RANGER
ENVIRONMENTAL SERVICES, INC.

SITE CHARACTERIZATION AND PROPOSED REMEDIATION PLAN

NICHOLAS BJ BATTERY - PIPELINE
UNIT L, SECTION 4, TOWNSHIP 19S, RANGE 25E
EDDY COUNTY, NEW MEXICO
32.68956, -104.49861
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

JANUARY 26, 2022

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

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Project Manager

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1.0 SITE LOCATION AND BACKGROUND

On August 5, 2021, during a site visit tour, Howell Ranch Revocable Trust representatives reported an area of concern to EOG Resources Inc. (EOG). The area of concern was reported to EOG due to the lack vegetation growth. The area, dubbed the "*Nicholas BJ Battery – Pipeline*" (Site), is located to the east of the Nicholas BJ #1 tank battery on private land, approximately 12 miles southwest of Artesia, within Eddy County, New Mexico. The Site is situated in Unit L, Section 4, T19S-R25E at GPS coordinates 32.68956, -104.49861.

EOG subsequently engaged Ranger Environmental Services, Inc. (Ranger) to assist in the assessment, remediation, and reclamation efforts at the Site. On September 2, 2021, Ranger personnel conducted an initial assessment of the reported area of concern. Based on the results of the initial assessment activities, the area of concern was reported to the New Mexico Oil Conservation Division (NMOCD) on September 28, 2021 (NMOCD Incident # nAPP2127158509).

The following site characterization and proposed remediation work plan has been prepared to address the soil impacts at the Site. A copy of the previously submitted Form C-141 Release Notification, as well as the Site Assessment/Characterization and Remediation Plan sections of Form C-141, are attached. A Topographic Map and Area Map noting the location of the subject Site and surrounding areas, and 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, one water well (RA 05331) was documented to be located within a half-mile of the Site.

Based on the available information, the depth to groundwater appears to be greater than 100 feet below ground surface (bgs). However, the available water level data is greater than 25 years old and as such is not considered acceptable by the NMOCD for current site characterization purposes.

A Water Well Location Map and copies of the reviewed depth-to-groundwater information are attached.

2.2 Wellhead Protection Area

The USGS and NMOSE information indicate that one water well (RA 05331) is present within a half-mile radius of the Site.

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

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

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

2.3 Distance to Nearest Significant Watercourse

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

2.4 Closure Criteria

Based upon the site characterization details, lack of recent depth-to-groundwater data, and per NMAC 19.15.29.12, the Site will be remediated to the Table 1 19.15.29.12 NMAC (groundwater <50 feet) criteria. Additionally, the remediation activities will be conducted to bring the area into compliance with the Restoration, Reclamation and Re-Vegetation criteria detailed in 19.15.29.13 NMAC. The proposed site closure criteria are detailed below:

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

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

3.0 SITE ASSESSMENT

3.1 September 2, 2021 – Initial Site Assessment

On September 2, 2021, Ranger personnel and representatives for EOG mobilized to the Site to conduct an initial assessment of the reported area of concern. Ten soil samples were collected from five locations (S-1 through S-5 locations) within the reported area of concern. At each of the five locations, soil samples were collected for laboratory analysis from the surface and from a depth of one foot below ground surface (bgs). Due to the presence of unmarked underground utilities in the area, the assessment process was limited to the surface and one-foot depth interval.

Upon collection, the soil samples were submitted to Hall Environmental 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.

A site map depicting the assessment sample locations is attached.

3.2 Sample Results (September 2, 2021 Initial Assessment Samples)

Both of the soil samples (surface and one-foot samples) collected from the S-1 location were found to contain chloride concentrations in excess of the applicable 600 ppm regulatory criteria. No exceedances of the 600 ppm regulatory criteria for chloride were found at the remaining sample locations (S-2 through S-5). The laboratory results also documented exceedances of the 100 ppm regulatory criteria for TPH (GRO+DRO+MRO) in four samples collected from three of the sampling locations (S-1, S-2 and S-3). All BTEX concentrations were documented to be below the laboratory detection limits.

The soil sample analytical results are summarized in the attached soil analytical table. A copy of the laboratory analytical report is also attached.

3.3 Line Locate Hydrovac Activities – December 2021

Multiple underground lines were found to be present in the vicinity of the reported area of concern; however, the exact location of the lines could not be determined due to their materials of construction (poly/PVC). In order to safely assess the area of concern, the locations of the lines first had to be determined. During December 2021, representatives for EOG conducted hydrovac activities to determine the exact location of the area lines. The hydrovac activities were successful in locating all lines reported to be present in the area, allowing for the safe assessment of the area. On December 21, 2021, the hydrovac activities were completed.

3.4 December 22, 2021 – Additional Site Assessment

On December 22, 2021, following the completion of the hydrovac line locate activities, Ranger personnel and representatives for EOG returned to the site to conduct additional assessment of the area of concern, including delineation of the vertical and horizontal extent of the soil impacts documented during the September 2021 initial site assessment activities. The assessment activities included the installation of test excavations, field screening of the test excavation soils at the surface and one-foot intervals thereafter using an organic vapor monitor (OVM) and field chloride titration kits, and the collection of soil samples for laboratory analysis.

A total of seven (7) test excavations (S-6 through S-12) were installed and sampled on December 22, 2021. To vertically delineate the extent of the TPH and chloride impacts documented at the S-1 through S-3 locations, test excavation S-12 was completed in between these previous sampling locations. For horizontal delineation purposes, the remainder of the test excavations were completed in strategic locations moving outward from the S-1 through S-3 locations. The test excavations were completed to depths of approximately 4’-6’ bgs.

With the exception of test excavation S-12, none of the test excavation soils were found to exhibit elevated OVM readings or field chloride titration results. Slightly elevated field chloride readings

were obtained to a depth of approximately 4' bgs in test excavation S-12; however, no elevated OVM readings were obtained in this test excavation.

Two soil samples were subsequently collected from each test excavation for laboratory analysis. This included the collection of a soil sample from test excavation S-12 at the depth interval found to exhibit the highest field chloride titration result. Upon collection, the soil samples were submitted to Hall Environmental in Albuquerque, New Mexico for analysis of TPH, BTEX, and chloride using the aforementioned laboratory methods. The samples were collected and managed using standard QA/QC and chain-of-custody procedures.

3.5 ***Sample Results (December 22, 2021 Assessment Samples)***

All of the soil analytical results for the December 22, 2021 soil samples were found to be either nondetectable or below the site closure criteria with the exception of the sample collected from test excavation S-12 at a depth of 3' bgs. This sample was found to contain a slightly elevated chloride result (920 mg/Kg).

The soil sample analytical results are summarized in the attached soil analytical table. A copy of the laboratory analytical report is also attached.

