented at the Site, soil removal operations are proposed. Due to the depth of observed impacts at the Site being greater than 20 feet and internal EOG policies, an excavation plan stamped by a professional engineer (P.E.) is necessary. Coordination with an appropriate party capable of preparing a P.E. approved plan has been completed and finalization of the plan is currently pending.

Based on the observed conditions at the Site, it is anticipated that the impact area has dimensions of approximately 40 feet long and 27 feet wide and will require excavation to depths of approximately 26 to 30 feet bgs. Based on previously completed engineered plans for similar remediation projects, it is anticipated that an area approximately 215 feet by 198 feet will be necessary to allow for proper benching and shoring requirements. The extent of the anticipated

boundaries of the benching and shoring areas will include removal efforts of non-impacted areas or areas that have concentrations below the applicable Table 1 Criteria.

In order to allow for the segregation of impacted and non-impacted material, the excavation will be completed in approximate five foot lifts. Initial excavation of each five foot lift will be completed within the main impact area and will have dimensions of approximately 40 feet by 27 feet to a depth of five feet below ground surface. During the soil removal process, Ranger personnel will field screen the excavated areas using an organic vapor monitor (OVM) and a field chloride titration kit. The field screening results will be utilized to guide the excavation process and assist in determining when the excavation side walls (lateral boundaries) appear to meet applicable NMAC 19.15.29.12 Table 1 Criteria. Upon reaching appropriate lateral boundaries, confirmation soil samples will be collected from the excavation side walls for laboratory analysis in accordance with NMAC 19.15.29.12 (D) as five-part composite samples representing no more than 200 square feet. Upon laboratory confirmation that the side wall samples are within the applicable Table 1 Criteria, excavation of soils will be completed outside the main excavation within the required benching and shoring area. All material excavated from this benching/shoring area will be segregated and stockpiled on-site for re-use as backfill. This excavation process will be continued in five foot lifts as detailed above until the vertical extent of contamination has been remediated, which Ranger anticipates to be an appropriate depth interval of 26 to 30 feet bgs. Upon reaching the terminal depth of the excavation area, grab soil samples are proposed to be collected from various locations within the excavation floor to confirm attainment of the applicable NMAC 19.15.29.12 Table 1 Criteria.

Upon collection, the composite sample parts will be placed into a new Ziplock® bag, thoroughly mixed, and a sample for laboratory analysis will be collected from the mixture. The cleanup confirmation soil samples will be collected using standard QA/QC procedures, placed into laboratory-supplied containers, and will be immediately placed into a sample shuttle containing ice. All confirmation soil samples will be transported to an approved laboratory for analysis of TPH using EPA Method 8015; BTEX using EPA Method 8021; and, total chloride using EPA Method 300.

A *Proposed Excavation Area Map* depicting the anticipated excavation boundaries is attached. It should be noted that the depicted boundaries are pending the P.E. approved excavation plan. A *Proposed Confirmation Sample Location Map* depicting the proposed excavation base grab sample locations is attached.

4.2 Excavated Material Management, Backfill, and Re-Vegetation

Based on the anticipated dimensions of the P.E. approved excavation plan, it is believed that approximately 15,000-20,000 cubic yards of material will be generated during the excavation activities at the Site. Of this estimated volume, it is anticipated that approximately 1,500 cubic yards will be removed from the impact area for disposal purposes. The generated excavated material documented or anticipated to be impacted beyond the applicable NMAC 19.15.29.12 Table 1 Criteria will be transported off-site for disposal at an approved disposal facility.

Upon attainment of the 19.15.29.13 NMAC Reclamation Criteria, the excavated area will be backfilled utilizing the material generated during the benching and shoring activities outside of the impacted area. The remaining portions of the excavation will be backfilled with imported clean fill material in accordance with NMAC 19.15.29.13.

Re-vegetation efforts at the Site will be completed in conjunction with the remaining decommissioning and reclamation efforts for the former well pad location.

4.3 Remediation Schedule

Upon approval of the proposed remediation plan, all field activities will be scheduled as soon as reasonably possible. It is anticipated that the soil removal operations and cleanup confirmation soil sampling activities will be completed within 120 days of initiation.

Appropriate notification to the NMOCD will be provided prior to the performance of the cleanup confirmation soil sampling activities.

5.0 SITE CLOSURE

Upon completion of the remedial and backfilling activities at the Site, a C-141 Closure Report will be submitted to the NMOCD, and site closure will be requested. The Closure Report will be completed in accordance with the closure reporting criteria detailed in NMAC 19.15.29.12(E).

FORM C-141

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	OGRID Number	Contact
EOG Y Resources, Inc.	25575	Robert Asher
Address		Telephone No.
104 S. 4th Street		575-748-1471
Facility Name		Facility Type
Judson AUU State Com #2		Battery

Surface Owner	Mineral Owner	API No.
Fee	State	30-025-36886

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	26	10S	34E	660	South	1980	East	Lea

Latitude 32.41272 **Longitude** 103.43251

NATURE OF RELEASE

Type of Release	Volume of Release	Volume Recovered
Condensate	26 B/C	0 B/C
Source of Release	Date and Hour of Occurrence	Date and Hour of Discovery
Production Tank	9/7/2017; PM	9/7/2017; PM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Olivia Yu/NMOCD I	
By Whom? Robert Asher/ EOG Y Resources	Date and Hour 9/8/2017; AM	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

RECEIVED
By Olivia Yu at 8:45 am, Sep 27, 2017

Describe Cause of Problem and Remedial Action Taken.*
Hole discovered in tank bottom, causing the release. Tank removed.

Describe Area Affected and Cleanup Action Taken.*
An approximate area of 20'X 20'. The well and valves were closed. The impacted soils under removed tank were excavated and placed on bermed plastic, if applicable in-place remediation will be conducted. Vertical and horizontal delineation samples will be collected and analysis ran for TPH & BTEX. If initial analytical results for TPH & BTEX are under RRAL's a Final Report, C-141 will be submitted to the OCD requesting closure. If the analytical results are above the RRAL's a work plan will be submitted to the OCD. **Depth to Ground Water: <50' (approximately 36', per USGS Groundwater Levels), Wellhead Protection Area: No, Distance to Surface Water Body: >1000', SITE RANKING IS 20.**

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature:

Printed Name: Robert Asher

Title: Environmental Supervisor

E-mail Address: Robert_Asher@eogresources.com

Date: September 22, 2017 Phone: 575-748-4217

OIL CONSERVATION DIVISION

Approved by Environmental Specialist: OY

Approval Date: 9/27/2017 Expiration Date:

Conditions of Approval:
see attached directive

Attached ☑

* Attach Additional Sheets If Necessary

1RP-4826 nOY1727031593 pOY1727031945

Operator/Responsible Party,

The OCD has received the form C-141 you provided on _9/25/2017_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number _1RP-4826__ 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 division-approved corrective action 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 _1_ office in __Hobbs____ on or before _10/27/2017_. 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; C_6 thru C_{36}), 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; C_6 thru C_{36}), 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

State of New Mexico
Oil Conservation Division

Incident ID	nOY1727031593
District RP	1RP-4826
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	~33-36' (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	nOY1727031593
District RP	1RP-4826
Facility ID	
Application ID	

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

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

Signature: Chase Settle Date: 08/10/2022

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

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	nOY1727031593
District RP	1RP-4826
Facility ID	
Application ID	

Remediation Plan

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

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

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

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

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

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

Signature: Chase Settle Date: 08/10/2022

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

OCD Only

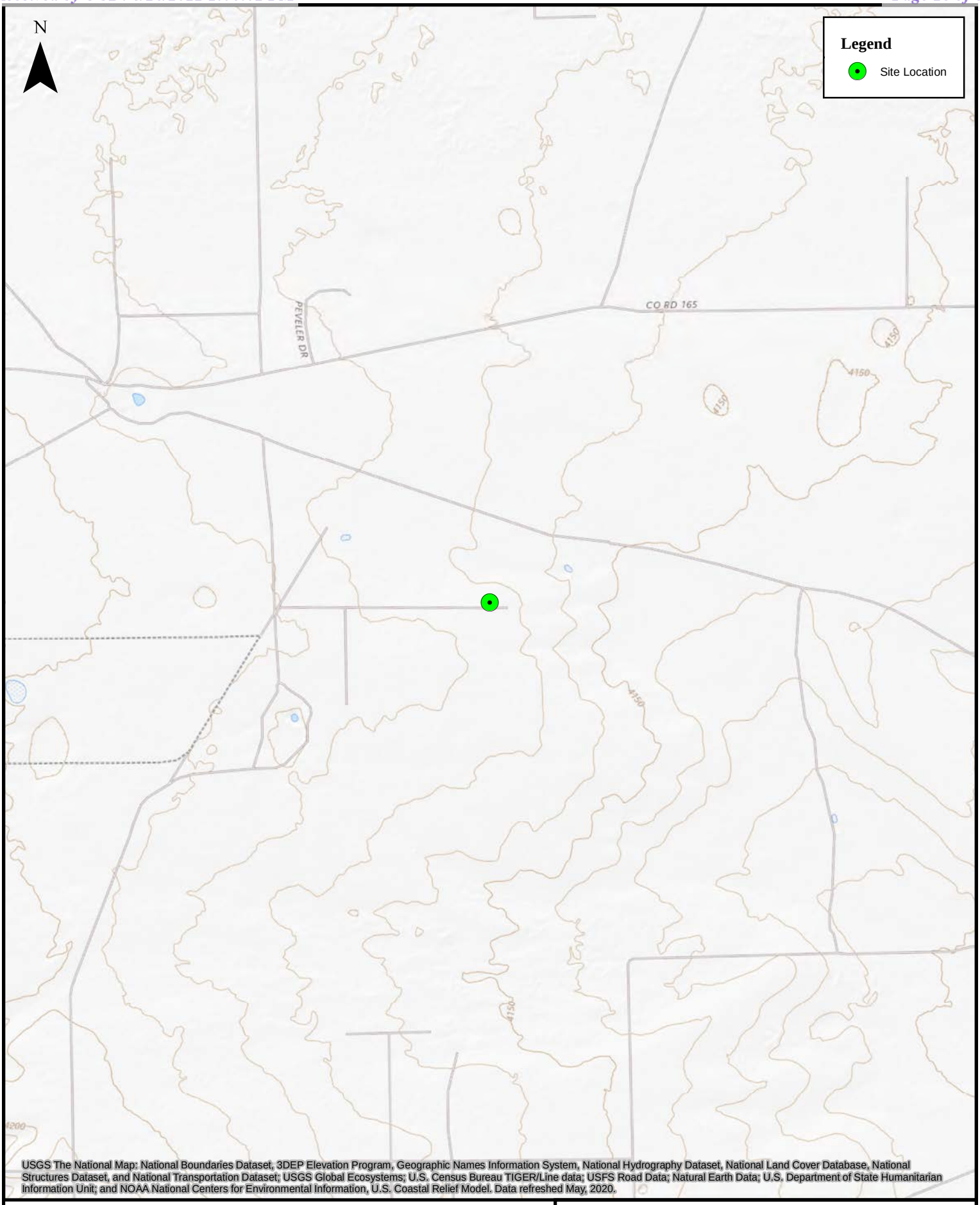
Received by: _____ Date: _____

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

Signature: Bradford Billings Date: 8/24/2022

FIGURES

Topographic Map
Area Map
National Wetland Inventory Map
Karst Topography Map
Assessment Sample Location Map
Proposed Excavation and Sample Location Map



USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road Data; Natural Earth Data; U.S. Department of State Humanitarian Information Unit; and NOAA National Centers for Environmental Information, U.S. Coastal Relief Model. Data refreshed May, 2020.