4.0 PROPOSED REMEDIATION PLAN

4.1 Soil Excavation and Confirmation Sampling

To address the elevated soil chloride and TPH concentrations, soil excavation is proposed to be completed at the Site to boundaries and depths anticipated to be within the applicable site closure criteria. The initial proposed excavation area is anticipated to have maximum dimensions of approximately 37' long by 25'-40' wide and will be completed to depths of approximately 1'-5' bgs. A *Proposed Excavation Area Map* is attached which depicts the proposed excavation boundaries and depths.

During the remedial excavation activities, Ranger personnel will utilize an OVM and field chloride titration kits to guide the excavation process and determine when all affected soils appear to have been removed. Based on the field readings, the excavation boundaries will be adjusted as necessary. At such point in time that the field screening activities indicate that all affected soils appear to have been removed, cleanup confirmation soil samples will be collected for laboratory analysis. The samples will be collected in accordance with NMAC 19.15.29.12(D), as five-part composite samples with each sample representing no more than 200 square feet. The sample parts will be collected from various locations and depths along the excavation side walls and base. 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.

Based on the cleanup confirmation soil sample results, if any area is found to remain in exceedance of the applicable regulatory closure criteria, the area will be further over-excavated and additional cleanup confirmation soil samples will be collected in accordance with NMAC 19.15.29.12(D), as five-part composite samples with each sample representing no more than 200 square feet.

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. The 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.

Based on the proposed excavation boundaries and depths, it is anticipated that approximately 225 cubic yards of material will be generated during the site remediation process. The excavated material will be transported off-site for disposal at an approved disposal facility.

4.2 Site Backfill and Reclamation

Upon attainment of the 19.15.29.13 NMAC Reclamation Criteria and Restoration Criteria, the excavated area will be backfilled to grade with clean fill material of similar type to that which was removed. Upon completion, the area will be re-vegetated with the James H & Betty R Howell Revocable Trust Seed Mix.

4.3 Remediation Schedule

Upon NMOCD 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 Department

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

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	nAPP2127158509
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party EOG Resources, Inc.	OGRID 7377
Contact Name Chase Settle	Contact Telephone 575-748-1471
Contact email Chase_Settle@eogresources.com	Incident # *(assigned by OCD)* nAPP2127158509
Contact mailing address 104 S. 4th Street, Artesia, NM 88210	

Location of Release Source

Latitude 32.68956 Longitude -104.49861
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Nicholas BJ Battery- Pipeline	Site Type Pipeline
Date Release Discovered 9/23/2021	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
L	4	19S	25E	Eddy

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☑ Private (*Name:* Howell Revocable Trust)

Nature and Volume of Release

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

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

Cause of Release: Historical impacts reported by the surface owner. The environmental consultant contracted to investigate the area determined on 9/23/21 based on the impacted area footprint that the release more than likely breached the reportable volume threshold.

State of New Mexico
Oil Conservation Division

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

Initial Response

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

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

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

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

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

Printed Name: Chase Settle
Title: Rep Safety & Environmental Sr
Signature: Chase Settle
Date: 9/28/21
email: Chase_Settle@eogresources.com
Telephone: 575-748-1471

OCD Only

Received by: Ramona Marcus
Date: 10/01/2021

State of New Mexico
Oil Conservation Division

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District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	_____ (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.

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

Printed Name: _____ Title: _____

Signature:_____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

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District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.

☐ Extents of contamination must be fully delineated.

☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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

Signature: _____ Date: _____

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Closure

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

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

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

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

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

☐ Description of remediation activities

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

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: 52548
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rmarcus	None	10/1/2021

State of New Mexico
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Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	>100 (ft bgs)
Did this release impact groundwater or surface water?	☐ 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.

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

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

Signature: Chase Settle Date: 3/1/2022

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

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2127158509
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Remediation Plan

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

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

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

☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.

☐ Extents of contamination must be fully delineated.

☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Signature: Chase Settle Date: 3/1/2022

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

OCD Only

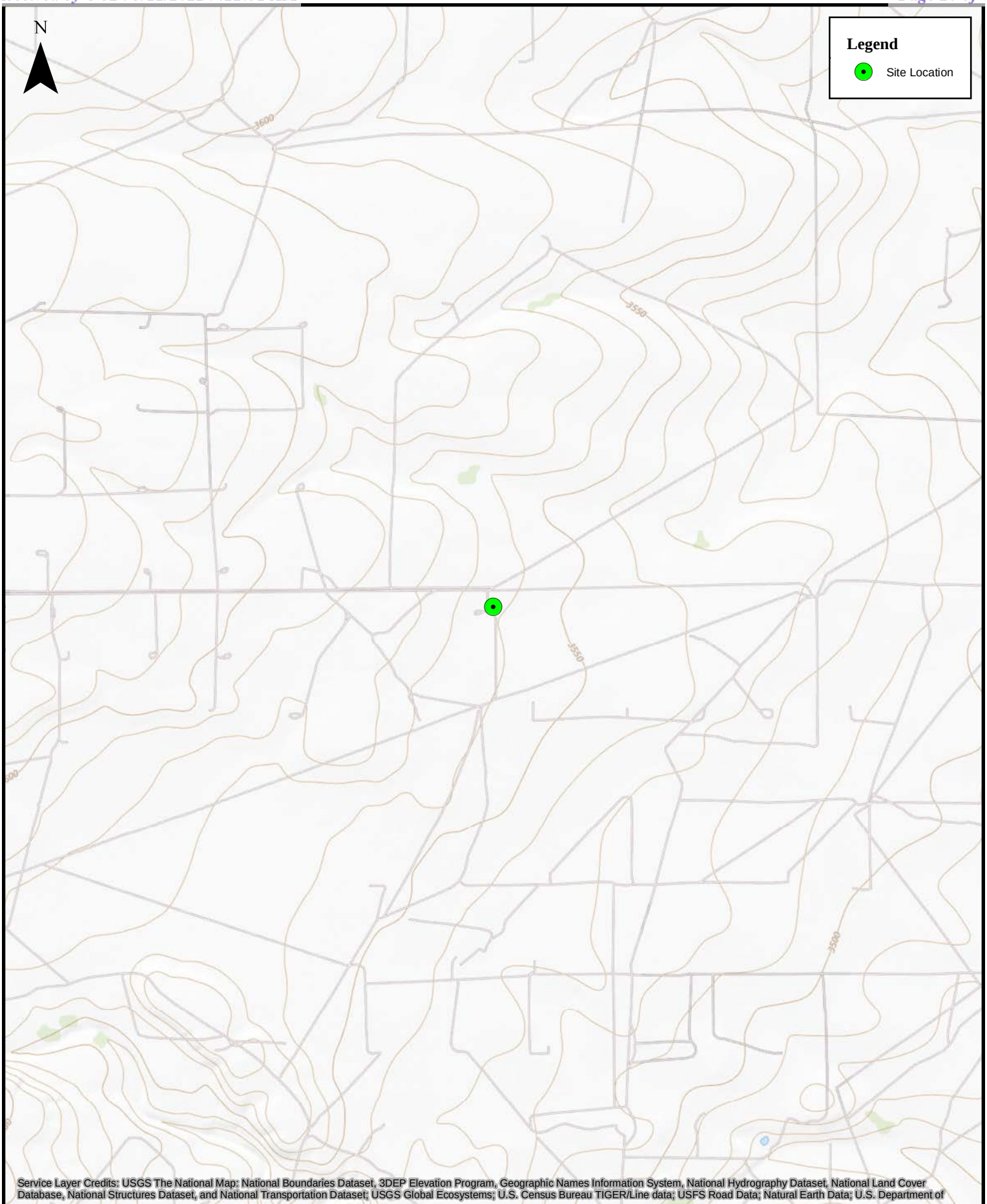
Received by: _____ Date: _____

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

Signature: Jennifer Nobui Date: 03/22/2022

FIGURES

Topographic Map
Area Map
Water Well Location Map
National Wetland Inventory Map
FEMA Floodplain Map
Karst Topography Map
Sample Location Map (08/31/2021)
Proposed Excavation Map



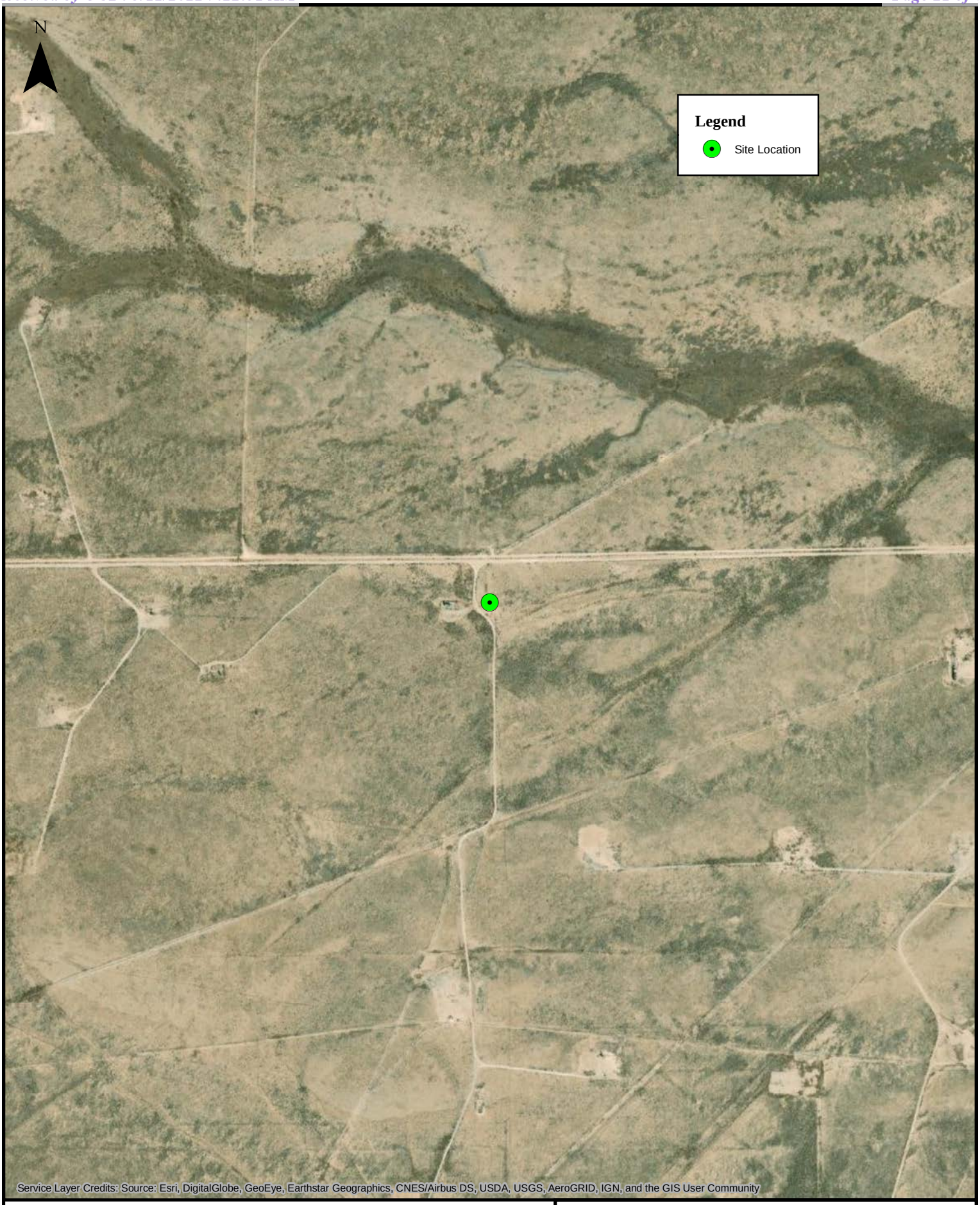
Service Layer Credits: USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road Data; Natural Earth Data; U.S. Department of

RANGER ENVIRONMENTAL SERVICES, INC.

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

1:24,000

Topographic Map
Nicholas BJ Pipeline
EOG Resources, Inc.