RANGER ENVIRONMENTAL SERVICES, INC.

0 600 1,200 2,400 3,600 4,800 Feet

1:24,000

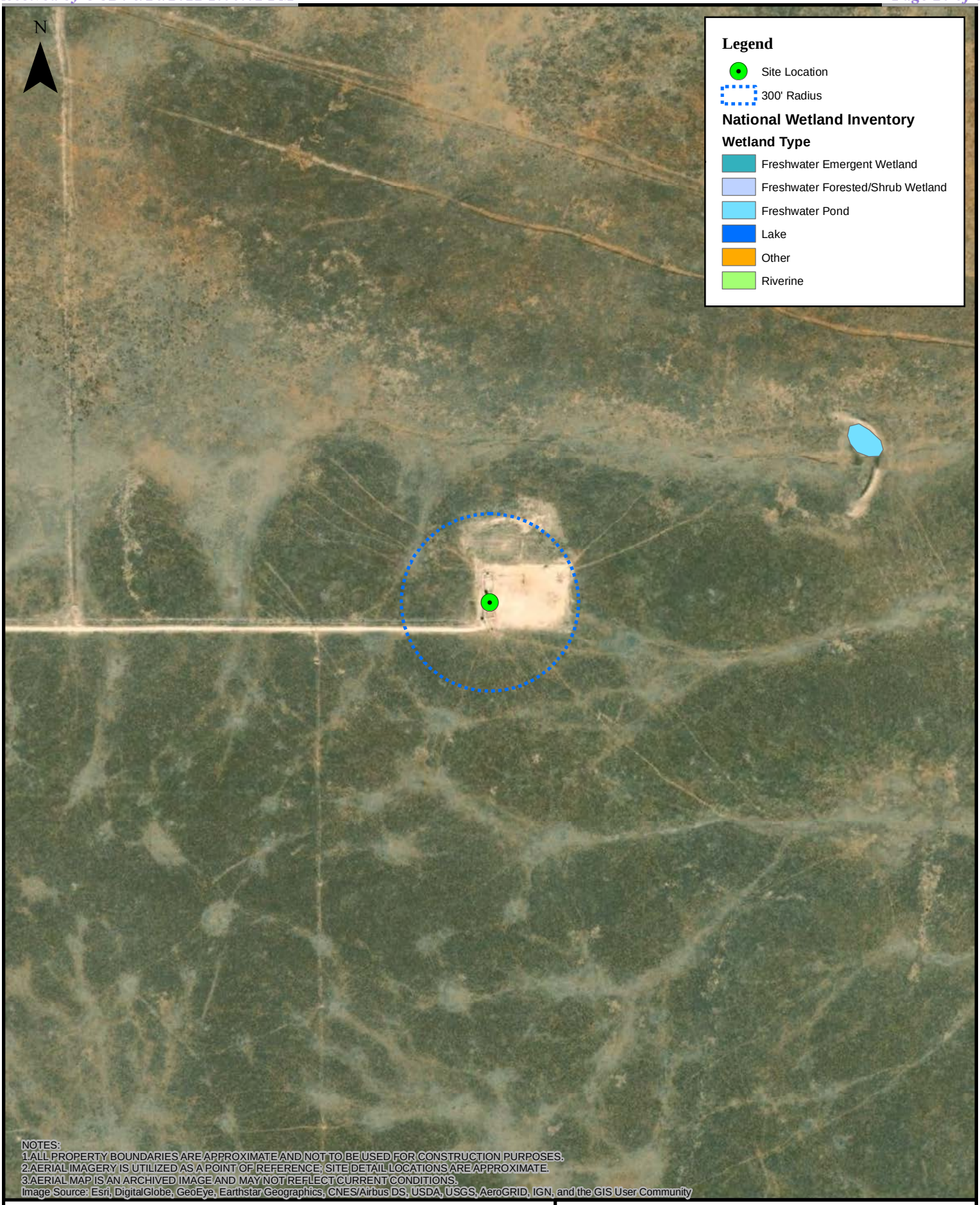
Topographic Map
Judson AUU State Com 2
EOG Resources, Inc.

RANGER ENVIRONMENTAL SERVICES, INC.

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

1:10,000

Area Map
Judson AUU State Com 2
EOG Resources, Inc.



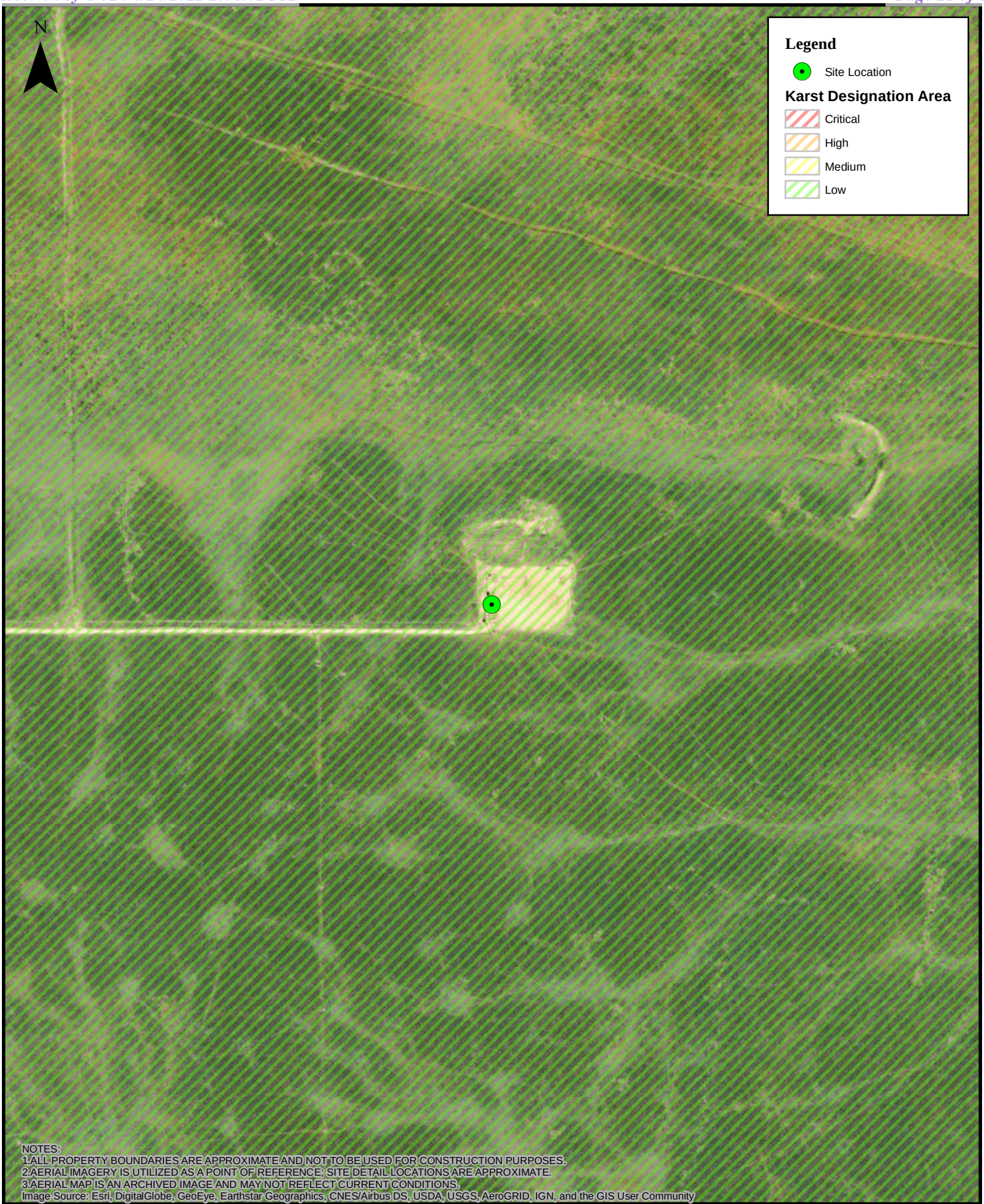
NOTES:
1.ALL PROPERTY BOUNDARIES ARE APPROXIMATE AND NOT TO BE USED FOR CONSTRUCTION PURPOSES.
2.AERIAL IMAGERY IS UTILIZED AS A POINT OF REFERENCE; SITE DETAIL LOCATIONS ARE APPROXIMATE.
3.AERIAL MAP IS AN ARCHIVED IMAGE AND MAY NOT REFLECT CURRENT CONDITIONS.
Image Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

RANGER ENVIRONMENTAL SERVICES, INC.

0 125 250 500 750 1,000 Feet

1:5,000

National Wetland Inventory Map
Judson AUU State Com 2
EOG Resources, Inc.



RANGER ENVIRONMENTAL SERVICES, INC.

0 125 250 500 750 1,000 Feet

1:5,000

Karst Topography Map
Judson AUU State Com 2
EOG Resources, Inc.

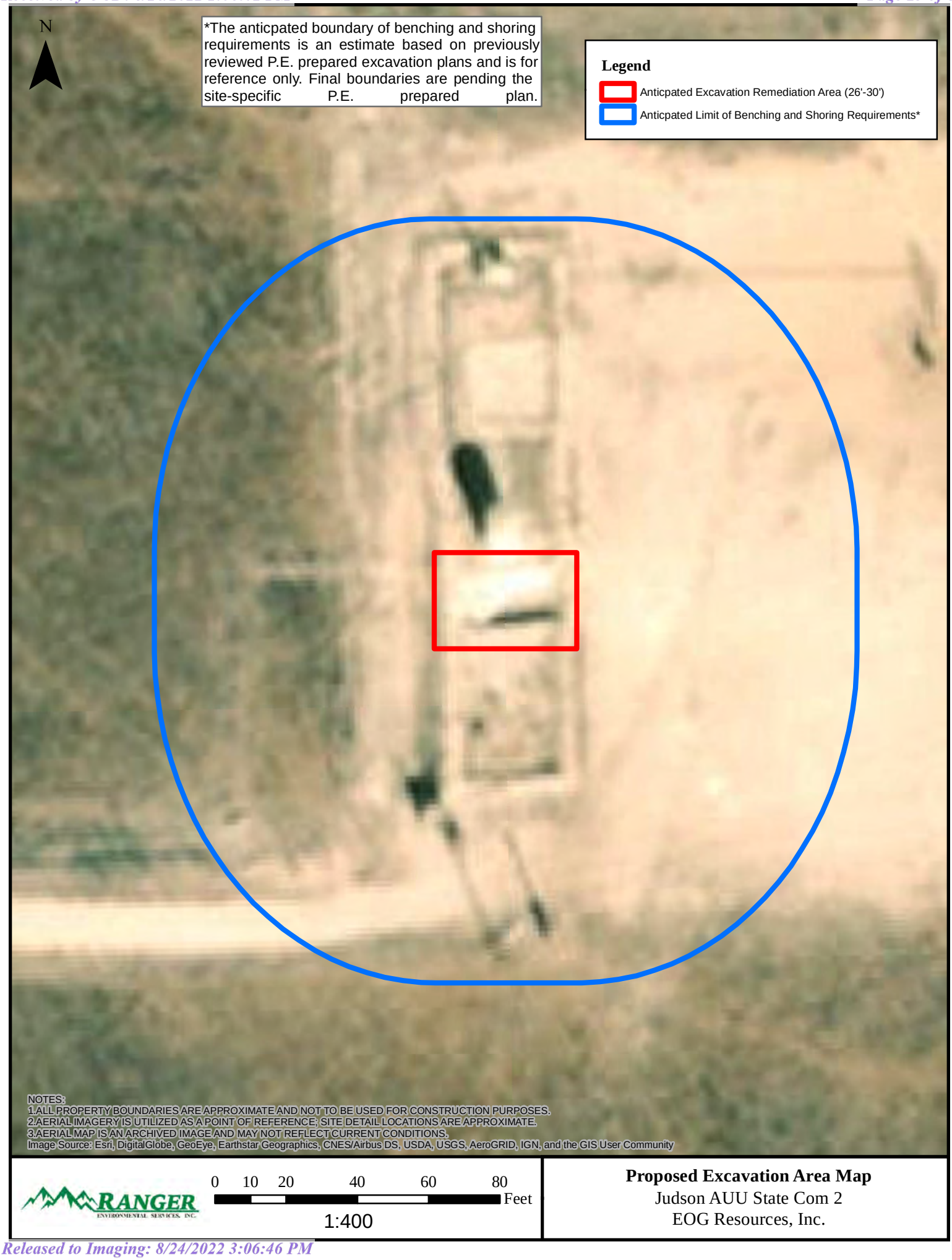
NOTES:
1.ALL PROPERTY BOUNDARIES ARE APPROXIMATE AND NOT TO BE USED FOR CONSTRUCTION PURPOSES.
2.AERIAL IMAGERY IS UTILIZED AS A POINT OF REFERENCE; SITE DETAIL LOCATIONS ARE APPROXIMATE.
3.AERIAL MAP IS AN ARCHIVED IMAGE AND MAY NOT REFLECT CURRENT CONDITIONS.
Image Source: Google Earth (Dated: 1/2018)

RANGER ENVIRONMENTAL SERVICES, INC.

0 2.75 5.5 11 16.5 22 Feet

1:111

Assessment Sample Location Map
Judson AUU State Com 2
EOG Resources, Inc.


N
*The anticpated boundary of benching and shoring requirements is an estimate based on previously reviewed P.E. prepared excavation plans and is for reference only. Final boundaries are pending the site-specific P.E. prepared plan.
Legend
Anticpated Excavation Remediation Area (26'-30')
Anticpated Limit of Benching and Shoring Requirements*
NOTES:
1.ALL PROPERTY BOUNDARIES ARE APPROXIMATE AND NOT TO BE USED FOR CONSTRUCTION PURPOSES.
2.AERIAL IMAGERY IS UTILIZED AS A POINT OF REFERENCE; SITE DETAIL LOCATIONS ARE APPROXIMATE.
3.AERIAL MAP IS AN ARCHIVED IMAGE AND MAY NOT REFLECT CURRENT CONDITIONS.
Image Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
RANGER
ENVIRONMENTAL SERVICES, INC.
0 10 20 40 60 80
Feet
1:400
Proposed Excavation Area Map
Judson AUU State Com 2
EOG Resources, Inc.

N

*The anticpated boundary of benching and shoring requirements is an estimate based on previously reviewed P.E. prepared excavation plans and is for reference only. Final boundaries are pending the site-specific P.E. prepared plan.

Legend

- Anticpated Excavation Area (26'-30')
- Anticpated Limit of Benching and Shoring Requirements*
- Proposed Grab Sample Location

*Confrimation soil samples from the Anticpated Benching and shoring area are proposed to be collected as five-part composite samples at a frequency of one composite sample per 1,000 square feet.

NOTES:
1.ALL PROPERTY BOUNDARIES ARE APPROXIMATE AND NOT TO BE USED FOR CONSTRUCTION PURPOSES.
2.AERIAL IMAGERY IS UTILIZED AS A POINT OF REFERENCE; SITE DETAIL LOCATIONS ARE APPROXIMATE.
3.AERIAL MAP IS AN ARCHIVED IMAGE AND MAY NOT REFLECT CURRENT CONDITIONS.
Image Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

RANGER ENVIRONMENTAL SERVICES, INC.

0 10 20 40 60 80 Feet

1:400

Proposed Confimraiton Sample Location Map
Judson AUU State Com 2
EOG Resources, Inc.

TABLES

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

Field Screening Summary Table

SITE ASSESSMENT SOIL BTEX (EPA 8260), TPH (EPA 8015) & CHLORIDE (EPA 300) ANALYTICAL DATA
JUDSON AUU STATE COM 2
LEA COUNTY, NEW MEXICO

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
Initial Soil Samples: June 23 2021													
Base/5'	6/23/2021	5'	<0.12	<0.24	0.29	15	15.29	300	2,400	610	2,700	**3,310**	<60
Base/7'	6/23/2021	7'	<0.49	<0.97	<0.97	44	44	720	1,500	<460	2,220	**2,220**	<60
Base/9'	6/23/2021	9'	<0.48	<0.95	<0.95	36	36	710	1,800	<450	2,510	**2,510**	<60
Base/12'	6/23/2021	12'	<0.48	1.7	3.8	380	**385.5**	4,200	3,800	<990	8,000	**8,000**	<59
W.1/2'	6/23/2021	2'	<0.024	<0.048	<0.048	<0.096	<0.216	<4.8	<9.9	<50	<14.7	<64.7	<60
W.1/5'	6/23/2021	5'	<0.023	<0.047	<0.047	<0.094	<0.211	<4.7	<9.6	<48	<14.3	<62.3	<60
S.3/2'	6/23/2021	2'	<0.024	<0.047	<0.047	<0.094	<0.212	<4.7	<9.1	<46	<13.8	<59.8	<60
S.3/4'	6/23/2021	4'	<0.024	<0.048	<0.048	<0.096	<0.216	<4.8	<10	<51	<14.8	<65.8	<59
S.3/5'	6/23/2021	5'	<0.024	<0.048	<0.048	<0.097	<0.217	<4.8	<8.8	<44	<13.6	<57.6	<60
E.2/2'	6/23/2021	2'	<0.024	<0.049	<0.049	<0.097	<0.219	<4.9	16	<47	16	16	<59
E.2/4'	6/23/2021	4'	<0.024	<0.049	<0.049	<0.097	<0.219	<4.9	<9.9	<49	<14.8	<63.8	<61
E.1/5'	6/23/2021	5'	<0.024	<0.048	<0.048	<0.097	<0.217	<4.8	<9.3	<46	<14.1	<60.1	<60
Soil Samples: July 14, 2021													
N.2/2'	7/14/2021	2'	<0.025	<0.049	<0.049	<0.099	<0.222	<4.9	<9.6	<48	<14.5	<62.5	<60
N.2/4'	7/14/2021	4'	<0.024	<0.047	<0.047	<0.095	<0.213	<4.7	<9.4	<47	<14.1	<61.1	<59
N.2/5'	7/14/2021	5'	<0.024	<0.048	<0.048	<0.095	<0.215	<4.8	<9.6	<48	<14.4	<62.4	<60
Base/16'	7/14/2021	16'	<0.49	33	12	330	**375**	3,900	3,300	<460	7,200	**7,200**	<60
Base/19'	7/14/2021	19'	<1.2	36	21	240	**297**	2,600	2,800	<480	5,400	**5,400**	<60
Base/22'	7/14/2021	22'	1.2	56	32	290	**379.2**	3,200	2,900	<490	6,100	**6,100**	<60
Soil Boring Samples: May 16, 2022 (Collected by GHD)													
SB-1 (22')	5/16/2022	22'	<0.12	<0.24	<0.24	1.1	1.1	43	1,200	<44	1,243	**1,243**	<60
SB-1 (25')	5/16/2022	25'	<0.12	1.7	3.1	29	33.8	350	740	<46	1,090	**1,090**	74
SB-1 (30')	5/16/2022	30'	<0.12	<0.24	<0.24	<0.49	<1.09	<24	<10	<50	<84	<84	<60
SB-1 (35')	5/16/2022	35'	<0.12	<0.23	<0.23	<0.47	<1.05	<23	<10	<47	<80	<80	<60
19.15.29.12 NMAC Table 1 Closure Criteria for Soils Impacted by a Release (GW ≤50')			**10**	**---**	**---**	**---**	**50**	**---**	**---**	**---**	**---**	**100**	**600**
19.15.29.13 NMAC Reclamation Criteria (0'-4' Soils Only)			**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.
4. NA - Not Analyzed

NA = Not Analyzed
TPH = Total Petroleum Hydrocarbons
mg/Kg = Milligrams per Kilogram

FIELD SCREENING SUMMARY TABLE
EOG RESOURCES, INC.
JUDSON AUU STATE COM 2

Sample Location ID	Date	Depth (ft-bgs)	Field Chloride Reading (mg/Kg)	OVM Reading (ppm_v)	Sample Collected for Lab Analysis
Base	6/23/2022	5'	---	1,834	X
	6/23/2022	6'	150	2,556	
	6/23/2022	7'	---	2,506	X
	6/23/2022	8'	150	1,509	
	6/23/2022	9'	---	1,507	X
	6/23/2022	11'	---	1,653	
	6/23/2022	12'	---	1,280	X
	7/14/2021	13'	---	1,671	
	7/14/2021	14'	---	1,755	
	7/14/2021	15'	---	1,581	
	7/14/2021	16'	---	1,621	X
	7/14/2021	19'	---	1,599	X
	7/14/2021	22'	---	1,546	X
N	6/23/2021	2'	---	517	
	6/23/2021	4'	---	599	
	6/23/2021	5'	---	3,067	
N.1	7/14/2021	2'	---	0.1	
	7/14/2021	4'	---	23	
	7/14/2021	5'	---	1,737	
N.2	7/14/2021	2'	150	3.7	X
	7/14/2021	4'	150	2.5	X
	7/14/2021	5'	150	10.4	X
E.1	6/23/2021	2'	---	28.5	
	6/23/2021	4'	---	14.1	
	6/23/2021	5'	---	10.7	X
E.2	6/23/2021	2'	---	7.1	X
	6/23/2021	4'	---	4.9	X
S.1	6/23/2021	2'	---	102	
	6/23/2021	4'	---	858	
	6/23/2021	5'	---	2,100	
S.2	6/23/2021	2'	---	17.1	
	6/23/2021	4'	---	32	
	6/23/2021	5'	---	155.4	
S.3	6/23/2021	2'	---	2.8	X
	6/23/2021	4'	---	2.2	X
	6/23/2021	5'	---	2.2	X
W	6/23/2021	2'	---	218	
	6/23/2021	4'	---	<5,000	
	6/23/2021	5'	---	<5,000	
W.1	6/23/2021	2'	---	2.2	X
	6/23/2021	5'	---	2.5	X