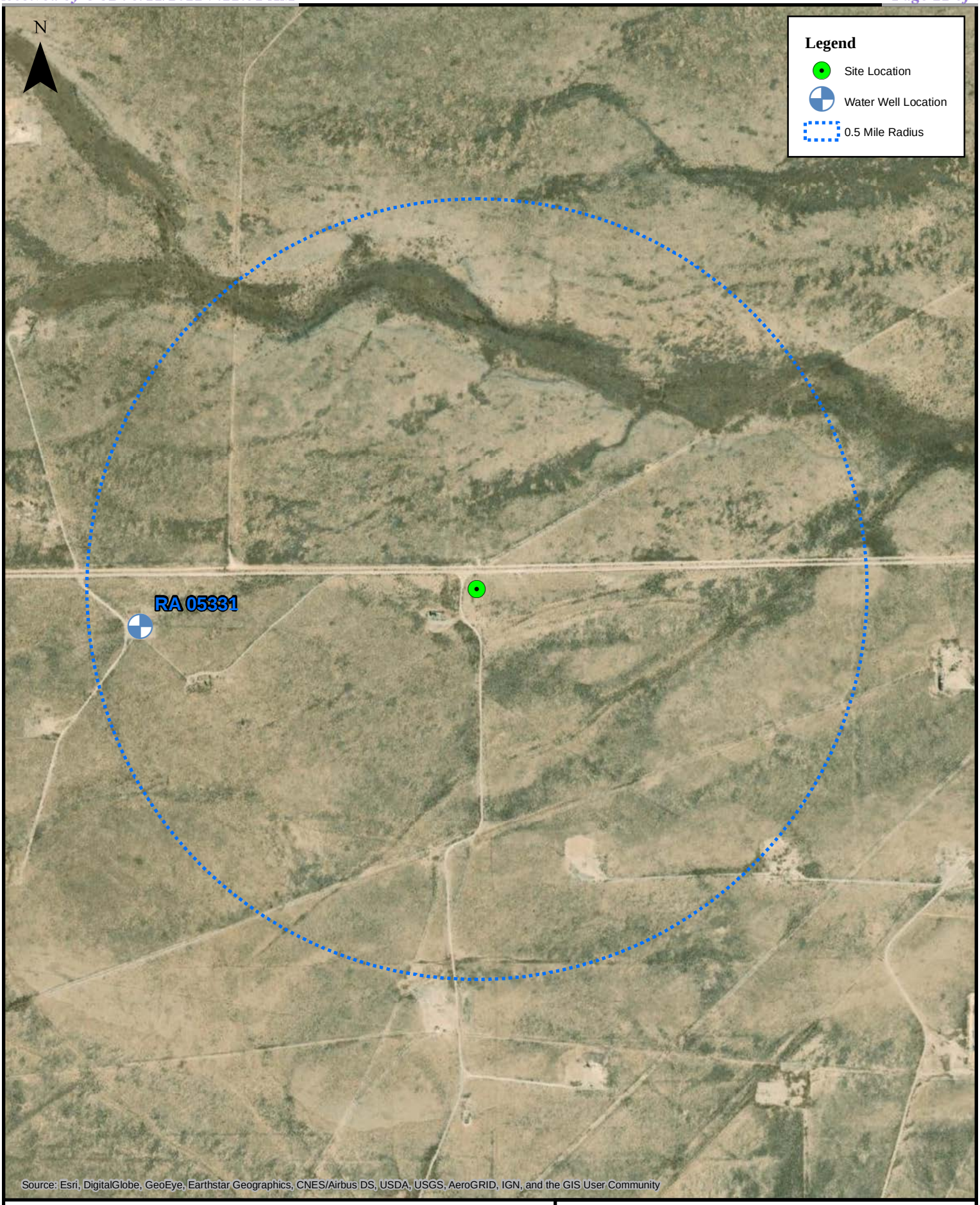


RANGER ENVIRONMENTAL SERVICES, INC.

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

1:10,000

Area Map
Nicholas BJ Pipeline
EOG Resources, Inc.

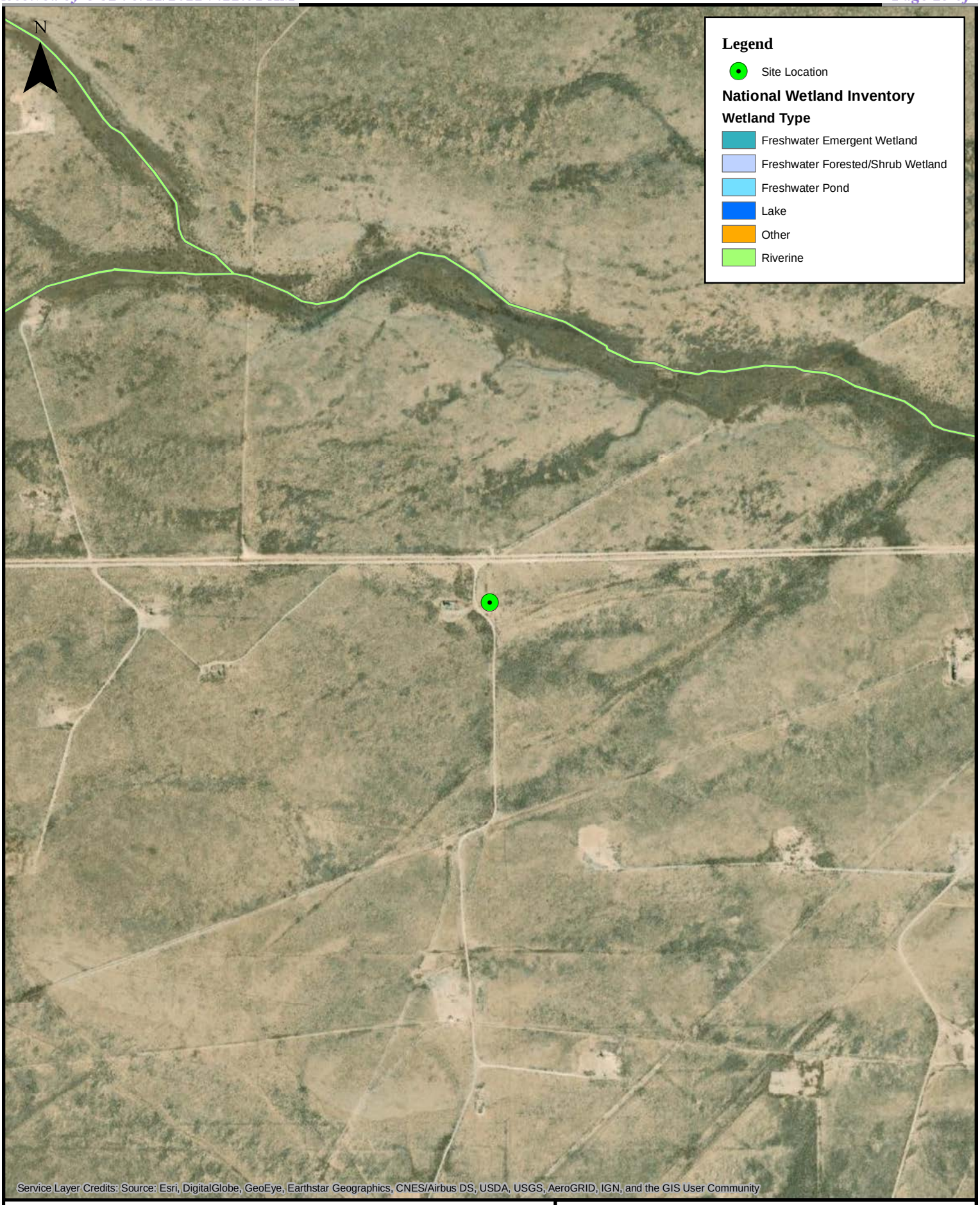


RANGER ENVIRONMENTAL SERVICES, INC.