ATTACHMENT 1 – SOIL BORING/TEMPORARY MONITOR WELL “SB-1” BORING LOG

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: Judson AUU State Com #2
PROJECT NUMBER: 12579880
CLIENT: EOG Resources
LOCATION: Lea County, New Mexico
DRILLING CONTRACTOR: HCI Drilling

HOLE DESIGNATION: SB-1
DATE COMPLETED: 16 May 2022
DRILLING METHOD: Air Rotary/Split Spoons and Cuttings
FIELD PERSONNEL: L. Mullins
DRILLER: K. Cooper

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	CHLORIDE (mg/kg)	TOTAL TPH (mg/kg)
0	Stratigraphy not recorded							
22	SP-SAND, fine to medium grained sand, with beds of caliche interbedded throughout, light brown, dry, odor - with clay, slightly moist, odor at 24.00ft BGS	22.00		22'			<60	810
				25'			74	1100
28	CLS-SANDY CLAY, orangish brown to dark brown, dry	28.00		30'			<60	<50
34				35'			<60	<47
40	SP-SAND, fine to medium grained sand, light brown, dry	40.00						
45	CLS-SANDY CLAY, grey to brown, slightly moist	45.00	7" Ø Borehole					

NOTES: CHEMICAL ANALYSIS ( )

File: \\GHDNET\GHD\US\MIDLAND\PROJECTS\562\12579880\TECH\GINT LOGS\12579880 LOGS.GPJ Library File: GHD_ENVIRO_V06.GLB Report: OVERBURDEN LOG Date: 10/6/22

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: Judson AUU State Com #2
PROJECT NUMBER: 12579880
CLIENT: EOG Resources
LOCATION: Lea County, New Mexico
DRILLING CONTRACTOR: HCI Drilling

HOLE DESIGNATION: SB-1
DATE COMPLETED: 16 May 2022
DRILLING METHOD: Air Rotary/Split Spoons and Cuttings
FIELD PERSONNEL: L. Mullins
DRILLER: K. Cooper

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE CHLORIDE (mg/kg)	SAMPLE TOTAL TPH (mg/kg)
50								
52								
54								
56	END OF BOREHOLE @ 55.82ft BGS	55.82	2" Ø Screen WELL DETAILS Screened interval: 45.82 to 55.82ft BGS Length: 10ft Diameter: 2in NOTE: This well was plugged and abandoned. Plugged on 5/27/2022					
58								
60								
62								
64								
66								
68								
70								
72								
74								
76								
78								
80								
82								
84								
86								
88								
90								
92								
94								

NOTES: Temp Well Gauged on May 20, 2022, DTW was 36.48 feet below ground surface. On May 27, 2022 the well was again gauged DTW was 33.57 feet below ground surface. The well was P&A on May 27, 2022.

CHEMICAL ANALYSIS

File: \\GHDNET\GHD\US\MIDLAND\PROJECTS\562\12579880\TECH\GINT LOGS\12579880 LOGS.GPJ Library File: GHD_ENVIRO_V06.GLB Report: OVERBURDEN LOG Date: 10/6/22

ATTACHMENT 2 – PHOTOGRAPHIC DOCUMENTATION

PHOTOGRAPH NO. 1 – A general view of the excavation area at the Site on June 22, 2021. The view is towards the northwest.

(Approximate GPS: 33.412585, -103.432814)

PHOTOGRAPH NO. 2 – A view of the assessment test excavation being completed in the base of the excavation area on June 23, 2021. The view is towards the east.

(Approximate GPS: 33.412613, -103.432865)

PHOTOGRAPH NO. 3 – A general view of the assessment activities along the northern wall of the excavated area on July 14, 2021. The view is towards the west.

PHOTOGRAPH NO. 4 – A view of the additional assessment activities in the base of the excavation area on July 14, 2021. The view is towards the south.

ATTACHMENT 3 – LABORATORY ANALYTICAL REPORTS

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

July 06, 2021

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

RE: Judson AUU Sate Com 2 OrderNo.: 2106D68

Dear Will Kierdorf:

Hall Environmental Analysis Laboratory received 12 sample(s) on 6/25/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2106D68**
Date Reported: **7/6/2021**

CLIENT: EOG
Client Sample ID: Base/5'
Project: Judson AUU Sate Com 2
Collection Date: 6/23/2021 11:54:00 AM
Lab ID: 2106D68-001 **Matrix:** SOIL
Received Date: 6/25/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**VP**
Chloride	ND	60		mg/Kg	20	7/1/2021 7:13:23 PM	61040
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**SB**
Diesel Range Organics (DRO)	2400	47		mg/Kg	5	7/1/2021 4:17:37 PM	60965
Motor Oil Range Organics (MRO)	610	240		mg/Kg	5	7/1/2021 4:17:37 PM	60965
Surr: DNOP	106	70-130		%Rec	5	7/1/2021 4:17:37 PM	60965
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**mb**
Gasoline Range Organics (GRO)	300	24		mg/Kg	5	7/1/2021 9:19:00 PM	60961
Surr: BFB	133	70-130	S	%Rec	5	7/1/2021 9:19:00 PM	60961
EPA METHOD 8021B: VOLATILES						Analyst:	**mb**
Benzene	ND	0.12		mg/Kg	5	7/1/2021 9:19:00 PM	60961
Toluene	ND	0.24		mg/Kg	5	7/1/2021 9:19:00 PM	60961
Ethylbenzene	0.29	0.24		mg/Kg	5	7/1/2021 9:19:00 PM	60961
Xylenes, Total	15	0.48		mg/Kg	5	7/1/2021 9:19:00 PM	60961
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	5	7/1/2021 9:19:00 PM	60961

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2106D68**
Date Reported: **7/6/2021**

CLIENT: EOG
Client Sample ID: Base/7'
Project: Judson AUU Sate Com 2
Collection Date: 6/23/2021 11:56:00 AM
Lab ID: 2106D68-002 **Matrix:** SOIL
Received Date: 6/25/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**VP**
Chloride	ND	60		mg/Kg	20	7/1/2021 7:25:48 PM	61040
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**SB**
Diesel Range Organics (DRO)	1500	93		mg/Kg	10	7/1/2021 3:16:20 PM	60965
Motor Oil Range Organics (MRO)	ND	460	D	mg/Kg	10	7/1/2021 3:16:20 PM	60965
Surr: DNOP	41.3	70-130	S	%Rec	10	7/1/2021 3:16:20 PM	60965
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**mb**
Gasoline Range Organics (GRO)	720	97		mg/Kg	20	7/1/2021 9:39:00 PM	60961
Surr: BFB	130	70-130	S	%Rec	20	7/1/2021 9:39:00 PM	60961
EPA METHOD 8021B: VOLATILES						Analyst:	**mb**
Benzene	ND	0.49	D	mg/Kg	20	7/1/2021 9:39:00 PM	60961
Toluene	ND	0.97	D	mg/Kg	20	7/1/2021 9:39:00 PM	60961
Ethylbenzene	ND	0.97	D	mg/Kg	20	7/1/2021 9:39:00 PM	60961
Xylenes, Total	44	1.9		mg/Kg	20	7/1/2021 9:39:00 PM	60961
Surr: 4-Bromofluorobenzene	136	70-130	SD	%Rec	20	7/1/2021 9:39:00 PM	60961

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

Qualifiers:

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

Analytical Report
Lab Order **2106D68**
Date Reported: **7/6/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: Base/9'
Project: Judson AUU Sate Com 2
Collection Date: 6/23/2021 11:58:00 AM
Lab ID: 2106D68-003 **Matrix:** SOIL
Received Date: 6/25/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**VP**
Chloride	ND	60		mg/Kg	20	7/1/2021 7:38:13 PM	61040
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**SB**
Diesel Range Organics (DRO)	1800	91		mg/Kg	10	7/1/2021 3:04:02 PM	60966
Motor Oil Range Organics (MRO)	ND	450	D	mg/Kg	10	7/1/2021 3:04:02 PM	60966
Surr: DNOP	0	70-130	S	%Rec	10	7/1/2021 3:04:02 PM	60966
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**mb**
Gasoline Range Organics (GRO)	710	95		mg/Kg	20	7/1/2021 10:59:00 PM	60962
Surr: BFB	129	70-130		%Rec	20	7/1/2021 10:59:00 PM	60962
EPA METHOD 8021B: VOLATILES						Analyst:	**mb**
Benzene	ND	0.48	D	mg/Kg	20	7/1/2021 10:59:00 PM	60962
Toluene	ND	0.95	D	mg/Kg	20	7/1/2021 10:59:00 PM	60962
Ethylbenzene	ND	0.95	D	mg/Kg	20	7/1/2021 10:59:00 PM	60962
Xylenes, Total	36	1.9		mg/Kg	20	7/1/2021 10:59:00 PM	60962
Surr: 4-Bromofluorobenzene	139	70-130	SD	%Rec	20	7/1/2021 10:59:00 PM	60962

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

Qualifiers:

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

Analytical Report
Lab Order **2106D68**
Date Reported: **7/6/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: Base/12'
Project: Judson AUU Sate Com 2
Collection Date: 6/23/2021 12:00:00 PM
Lab ID: 2106D68-004 **Matrix:** SOIL **Received Date:** 6/25/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**VP**
Chloride	ND	59		mg/Kg	20	7/1/2021 8:15:27 PM	61040
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**SB**
Diesel Range Organics (DRO)	3800	200		mg/Kg	20	7/1/2021 4:29:58 PM	60966
Motor Oil Range Organics (MRO)	ND	990	D	mg/Kg	20	7/1/2021 4:29:58 PM	60966
Surr: DNOP	0	70-130	S	%Rec	20	7/1/2021 4:29:58 PM	60966
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**mb**
Gasoline Range Organics (GRO)	4200	97		mg/Kg	20	7/1/2021 11:19:00 PM	60962
Surr: BFB	803	70-130	S	%Rec	20	7/1/2021 11:19:00 PM	60962
EPA METHOD 8021B: VOLATILES						Analyst:	**mb**
Benzene	ND	0.48		mg/Kg	20	7/1/2021 11:19:00 PM	60962
Toluene	1.7	0.97		mg/Kg	20	7/1/2021 11:19:00 PM	60962
Ethylbenzene	3.8	0.97		mg/Kg	20	7/1/2021 11:19:00 PM	60962
Xylenes, Total	380	9.7		mg/Kg	100	7/2/2021 12:05:00 PM	60962
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	20	7/1/2021 11:19:00 PM	60962