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

1:10,000

Water Well Location Map
Nicholas BJ Pipeline
EOG Resources, Inc.

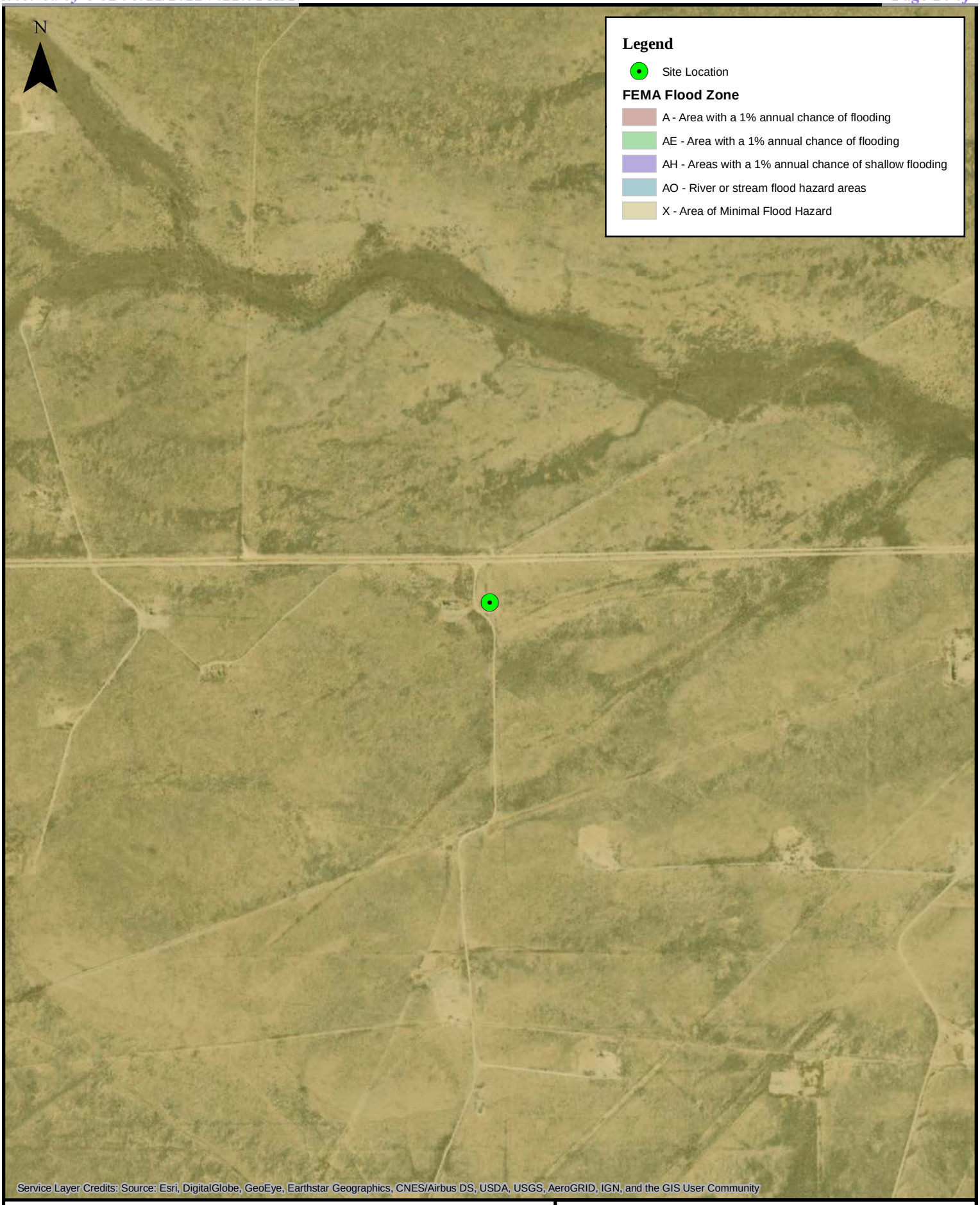


RANGER ENVIRONMENTAL SERVICES, INC.

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

1:10,000

National Wetland Inventory Map
Nicholas BJ Pipeline
EOG Resources, Inc.

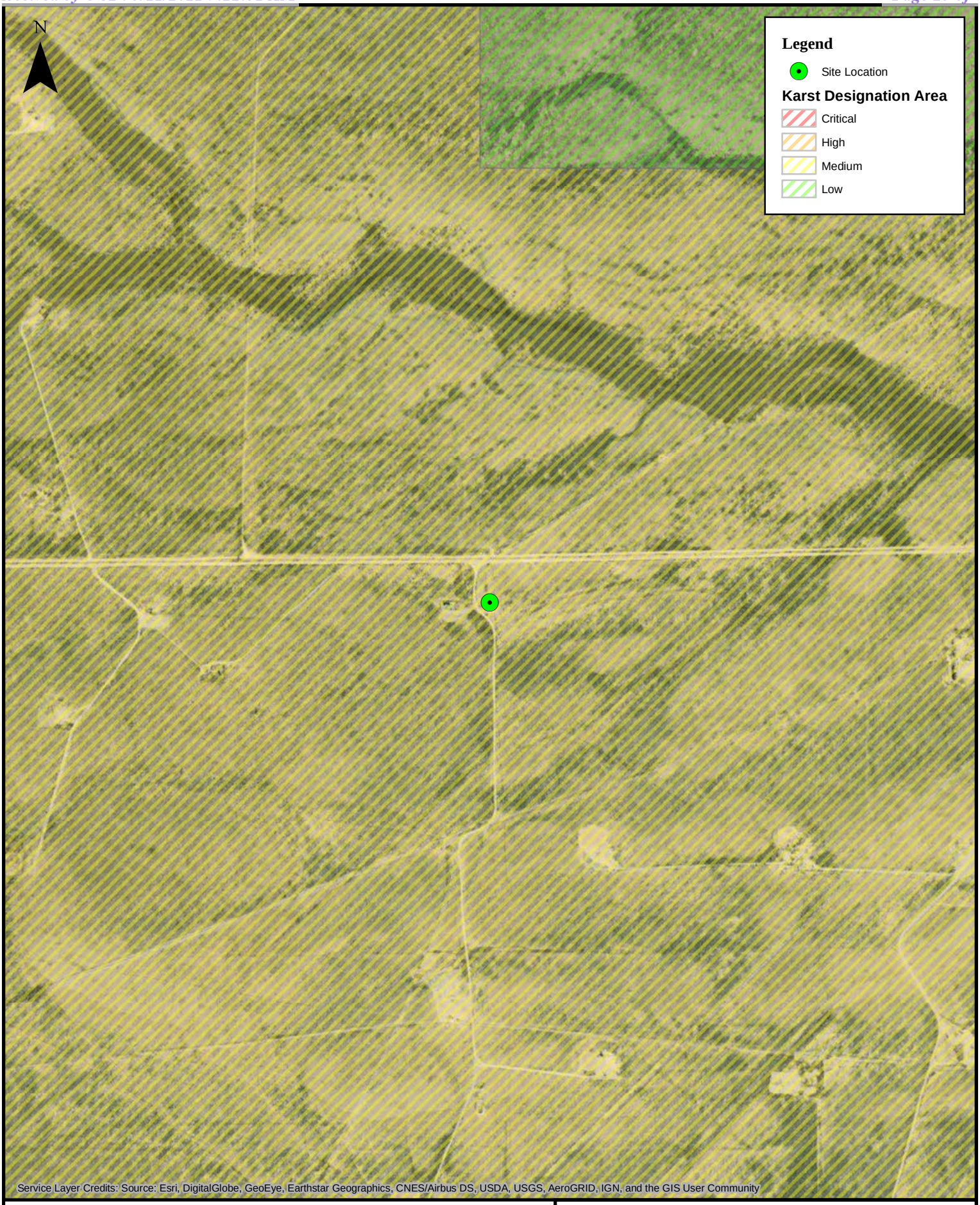


RANGER ENVIRONMENTAL SERVICES, INC.

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

1:10,000

FEMA Floodplain Map
Nicholas BJ Pipeline
EOG Resources, Inc.

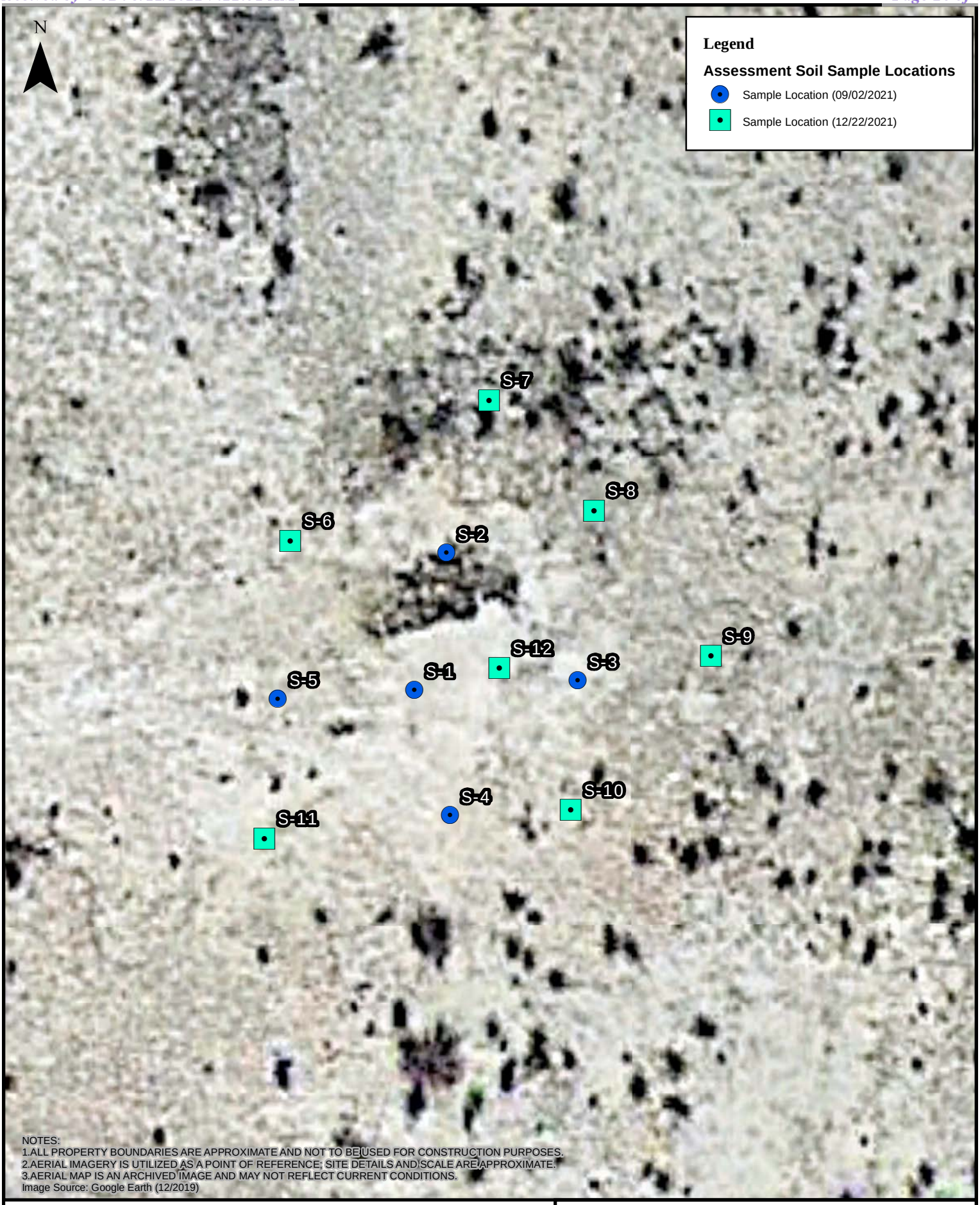


RANGER ENVIRONMENTAL SERVICES, INC.

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

1:10,000

Karst Topography Map
Nicholas BJ Pipeline
EOG Resources, Inc.