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

Qualifiers:

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

Analytical Report
Lab Order **2106D68**
Date Reported: **7/6/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: W.1/2'
Project: Judson AUU Sate Com 2
Collection Date: 6/23/2021 4:25:00 PM
Lab ID: 2106D68-005 **Matrix:** SOIL **Received Date:** 6/25/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	60		mg/Kg	20	7/1/2021 8:27:51 PM	61040
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	6/29/2021 12:46:53 PM	60966
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/29/2021 12:46:53 PM	60966
Surr: DNOP	83.7	70-130		%Rec	1	6/29/2021 12:46:53 PM	60966
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/1/2021 11:39:00 PM	60962
Surr: BFB	112	70-130		%Rec	1	7/1/2021 11:39:00 PM	60962
EPA METHOD 8021B: VOLATILES						Analyst: **mb**	
Benzene	ND	0.024		mg/Kg	1	7/1/2021 11:39:00 PM	60962
Toluene	ND	0.048		mg/Kg	1	7/1/2021 11:39:00 PM	60962
Ethylbenzene	ND	0.048		mg/Kg	1	7/1/2021 11:39:00 PM	60962
Xylenes, Total	ND	0.096		mg/Kg	1	7/1/2021 11:39:00 PM	60962
Surr: 4-Bromofluorobenzene	92.3	70-130		%Rec	1	7/1/2021 11:39:00 PM	60962

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

Qualifiers:

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

Analytical Report
Lab Order **2106D68**
Date Reported: **7/6/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: W.1/5'
Project: Judson AUU Sate Com 2
Collection Date: 6/23/2021 4:27:00 PM
Lab ID: 2106D68-006 **Matrix:** SOIL **Received Date:** 6/25/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	60		mg/Kg	20	7/1/2021 8:40:17 PM	61040
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	6/29/2021 1:11:07 PM	60966
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/29/2021 1:11:07 PM	60966
Surr: DNOP	82.6	70-130		%Rec	1	6/29/2021 1:11:07 PM	60966
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/1/2021 11:59:00 PM	60962
Surr: BFB	97.3	70-130		%Rec	1	7/1/2021 11:59:00 PM	60962
EPA METHOD 8021B: VOLATILES						Analyst: **mb**	
Benzene	ND	0.023		mg/Kg	1	7/1/2021 11:59:00 PM	60962
Toluene	ND	0.047		mg/Kg	1	7/1/2021 11:59:00 PM	60962
Ethylbenzene	ND	0.047		mg/Kg	1	7/1/2021 11:59:00 PM	60962
Xylenes, Total	ND	0.094		mg/Kg	1	7/1/2021 11:59:00 PM	60962
Surr: 4-Bromofluorobenzene	90.1	70-130		%Rec	1	7/1/2021 11:59:00 PM	60962

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

Qualifiers:

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

Analytical Report
Lab Order **2106D68**
Date Reported: **7/6/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: S.3/2'
Project: Judson AUU Sate Com 2
Collection Date: 6/23/2021 3:35:00 PM
Lab ID: 2106D68-007 **Matrix:** SOIL **Received Date:** 6/25/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	60		mg/Kg	20	7/1/2021 8:52:42 PM	61040
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	6/29/2021 1:35:18 PM	60966
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	6/29/2021 1:35:18 PM	60966
Surr: DNOP	84.0	70-130		%Rec	1	6/29/2021 1:35:18 PM	60966
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/2/2021 12:19:00 AM	60962
Surr: BFB	94.8	70-130		%Rec	1	7/2/2021 12:19:00 AM	60962
EPA METHOD 8021B: VOLATILES						Analyst: **mb**	
Benzene	ND	0.024		mg/Kg	1	7/2/2021 12:19:00 AM	60962
Toluene	ND	0.047		mg/Kg	1	7/2/2021 12:19:00 AM	60962
Ethylbenzene	ND	0.047		mg/Kg	1	7/2/2021 12:19:00 AM	60962
Xylenes, Total	ND	0.094		mg/Kg	1	7/2/2021 12:19:00 AM	60962
Surr: 4-Bromofluorobenzene	88.9	70-130		%Rec	1	7/2/2021 12:19:00 AM	60962

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

Qualifiers:

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

Analytical Report
Lab Order **2106D68**
Date Reported: **7/6/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: S.3/4'
Project: Judson AUU Sate Com 2
Collection Date: 6/23/2021 3:37:00 PM
Lab ID: 2106D68-008 **Matrix:** SOIL **Received Date:** 6/25/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	59		mg/Kg	20	7/1/2021 9:05:06 PM	61040
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/29/2021 1:59:29 PM	60966
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	6/29/2021 1:59:29 PM	60966
Surr: DNOP	84.7	70-130		%Rec	1	6/29/2021 1:59:29 PM	60966
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/2/2021 12:38:00 AM	60962
Surr: BFB	96.9	70-130		%Rec	1	7/2/2021 12:38:00 AM	60962
EPA METHOD 8021B: VOLATILES						Analyst: **mb**	
Benzene	ND	0.024		mg/Kg	1	7/2/2021 12:38:00 AM	60962
Toluene	ND	0.048		mg/Kg	1	7/2/2021 12:38:00 AM	60962
Ethylbenzene	ND	0.048		mg/Kg	1	7/2/2021 12:38:00 AM	60962
Xylenes, Total	ND	0.096		mg/Kg	1	7/2/2021 12:38:00 AM	60962
Surr: 4-Bromofluorobenzene	89.9	70-130		%Rec	1	7/2/2021 12:38:00 AM	60962

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

Qualifiers:

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

Analytical Report
Lab Order **2106D68**
Date Reported: **7/6/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: S.3/5'
Project: Judson AUU Sate Com 2
Collection Date: 6/23/2021 3:39:00 PM
Lab ID: 2106D68-009 **Matrix:** SOIL **Received Date:** 6/25/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**VP**
Chloride	ND	60		mg/Kg	20	7/1/2021 9:17:31 PM	61040
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**BRM**
Diesel Range Organics (DRO)	ND	8.8		mg/Kg	1	6/29/2021 2:23:42 PM	60966
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	6/29/2021 2:23:42 PM	60966
Surr: DNOP	84.7	70-130		%Rec	1	6/29/2021 2:23:42 PM	60966
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**mb**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/2/2021 12:58:00 AM	60962
Surr: BFB	93.1	70-130		%Rec	1	7/2/2021 12:58:00 AM	60962
EPA METHOD 8021B: VOLATILES						Analyst:	**mb**
Benzene	ND	0.024		mg/Kg	1	7/2/2021 12:58:00 AM	60962
Toluene	ND	0.048		mg/Kg	1	7/2/2021 12:58:00 AM	60962
Ethylbenzene	ND	0.048		mg/Kg	1	7/2/2021 12:58:00 AM	60962
Xylenes, Total	ND	0.097		mg/Kg	1	7/2/2021 12:58:00 AM	60962
Surr: 4-Bromofluorobenzene	89.0	70-130		%Rec	1	7/2/2021 12:58:00 AM	60962

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

Qualifiers:

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

Analytical Report
Lab Order **2106D68**
Date Reported: **7/6/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: E.2/2'
Project: Judson AUU Sate Com 2
Collection Date: 6/23/2021 3:41:00 PM
Lab ID: 2106D68-010 **Matrix:** SOIL **Received Date:** 6/25/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	59		mg/Kg	20	7/1/2021 9:29:56 PM	61040
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	16	9.3		mg/Kg	1	6/29/2021 2:48:07 PM	60966
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/29/2021 2:48:07 PM	60966
Surr: DNOP	78.0	70-130		%Rec	1	6/29/2021 2:48:07 PM	60966
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/2/2021 1:18:00 AM	60962
Surr: BFB	97.3	70-130		%Rec	1	7/2/2021 1:18:00 AM	60962
EPA METHOD 8021B: VOLATILES						Analyst: **mb**	
Benzene	ND	0.024		mg/Kg	1	7/2/2021 1:18:00 AM	60962
Toluene	ND	0.049		mg/Kg	1	7/2/2021 1:18:00 AM	60962
Ethylbenzene	ND	0.049		mg/Kg	1	7/2/2021 1:18:00 AM	60962
Xylenes, Total	ND	0.097		mg/Kg	1	7/2/2021 1:18:00 AM	60962
Surr: 4-Bromofluorobenzene	90.6	70-130		%Rec	1	7/2/2021 1:18:00 AM	60962

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

Qualifiers:

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

Analytical Report
Lab Order **2106D68**
Date Reported: **7/6/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: E.2/4'
Project: Judson AUU Sate Com 2
Collection Date: 6/23/2021 3:43:00 PM
Lab ID: 2106D68-011 **Matrix:** SOIL **Received Date:** 6/25/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**VP**
Chloride	ND	61		mg/Kg	20	7/1/2021 9:42:21 PM	61040
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**BRM**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	6/29/2021 3:12:23 PM	60966
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/29/2021 3:12:23 PM	60966
Surr: DNOP	77.6	70-130		%Rec	1	6/29/2021 3:12:23 PM	60966
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**mb**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/2/2021 2:38:00 AM	60962
Surr: BFB	99.4	70-130		%Rec	1	7/2/2021 2:38:00 AM	60962
EPA METHOD 8021B: VOLATILES						Analyst:	**mb**
Benzene	ND	0.024		mg/Kg	1	7/2/2021 2:38:00 AM	60962
Toluene	ND	0.049		mg/Kg	1	7/2/2021 2:38:00 AM	60962
Ethylbenzene	ND	0.049		mg/Kg	1	7/2/2021 2:38:00 AM	60962
Xylenes, Total	ND	0.097		mg/Kg	1	7/2/2021 2:38:00 AM	60962
Surr: 4-Bromofluorobenzene	94.4	70-130		%Rec	1	7/2/2021 2:38:00 AM	60962

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

Qualifiers:

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

Analytical Report
Lab Order **2106D68**
Date Reported: **7/6/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: E.1/5'
Project: Judson AUU Sate Com 2
Collection Date: 6/23/2021 3:45:00 PM
Lab ID: 2106D68-012 **Matrix:** SOIL **Received Date:** 6/25/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	60		mg/Kg	20	7/1/2021 9:54:45 PM	61040
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	6/29/2021 3:36:47 PM	60966
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	6/29/2021 3:36:47 PM	60966
Surr: DNOP	83.1	70-130		%Rec	1	6/29/2021 3:36:47 PM	60966
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/2/2021 3:17:00 AM	60962
Surr: BFB	94.2	70-130		%Rec	1	7/2/2021 3:17:00 AM	60962
EPA METHOD 8021B: VOLATILES						Analyst: **mb**	
Benzene	ND	0.024		mg/Kg	1	7/2/2021 3:17:00 AM	60962
Toluene	ND	0.048		mg/Kg	1	7/2/2021 3:17:00 AM	60962
Ethylbenzene	ND	0.048		mg/Kg	1	7/2/2021 3:17:00 AM	60962
Xylenes, Total	ND	0.097		mg/Kg	1	7/2/2021 3:17:00 AM	60962
Surr: 4-Bromofluorobenzene	88.9	70-130		%Rec	1	7/2/2021 3:17:00 AM	60962