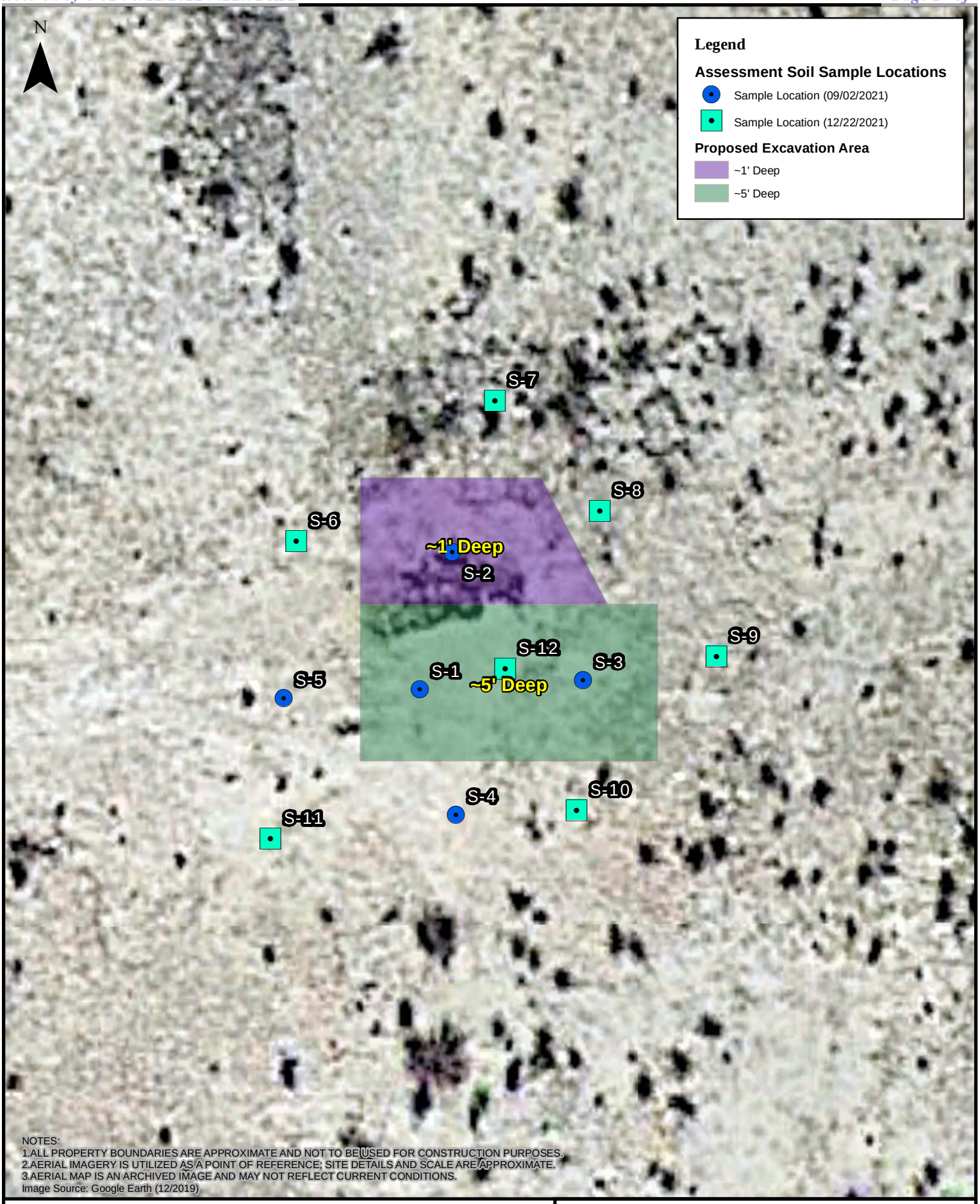
NOTES:
1.ALL PROPERTY BOUNDARIES ARE APPROXIMATE AND NOT TO BE USED FOR CONSTRUCTION PURPOSES.
2.AERIAL IMAGERY IS UTILIZED AS A POINT OF REFERENCE; SITE DETAILS AND SCALE ARE APPROXIMATE.
3.AERIAL MAP IS AN ARCHIVED IMAGE AND MAY NOT REFLECT CURRENT CONDITIONS.
Image Source: Google Earth (12/2019)

RANGER ENVIRONMENTAL SERVICES, INC.

0 5 10 20 30 40 Feet

1:200

Assessment Sample Location Map
Nicholas BJ Pipeline
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 DETAILS AND SCALE ARE APPROXIMATE.
3.AERIAL MAP IS AN ARCHIVED IMAGE AND MAY NOT REFLECT CURRENT CONDITIONS.
Image Source: Google Earth (12/2019)

RANGER ENVIRONMENTAL SERVICES, INC.

0 5 10 20 30 40 Feet

1:200

Proposed Excavation Area Map
Nicholas BJ Pipeline
EOG Resources, Inc.

TABLES

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

SOIL BTEX (EPA 8021), TPH (SW 8015) & CHLORIDE (EPA 300) ANALYTICAL DATA
EOG RESOURCES, INC.
NICHOLAS BJ #1 (Pipeline)

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 Site Assessment - September 2, 2021													
S-1/Surface	9/2/2021	Surface	<0.025	<0.050	<0.050	<0.099	<0.10	<5.0	<9.5	<48	<9.5	<48	**880**
S-1/1'	9/2/2021	1'	<0.025	<0.049	<0.049	<0.098	<0.10	<4.9	1,500	2,500	1,500	**4,000**	**1,400**
S-2/Surface	9/2/2021	Surface	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	58	240	58	**298**	<60
S-2/1'	9/2/2021	1'	<0.024	<0.047	<0.047	<0.095	<0.09	<4.7	<9.5	<48	<9.5	<48	240
S-3/Surface	9/2/2021	Surface	<0.024	<0.049	<0.049	<0.097	<0.10	<4.9	19	95	19	**114**	260
S-3/1'	9/2/2021	1'	<0.025	<0.049	<0.049	<0.099	<0.10	<4.9	250	530	250	**780**	410
S-4/Surface	9/2/2021	Surface	<0.025	<0.049	<0.049	<0.098	<0.10	<4.9	<9.2	<46	<9.2	<46	<59
S-4/1'	9/2/2021	1'	<0.024	<0.049	<0.049	<0.098	<0.10	<4.9	<9.8	<49	<9.8	<49	<60
S-5/Surface	9/2/2021	Surface	<0.024	<0.048	<0.048	<0.097	<0.10	<4.8	<9.4	<47	<9.4	<47	<61
S-5/1'	9/2/2021	1'	<0.025	<0.049	<0.049	<0.099	<0.10	<4.9	<9.7	<49	<9.7	<49	<60
Site Assessment - December 22, 2021													
S-6/0	12/22/2021	Surface	<0.024	<0.047	<0.047	<0.095	<0.09	<4.7	<9.4	<47	<9.4	<47	<59
S-6/4	12/22/2021	4'	<0.024	<0.048	<0.048	<0.096	<0.10	<4.8	<9.8	<49	<9.8	<49	<59
S-7/0	12/22/2021	Surface	<0.023	<0.047	<0.047	<0.093	<0.09	<4.7	<9.7	<48	<9.7	<48	<60
S-7/4	12/22/2021	4'	<0.024	<0.049	<0.049	<0.098	<0.10	<4.9	<9.8	<49	<9.8	<49	<60
S-8/0	12/22/2021	Surface	<0.024	<0.048	<0.048	<0.097	<0.10	<4.8	<9.8	<49	<9.8	<49	<60
S-8/3	12/22/2021	3'	<0.023	<0.047	<0.047	<0.094	<0.09	<4.7	<9.6	<48	<9.6	<48	210
S-9/0	12/22/2021	Surface	<0.025	<0.049	<0.049	<0.098	<0.10	<4.9	<9.9	<50	<9.9	<50	<59
S-9/4	12/22/2021	4'	<0.023	<0.046	<0.046	<0.093	<0.09	<4.6	<10	<50	<10	<50	120
S-10/0	12/22/2021	Surface	<0.024	<0.049	<0.049	<0.097	<0.10	<4.9	<10	<50	<10	<50	<61
S-10/5	12/22/2021	5'	<0.023	<0.047	<0.047	<0.094	<0.09	<4.7	<9.9	<49	<9.9	<49	150
S-11/0	12/22/2021	Surface	<0.023	<0.046	<0.046	<0.092	<0.09	<4.6	<9.6	<48	<9.6	<48	<60
S-11/4	12/22/2021	4'	<0.024	<0.048	<0.048	<0.097	<0.10	<4.8	<10	<50	<10	<50	140
S-12/3	12/22/2021	3'	<0.023	<0.046	<0.046	<0.092	<0.09	<4.6	<10	<50	<10	<50	**920**
S-12/6	12/22/2021	6'	<0.023	<0.046	<0.046	<0.091	<0.09	<4.6	<10	<50	<10	<50	340
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.