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

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2106D68**
06-Jul-21

Client: EOG
Project: Judson AUU Sate Com 2

Sample ID: **MB-61040** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **61040** RunNo: **79497**
Prep Date: **6/30/2021** Analysis Date: **7/1/2021** SeqNo: **2796246** Units: **mg/Kg**

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

Sample ID: **LCS-61040** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **61040** RunNo: **79497**
Prep Date: **6/30/2021** Analysis Date: **7/1/2021** SeqNo: **2796247** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.8	90	110			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2106D68**
06-Jul-21

Client: EOG
Project: Judson AUU Sate Com 2

Sample ID: **LCS-60965**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **60965**	RunNo: **79472**
Prep Date: **6/28/2021**	Analysis Date: **6/29/2021**	SeqNo: **2793936** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	87.9	68.9	141			
Surr: DNOP	3.6		5.000		72.5	70	130			

Sample ID: **LCS-60966**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **60966**	RunNo: **79472**
Prep Date: **6/28/2021**	Analysis Date: **6/29/2021**	SeqNo: **2793937** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	88.9	68.9	141			
Surr: DNOP	3.7		5.000		74.8	70	130			

Sample ID: **MB-60965**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **60965**	RunNo: **79472**
Prep Date: **6/28/2021**	Analysis Date: **6/29/2021**	SeqNo: **2793938** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	7.7		10.00		77.0	70	130			

Sample ID: **MB-60966**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **60966**	RunNo: **79472**
Prep Date: **6/28/2021**	Analysis Date: **6/29/2021**	SeqNo: **2793939** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	7.9		10.00		79.4	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2106D68**
06-Jul-21

Client: EOG
Project: Judson AUU Sate Com 2

Sample ID: **mb-60961**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **60961**	RunNo: **79532**
Prep Date: **6/28/2021**	Analysis Date: **7/1/2021**	SeqNo: **2796799** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	920		1000		92.3	70	130			

Sample ID: **mb-60962**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **60962**	RunNo: **79532**
Prep Date: **6/28/2021**	Analysis Date: **7/1/2021**	SeqNo: **2796800** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	990		1000		99.1	70	130			

Sample ID: **lcs-60961**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **60961**	RunNo: **79532**
Prep Date: **6/28/2021**	Analysis Date: **7/1/2021**	SeqNo: **2796801** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	104	78.6	131			
Surr: BFB	1100		1000		108	70	130			

Sample ID: **lcs-60962**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **60962**	RunNo: **79532**
Prep Date: **6/28/2021**	Analysis Date: **7/1/2021**	SeqNo: **2796802** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	95.3	78.6	131			
Surr: BFB	1100		1000		110	70	130			

Sample ID: **mb-60981**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **60981**	RunNo: **79563**
Prep Date: **6/28/2021**	Analysis Date: **7/2/2021**	SeqNo: **2798482** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	970		1000		96.7	70	130			

Sample ID: **lcs-60981**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **60981**	RunNo: **79563**
Prep Date: **6/28/2021**	Analysis Date: **7/2/2021**	SeqNo: **2798484** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		114	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2106D68**
06-Jul-21

Client: EOG
Project: Judson AUU Sate Com 2

Sample ID: **mb-60961**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **60961**	RunNo: **79532**
Prep Date: **6/28/2021**	Analysis Date: **7/1/2021**	SeqNo: **2796853** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.90		1.000		90.1	70	130			

Sample ID: **mb-60962**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **60962**	RunNo: **79532**
Prep Date: **6/28/2021**	Analysis Date: **7/1/2021**	SeqNo: **2796854** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.93		1.000		92.9	70	130			

Sample ID: **lcs-60961**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **60961**	RunNo: **79532**
Prep Date: **6/28/2021**	Analysis Date: **7/1/2021**	SeqNo: **2796855** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	1.000	0	97.5	80	120			
Toluene	0.99	0.050	1.000	0	98.6	80	120			
Ethylbenzene	1.0	0.050	1.000	0	101	80	120			
Xylenes, Total	3.1	0.10	3.000	0	102	80	120			
Surr: 4-Bromofluorobenzene	0.93		1.000		93.2	70	130			

Sample ID: **lcs-60962**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **60962**	RunNo: **79532**
Prep Date: **6/28/2021**	Analysis Date: **7/1/2021**	SeqNo: **2796856** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.025	1.000	0	91.1	80	120			
Toluene	0.91	0.050	1.000	0	91.4	80	120			
Ethylbenzene	0.93	0.050	1.000	0	93.5	80	120			
Xylenes, Total	2.8	0.10	3.000	0	93.8	80	120			
Surr: 4-Bromofluorobenzene	0.92		1.000		91.8	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2106D68**
06-Jul-21

Client: EOG
Project: Judson AUU Sate Com 2

Sample ID: **mb-60981**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **60981**	RunNo: **79563**
Prep Date: **6/28/2021**	Analysis Date: **7/2/2021**	SeqNo: **2798540** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.93		1.000		92.6	70	130			

Sample ID: **lcs-60981**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **60981**	RunNo: **79563**
Prep Date: **6/28/2021**	Analysis Date: **7/2/2021**	SeqNo: **2798542** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.93		1.000		92.5	70	130			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **EOG** Work Order Number: **2106D68** RcptNo: **1**

Received By: **Cheyenne Cason** **6/25/2021 7:30:00 AM** CC

Completed By: **Cheyenne Cason** **6/25/2021 9:53:47 AM** CC

Reviewed By: JR 6/25/21

Chain of Custody

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

Log In

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

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

Adjusted?

Checked by: T.C. 6.25.21

Special Handling (if applicable)

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

Person Notified: Date:

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

Regarding:

Client Instructions:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.1	Good				

Chain-of-Custody Record

Client: EOG-Artesia / Ranger Env.

Mailing Address: EOG - 105 S 4th St, Artesia NM, 88210

Ranger: PO Box 201179, Austin TX 78720

Phone #: 521-335-1785

email or Fax#: Will@RangerEnv.com

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

Accreditation: ☐ Az Compliance
■ **NELAC** ☐ Other_____
■ **EDD** (Type) Excel

Turn-Around Time: 5 Days
☒ Standard ☐ **Rush**_____

Project Name: Judson AUU State Com #2

Project #: 5375

Project Manager: W. Kierdorf

Sampler: R. Martin
On Ice: ☒ Yes ☐ No
# of Coolers: 1
Cooler Temp(including CF): 2.1 - 0 = 2.1

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

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2106068	BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride (EPA 300)
6/23/21	1154	soil	base / 5'	1 4oz Jar	ice	001	X	X	X
	1156		base / 7'			002	X	X	X
	1158		base / 9'			003	X	X	X
	1200		base / 12'			004	X	X	X
	1625		W. 1 / 2' Sec. 6 (site) per W. Kierdorf			005	X	X	X
	1627		W. 1 / 5'			006	X	X	X
	1535		S. 3 / 2'			007	X	X	X
	1537		S. 3 / 4'			008	X	X	X
	1539		S. 3 / 5'			009	X	X	X
	1541		E. 2 / 2'			010	X	X	X
	1543		E. 2 / 4'			011	X	X	X
	1545		E. 1 / 5'			012	X	X	X

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
6/24/21	0703	Robert Martin	G Cummings		6/24/21	703
6/24/21	1900	G Cummings		courier	6/25/21	7:30

Remarks: Bill to EOG Artesia

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

July 22, 2021

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

RE: Judson AVV State Com 2 OrderNo.: 2107739

Dear Will Kierdorf:

Hall Environmental Analysis Laboratory received 6 sample(s) on 7/15/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2107739**
Date Reported: **7/22/2021**

CLIENT: EOG
Client Sample ID: N.2/2'
Project: Judson AVV State Com 2
Collection Date: 7/14/2021 9:26:00 AM
Lab ID: 2107739-001 **Matrix:** SOIL **Received Date:** 7/15/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	60		mg/Kg	20	7/21/2021 2:18:40 AM	61435
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	7/19/2021 9:43:10 PM	61383
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/19/2021 9:43:10 PM	61383
Surr: DNOP	111	70-130		%Rec	1	7/19/2021 9:43:10 PM	61383
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/19/2021 3:17:26 PM	61362
Surr: BFB	97.3	70-130		%Rec	1	7/19/2021 3:17:26 PM	61362
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	7/19/2021 3:17:26 PM	61362
Toluene	ND	0.049		mg/Kg	1	7/19/2021 3:17:26 PM	61362
Ethylbenzene	ND	0.049		mg/Kg	1	7/19/2021 3:17:26 PM	61362
Xylenes, Total	ND	0.099		mg/Kg	1	7/19/2021 3:17:26 PM	61362
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	7/19/2021 3:17:26 PM	61362

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

Qualifiers:

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

Analytical Report
Lab Order **2107739**
Date Reported: **7/22/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: N.2/4'
Project: Judson AVV State Com 2
Collection Date: 7/14/2021 9:28:00 AM
Lab ID: 2107739-002 **Matrix:** SOIL **Received Date:** 7/15/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	59		mg/Kg	20	7/21/2021 2:31:04 AM	61435
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	7/19/2021 9:55:58 PM	61383
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/19/2021 9:55:58 PM	61383
Surr: DNOP	111	70-130		%Rec	1	7/19/2021 9:55:58 PM	61383
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/19/2021 3:41:12 PM	61362
Surr: BFB	98.8	70-130		%Rec	1	7/19/2021 3:41:12 PM	61362
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	7/19/2021 3:41:12 PM	61362
Toluene	ND	0.047		mg/Kg	1	7/19/2021 3:41:12 PM	61362
Ethylbenzene	ND	0.047		mg/Kg	1	7/19/2021 3:41:12 PM	61362
Xylenes, Total	ND	0.095		mg/Kg	1	7/19/2021 3:41:12 PM	61362
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	7/19/2021 3:41:12 PM	61362

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

Qualifiers:

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

Analytical Report
Lab Order **2107739**
Date Reported: **7/22/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: N.2/5'
Project: Judson AVV State Com 2
Collection Date: 7/14/2021 9:30:00 AM
Lab ID: 2107739-003 **Matrix:** SOIL **Received Date:** 7/15/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	60		mg/Kg	20	7/21/2021 2:43:29 AM	61435
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	7/19/2021 10:08:12 PM	61383
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/19/2021 10:08:12 PM	61383
Surr: DNOP	111	70-130		%Rec	1	7/19/2021 10:08:12 PM	61383
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/19/2021 4:04:56 PM	61362
Surr: BFB	97.6	70-130		%Rec	1	7/19/2021 4:04:56 PM	61362
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	7/19/2021 4:04:56 PM	61362
Toluene	ND	0.048		mg/Kg	1	7/19/2021 4:04:56 PM	61362
Ethylbenzene	ND	0.048		mg/Kg	1	7/19/2021 4:04:56 PM	61362
Xylenes, Total	ND	0.095		mg/Kg	1	7/19/2021 4:04:56 PM	61362
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	7/19/2021 4:04:56 PM	61362

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

Qualifiers:

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

Analytical Report
Lab Order **2107739**
Date Reported: **7/22/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: Base/16'
Project: Judson AVV State Com 2
Collection Date: 7/14/2021 11:35:00 AM
Lab ID: 2107739-004 **Matrix:** SOIL
Received Date: 7/15/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	60		mg/Kg	20	7/21/2021 2:55:53 AM	61435
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	3300	92		mg/Kg	10	7/21/2021 2:47:44 PM	61383
Motor Oil Range Organics (MRO)	ND	460	D	mg/Kg	10	7/21/2021 2:47:44 PM	61383
Surr: DNOP	0	70-130	S	%Rec	10	7/21/2021 2:47:44 PM	61383
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	3900	99		mg/Kg	20	7/19/2021 10:09:54 AM	61362
Surr: BFB	564	70-130	S	%Rec	20	7/19/2021 10:09:54 AM	61362
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.49		mg/Kg	20	7/19/2021 10:09:54 AM	61362
Toluene	33	0.99		mg/Kg	20	7/19/2021 10:09:54 AM	61362
Ethylbenzene	12	0.99		mg/Kg	20	7/19/2021 10:09:54 AM	61362
Xylenes, Total	330	9.9		mg/Kg	100	7/19/2021 6:03:47 PM	61362
Surr: 4-Bromofluorobenzene	125	70-130		%Rec	20	7/19/2021 10:09:54 AM	61362

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

Qualifiers:

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

Analytical Report
Lab Order **2107739**
Date Reported: **7/22/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: Base/19'
Project: Judson AVV State Com 2
Collection Date: 7/14/2021 11:37:00 AM
Lab ID: 2107739-005 **Matrix:** SOIL **Received Date:** 7/15/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	60		mg/Kg	20	7/21/2021 3:33:07 AM	61435
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	2800	96		mg/Kg	10	7/21/2021 2:59:35 PM	61383
Motor Oil Range Organics (MRO)	ND	480	D	mg/Kg	10	7/21/2021 2:59:35 PM	61383
Surr: DNOP	0	70-130	S	%Rec	10	7/21/2021 2:59:35 PM	61383
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	2600	250		mg/Kg	50	7/19/2021 10:33:28 AM	61362
Surr: BFB	239	70-130	S	%Rec	50	7/19/2021 10:33:28 AM	61362
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	1.2		mg/Kg	50	7/19/2021 10:33:28 AM	61362
Toluene	36	2.5		mg/Kg	50	7/19/2021 10:33:28 AM	61362
Ethylbenzene	21	2.5		mg/Kg	50	7/19/2021 10:33:28 AM	61362
Xylenes, Total	240	4.9		mg/Kg	50	7/19/2021 10:33:28 AM	61362
Surr: 4-Bromofluorobenzene	116	70-130		%Rec	50	7/19/2021 10:33:28 AM	61362

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

Qualifiers:

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

Analytical Report
Lab Order **2107739**
Date Reported: **7/22/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: Base/22'
Project: Judson AVV State Com 2
Collection Date: 7/14/2021 11:39:00 AM
Lab ID: 2107739-006 **Matrix:** SOIL **Received Date:** 7/15/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	60		mg/Kg	20	7/21/2021 3:45:31 AM	61435
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	2900	98		mg/Kg	10	7/21/2021 3:11:35 PM	61383
Motor Oil Range Organics (MRO)	ND	490	D	mg/Kg	10	7/21/2021 3:11:35 PM	61383
Surr: DNOP	0	70-130	S	%Rec	10	7/21/2021 3:11:35 PM	61383
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	3200	94		mg/Kg	20	7/19/2021 10:57:04 AM	61362
Surr: BFB	573	70-130	S	%Rec	20	7/19/2021 10:57:04 AM	61362
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	1.2	0.47		mg/Kg	20	7/19/2021 10:57:04 AM	61362
Toluene	56	0.94		mg/Kg	20	7/19/2021 10:57:04 AM	61362
Ethylbenzene	32	0.94		mg/Kg	20	7/19/2021 10:57:04 AM	61362
Xylenes, Total	290	9.4		mg/Kg	100	7/19/2021 6:27:28 PM	61362
Surr: 4-Bromofluorobenzene	151	70-130	S	%Rec	20	7/19/2021 10:57:04 AM	61362

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

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2107739**
22-Jul-21

Client: EOG
Project: Judson AVV State Com 2

Sample ID: **MB-61435**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **61435**	RunNo: **79937**							
Prep Date: **7/20/2021**	Analysis Date: **7/20/2021**	SeqNo: **2812833**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-61435**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **61435**	RunNo: **79937**							
Prep Date: **7/20/2021**	Analysis Date: **7/20/2021**	SeqNo: **2812834**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.0	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2107739**

22-Jul-21

Client: EOG

Project: Judson AVV State Com 2

Sample ID: **MB-61383**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **61383**	RunNo: **79895**
Prep Date: **7/17/2021**	Analysis Date: **7/19/2021**	SeqNo: **2812460** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		106	70	130			

Sample ID: **LCS-61383**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **61383**	RunNo: **79895**
Prep Date: **7/17/2021**	Analysis Date: **7/19/2021**	SeqNo: **2812461** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	10	50.00	0	80.7	68.9	141			
Surr: DNOP	4.9		5.000		97.0	70	130			

Sample ID: **MB-61405**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **61405**	RunNo: **79945**
Prep Date: **7/19/2021**	Analysis Date: **7/20/2021**	SeqNo: **2813316** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		101	70	130			

Sample ID: **LCS-61405**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **61405**	RunNo: **79945**
Prep Date: **7/19/2021**	Analysis Date: **7/20/2021**	SeqNo: **2813318** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.6		5.000		91.9	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2107739**

22-Jul-21

Client: EOG

Project: Judson AVV State Com 2

Sample ID: **mb-61362**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **61362**	RunNo: **79883**
Prep Date: **7/15/2021**	Analysis Date: **7/19/2021**	SeqNo: **2810954** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	970		1000		96.5	70	130			

Sample ID: **lcs-61362**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **61362**	RunNo: **79883**
Prep Date: **7/15/2021**	Analysis Date: **7/19/2021**	SeqNo: **2810955** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	96.0	78.6	131			
Surr: BFB	1100		1000		107	70	130			

Sample ID: **mb-61386**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **61386**	RunNo: **79883**
Prep Date: **7/17/2021**	Analysis Date: **7/20/2021**	SeqNo: **2810968** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	940		1000		94.1	70	130			

Sample ID: **lcs-61386**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **61386**	RunNo: **79883**
Prep Date: **7/17/2021**	Analysis Date: **7/19/2021**	SeqNo: **2810969** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		110	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2107739**

22-Jul-21

Client: EOG

Project: Judson AVV State Com 2

Sample ID: **mb-61362**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **61362**	RunNo: **79883**
Prep Date: **7/15/2021**	Analysis Date: **7/19/2021**	SeqNo: **2811008** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.99		1.000		98.8	70	130			

Sample ID: **LCS-61362**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **61362**	RunNo: **79883**
Prep Date: **7/15/2021**	Analysis Date: **7/19/2021**	SeqNo: **2811009** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	1.000	0	89.0	80	120			
Toluene	0.92	0.050	1.000	0	91.6	80	120			
Ethylbenzene	0.92	0.050	1.000	0	92.2	80	120			
Xylenes, Total	2.8	0.10	3.000	0	93.0	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	70	130			

Sample ID: **mb-61386**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **61386**	RunNo: **79883**
Prep Date: **7/17/2021**	Analysis Date: **7/20/2021**	SeqNo: **2811025** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.99		1.000		99.2	70	130			

Sample ID: **LCS-61386**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **61386**	RunNo: **79883**
Prep Date: **7/17/2021**	Analysis Date: **7/19/2021**	SeqNo: **2811026** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		102	70	130			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: EOG | Work Order Number: 2107739 | RcptNo: 1

Received By: Cheyenne Cason 7/15/2021 7:30:00 AM

Completed By: Sean Livingston 7/15/2021 9:46:52 AM

Reviewed By: JR 7/15/21

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☐	No ☐	NA ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: (<2 or >12 unless noted)
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted?
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by: SPA 7.15.21

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

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

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.5	Good				

Chain-of-Custody Record

Client: EOG-Artesia / Ranger Env.

Mailing Address: EOG - 105 S 4th St, Artesia NM, 88210

Ranger: PO Box 201179, Austin TX 78720

Phone #: 521-335-1785

email or Fax#: Will@RangerEnv.com

QA/QC Package:

■ **Standard** ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

■ **NELAC** ☐ Other

■ **EDD** (Type) Excel

Turn-Around Time: 5 Day

■ Standard ☐ **Rush**

Project Name: Judson AUV State Com #2

Project #: 5375

Project Manager: W. Kierdorf

Sampler:

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 4.5 - 0 = 4.5

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2107739	BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride (EPA 300)
7/14/21	0926	Soil	N.2 /2'	1 4oz Jar	Ice	001	X	X	X
	0928		N.2/4'			002	X	X	X
	0930		N.2/5'			003	X	X	X
	1135		Base/16'			004	X	X	X
	1137		Base/19'			005	X	X	X
	1139		Base/22'			006	X	X	X

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
7/14/21	1325	Robert Martin			7/14/21	1325
7/14/21	1900				7/15/21	0730

Remarks: Bill to EOG Artesia

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

May 25, 2022

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

RE: Judson Auu State Com 2 OrderNo.: 2205790

Dear Becky Haskell:

Hall Environmental Analysis Laboratory received 4 sample(s) on 5/18/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2205790**
Date Reported: **5/25/2022**

CLIENT: GHD Midland
Client Sample ID: SB-1 (22')
Project: Judson Auu State Com 2
Collection Date: 5/16/2022 4:10:00 PM
Lab ID: 2205790-001 **Matrix:** SOIL **Received Date:** 5/18/2022 8:27:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	ND	60		mg/Kg	20	5/19/2022 3:50:26 PM	67566
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	760	87		mg/Kg	10	5/23/2022 1:27:30 PM	67546
Motor Oil Range Organics (MRO)	ND	440	D	mg/Kg	10	5/23/2022 1:27:30 PM	67546
Surr: DNOP	0	51.1-141	S	%Rec	10	5/23/2022 1:27:30 PM	67546
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	43	24		mg/Kg	5	5/19/2022 10:54:00 AM	67542
Surr: BFB	155	37.7-212		%Rec	5	5/19/2022 10:54:00 AM	67542
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.12		mg/Kg	5	5/19/2022 10:54:00 AM	67542
Toluene	ND	0.24		mg/Kg	5	5/19/2022 10:54:00 AM	67542
Ethylbenzene	ND	0.24		mg/Kg	5	5/19/2022 10:54:00 AM	67542
Xylenes, Total	1.1	0.47		mg/Kg	5	5/19/2022 10:54:00 AM	67542
Surr: 4-Bromofluorobenzene	113	70-130		%Rec	5	5/19/2022 10:54:00 AM	67542

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

Qualifiers:

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

Analytical Report
Lab Order **2205790**
Date Reported: **5/25/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland
Client Sample ID: SB-1 (25')
Project: Judson Auu State Com 2
Collection Date: 5/16/2022 4:20:00 PM
Lab ID: 2205790-002 **Matrix:** SOIL **Received Date:** 5/18/2022 8:27:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	74	60		mg/Kg	20	5/19/2022 4:02:47 PM	67566
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **ED**	
Diesel Range Organics (DRO)	740	9.1		mg/Kg	1	5/19/2022 4:20:39 PM	67546
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/19/2022 4:20:39 PM	67546
Surr: DNOP	85.1	51.1-141		%Rec	1	5/19/2022 4:20:39 PM	67546
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	350	24		mg/Kg	5	5/19/2022 11:14:00 AM	67542
Surr: BFB	209	37.7-212		%Rec	5	5/19/2022 11:14:00 AM	67542
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.12		mg/Kg	5	5/19/2022 11:14:00 AM	67542
Toluene	1.7	0.24		mg/Kg	5	5/19/2022 11:14:00 AM	67542
Ethylbenzene	3.1	0.24		mg/Kg	5	5/19/2022 11:14:00 AM	67542
Xylenes, Total	29	0.48		mg/Kg	5	5/19/2022 11:14:00 AM	67542
Surr: 4-Bromofluorobenzene	198	70-130	S	%Rec	5	5/19/2022 11:14:00 AM	67542

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

Qualifiers:

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

Analytical Report
Lab Order **2205790**
Date Reported: **5/25/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland
Client Sample ID: SB-1 (30')
Project: Judson Auu State Com 2
Collection Date: 5/16/2022 4:30:00 PM
Lab ID: 2205790-003 **Matrix:** SOIL **Received Date:** 5/18/2022 8:27:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	ND	60		mg/Kg	20	5/19/2022 4:15:08 PM	67566
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **ED**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/19/2022 4:31:35 PM	67546
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/19/2022 4:31:35 PM	67546
Surr: DNOP	93.8	51.1-141		%Rec	1	5/19/2022 4:31:35 PM	67546
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	24		mg/Kg	5	5/19/2022 1:12:00 PM	67542
Surr: BFB	96.3	37.7-212		%Rec	5	5/19/2022 1:12:00 PM	67542
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.12		mg/Kg	5	5/19/2022 1:12:00 PM	67542
Toluene	ND	0.24		mg/Kg	5	5/19/2022 1:12:00 PM	67542
Ethylbenzene	ND	0.24		mg/Kg	5	5/19/2022 1:12:00 PM	67542
Xylenes, Total	ND	0.49		mg/Kg	5	5/19/2022 1:12:00 PM	67542
Surr: 4-Bromofluorobenzene	99.0	70-130		%Rec	5	5/19/2022 1:12:00 PM	67542

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

Qualifiers:

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

Analytical Report
Lab Order **2205790**
Date Reported: **5/25/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland
Client Sample ID: SB-1 (35')
Project: Judson Auu State Com 2
Collection Date: 5/16/2022 4:40:00 PM
Lab ID: 2205790-004 **Matrix:** SOIL **Received Date:** 5/18/2022 8:27:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	ND	60		mg/Kg	20	5/19/2022 4:27:29 PM	67566
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **ED**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/19/2022 4:42:29 PM	67546
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/19/2022 4:42:29 PM	67546
Surr: DNOP	82.9	51.1-141		%Rec	1	5/19/2022 4:42:29 PM	67546
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	23		mg/Kg	5	5/19/2022 1:31:00 PM	67542
Surr: BFB	91.5	37.7-212		%Rec	5	5/19/2022 1:31:00 PM	67542
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.12		mg/Kg	5	5/19/2022 1:31:00 PM	67542
Toluene	ND	0.23		mg/Kg	5	5/19/2022 1:31:00 PM	67542
Ethylbenzene	ND	0.23		mg/Kg	5	5/19/2022 1:31:00 PM	67542
Xylenes, Total	ND	0.47		mg/Kg	5	5/19/2022 1:31:00 PM	67542
Surr: 4-Bromofluorobenzene	94.8	70-130		%Rec	5	5/19/2022 1:31:00 PM	67542

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2205790**

25-May-22

Client: GHD Midland

Project: Judson Auu State Com 2

Sample ID: **MB-67566**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **67566**	RunNo: **88138**
Prep Date: **5/19/2022**	Analysis Date: **5/19/2022**	SeqNo: **3125287** Units: **mg/Kg**

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

Sample ID: **LCS-67566**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **67566**	RunNo: **88138**
Prep Date: **5/19/2022**	Analysis Date: **5/19/2022**	SeqNo: **3125288** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.4	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2205790**

25-May-22

Client: GHD Midland

Project: Judson Auu State Com 2

Sample ID: **LCS-67562**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **67562**	RunNo: **88120**
Prep Date: **5/19/2022**	Analysis Date: **5/19/2022**	SeqNo: **3124115** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.5		5.000		111	51.1	141			

Sample ID: **MB-67562**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **67562**	RunNo: **88120**
Prep Date: **5/19/2022**	Analysis Date: **5/19/2022**	SeqNo: **3124116** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.3		10.00		82.8	51.1	141			

Sample ID: **MB-67546**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **67546**	RunNo: **88120**
Prep Date: **5/18/2022**	Analysis Date: **5/19/2022**	SeqNo: **3126501** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.6		10.00		85.9	51.1	141			

Sample ID: **LCS-67546**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **67546**	RunNo: **88120**
Prep Date: **5/18/2022**	Analysis Date: **5/19/2022**	SeqNo: **3126502** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	92.0	64.4	127			
Surr: DNOP	4.4		5.000		87.9	51.1	141			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2205790**

25-May-22

Client: GHD Midland

Project: Judson Auu State Com 2

Sample ID: **lcs-67542**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **67542**	RunNo: **88144**
Prep Date: **5/18/2022**	Analysis Date: **5/19/2022**	SeqNo: **3124724** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	72.3	137			
Surr: BFB	2000		1000		202	37.7	212			

Sample ID: **mb-67542**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **67542**	RunNo: **88144**
Prep Date: **5/18/2022**	Analysis Date: **5/19/2022**	SeqNo: **3124725** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	880		1000		88.0	37.7	212			

Sample ID: **lcs-67545**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **67545**	RunNo: **88144**
Prep Date: **5/18/2022**	Analysis Date: **5/19/2022**	SeqNo: **3124750** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1900		1000		191	37.7	212			

Sample ID: **mb-67545**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **67545**	RunNo: **88144**
Prep Date: **5/18/2022**	Analysis Date: **5/19/2022**	SeqNo: **3124752** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	910		1000		90.6	37.7	212			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2205790**

25-May-22

Client: GHD Midland

Project: Judson Auu State Com 2

Sample ID: **lcs-67542**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **67542**	RunNo: **88144**
Prep Date: **5/18/2022**	Analysis Date: **5/19/2022**	SeqNo: **3124800** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	1.000	0	98.5	80	120			
Toluene	1.0	0.050	1.000	0	99.9	80	120			
Ethylbenzene	1.0	0.050	1.000	0	99.6	80	120			
Xylenes, Total	3.0	0.10	3.000	0	99.2	80	120			
Surr: 4-Bromofluorobenzene	0.94		1.000		93.9	70	130			

Sample ID: **mb-67542**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **67542**	RunNo: **88144**
Prep Date: **5/18/2022**	Analysis Date: **5/19/2022**	SeqNo: **3124801** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.92		1.000		91.7	70	130			

Sample ID: **2205790-001ams**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **SB-1 (22')**	Batch ID: **67542**	RunNo: **88144**
Prep Date: **5/18/2022**	Analysis Date: **5/19/2022**	SeqNo: **3124805** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.12	0.9579	0	101	68.8	120			
Toluene	1.0	0.24	0.9579	0	107	73.6	124			
Ethylbenzene	1.1	0.24	0.9579	0.1210	104	72.7	129			
Xylenes, Total	4.1	0.48	2.874	1.051	107	75.7	126			
Surr: 4-Bromofluorobenzene	5.2		4.789		108	70	130			

Sample ID: **2205790-001amsd**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **SB-1 (22')**	Batch ID: **67542**	RunNo: **88144**
Prep Date: **5/18/2022**	Analysis Date: **5/19/2022**	SeqNo: **3124806** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.12	0.9625	0	98.7	68.8	120	1.49	20	
Toluene	1.0	0.24	0.9625	0	106	73.6	124	0.645	20	
Ethylbenzene	1.1	0.24	0.9625	0.1210	102	72.7	129	1.36	20	
Xylenes, Total	3.9	0.48	2.887	1.051	99.5	75.7	126	5.01	20	
Surr: 4-Bromofluorobenzene	5.1		4.812		106	70	130	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2205790**

25-May-22

Client: GHD Midland

Project: Judson Auu State Com 2

Sample ID: **lcs-67545**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **67545**	RunNo: **88144**
Prep Date: **5/18/2022**	Analysis Date: **5/19/2022**	SeqNo: **3124827** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.89		1.000		89.4	70	130			

Sample ID: **mb-67545**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **67545**	RunNo: **88144**
Prep Date: **5/18/2022**	Analysis Date: **5/19/2022**	SeqNo: **3124828** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.90		1.000		89.7	70	130			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **GHD Midland** Work Order Number: **2205790** RcptNo: **1**

Received By: **Joseph Alderette** **5/17/2022 8:27:00 AM**

Completed By: **Desiree Dominguez** **5/18/2022 8:35:51 AM**

Reviewed By: KPA 5.18.22

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☐	No ☐	NA ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH:
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	(<2 or >12 unless noted) Adjusted?
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by: JN 5/18/22

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

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

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.5	Good				

Chain-of-Custody Record

Client: GHD

Mailing Address:

Phone #:

email or Fax#:

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

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

Turn-Around Time:
☐ Standard ☒ Rush 48

Project Name: Judson Ann State Com #2

Project #: 125 79890

Project Manager: Amber_Griffin@EOG
Chase_Settle@EOG
Becky Haskell@ghd.com

Sampler:

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 5.5 -0 = 5.5 (°C)

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2205790	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
5/16	1610	S	SB-1 (22')			-001	X	X					X			
	1620		SB-1 (25')			-002										
	1630		SB-1 (30')			-003										
	1640		SB-1 (35')			-004										

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
5/17	1100				5/17/22	1100
5/17/22	1900			courier	~~5/17/22~~ 5-18-22	8:27

Remarks:

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

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 137551
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bbillings	Please secure segregated soils from possible rain impact.	8/24/2022