ATTACHMENT 1 – DEPTH-TO-GROUNDWATER DATA

New Mexico Office of the State Engineer
Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Twn	Rng	X	Y
	RA 05331	1	1	4	05	19S	25E	546308	3616955*

Driller License: 353 **Driller Company:** OSBOURN DRILLING & PUMP CO.

Driller Name:

Drill Start Date: 04/05/1967 **Drill Finish Date:** 04/13/1967 **Plug Date:**

Log File Date: 04/17/1967 **PCW Rcv Date:** **Source:** Shallow

Pump Type: **Pipe Discharge Size:** **Estimated Yield:**

Casing Size: 5.50 **Depth Well:** 460 feet **Depth Water:** 305 feet

Water Bearing Stratifications:	Top	Bottom	Description
	328	364	Limestone/Dolomite/Chalk
	398	440	Other/Unknown

Casing Perforations:	Top	Bottom
	400	440

***UTM location was derived from PLSS - see Help**

ATTACHMENT 2 – PHOTOGRAPHIC DOCUMENTATION

PHOTOGRAPH NO. 1 – A view of the Area of Concern on September 2, 2021. The view is towards the north.

(Approximate GPS: 32.689564, -104.498615)

PHOTOGRAPH NO. 2 – A view of the assessment activities on September 2, 2021 in the vicinity of sample location "S-4". The view is towards the southwest.

(Approximate GPS: 32.689517, -104.498599)

PHOTOGRAPH NO. 3 – A view hydrovac activities on December 21, 2021. The view is towards the north.

(Approximate GPS: 32.689564, -104.498615)

PHOTOGRAPH NO. 4 – An additional view of hydrovac activities on December 21, 2021. The view is towards the west.

(Approximate GPS: 32.689564, -104.498615)

PHOTOGRAPH NO. 5 – A view of the assessment activities on December 22, 2021 in the vicinity of test excavation "S-12". The view is towards the southwest.
(Approximate GPS: 32.689572, -104.498577)

PHOTOGRAPH NO. 2 – A view of the assessment activities on December 22, 2021 in the vicinity of test excavation "S-8". The view is towards the west.
(Approximate GPS: 32.689630, -104.498535)

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

September 15, 2021

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

RE: Nicholas BJ T-Post OrderNo.: 2109228

Dear Will Kierdorf:

Hall Environmental Analysis Laboratory received 10 sample(s) on 9/4/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2109228**
Date Reported: **9/15/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: S-1/Surface
Project: Nicholas BJ T-Post
Collection Date: 9/2/2021 4:17:00 PM
Lab ID: 2109228-001 **Matrix:** SOIL **Received Date:** 9/4/2021 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	880	60		mg/Kg	20	9/13/2021 3:56:06 PM	62531
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	9/9/2021 4:48:07 PM	62465
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/9/2021 4:48:07 PM	62465
Surr: DNOP	132	70-130	S	%Rec	1	9/9/2021 4:48:07 PM	62465
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/10/2021 9:43:00 PM	62460
Surr: BFB	89.8	70-130		%Rec	1	9/10/2021 9:43:00 PM	62460
EPA METHOD 8021B: VOLATILES						Analyst: **mb**	
Benzene	ND	0.025		mg/Kg	1	9/10/2021 9:43:00 PM	62460
Toluene	ND	0.050		mg/Kg	1	9/10/2021 9:43:00 PM	62460
Ethylbenzene	ND	0.050		mg/Kg	1	9/10/2021 9:43:00 PM	62460
Xylenes, Total	ND	0.099		mg/Kg	1	9/10/2021 9:43:00 PM	62460
Surr: 4-Bromofluorobenzene	79.1	70-130		%Rec	1	9/10/2021 9:43:00 PM	62460

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 **2109228**
Date Reported: **9/15/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: S-1/1'
Project: Nicholas BJ T-Post
Collection Date: 9/2/2021 4:20:00 PM
Lab ID: 2109228-002 **Matrix:** SOIL **Received Date:** 9/4/2021 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	1400	60		mg/Kg	20	9/13/2021 4:08:30 PM	62531
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	1500	200		mg/Kg	20	9/9/2021 4:57:56 PM	62465
Motor Oil Range Organics (MRO)	2500	990		mg/Kg	20	9/9/2021 4:57:56 PM	62465
Surr: DNOP	0	70-130	S	%Rec	20	9/9/2021 4:57:56 PM	62465
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/10/2021 10:03:00 PM	62460
Surr: BFB	89.1	70-130		%Rec	1	9/10/2021 10:03:00 PM	62460
EPA METHOD 8021B: VOLATILES						Analyst: **mb**	
Benzene	ND	0.025		mg/Kg	1	9/10/2021 10:03:00 PM	62460
Toluene	ND	0.049		mg/Kg	1	9/10/2021 10:03:00 PM	62460
Ethylbenzene	ND	0.049		mg/Kg	1	9/10/2021 10:03:00 PM	62460
Xylenes, Total	ND	0.098		mg/Kg	1	9/10/2021 10:03:00 PM	62460
Surr: 4-Bromofluorobenzene	76.7	70-130		%Rec	1	9/10/2021 10:03:00 PM	62460

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 **2109228**
Date Reported: **9/15/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: S-2/Surface
Project: Nicholas BJ T-Post
Collection Date: 9/2/2021 4:22:00 PM
Lab ID: 2109228-003 **Matrix:** SOIL **Received Date:** 9/4/2021 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	60		mg/Kg	20	9/13/2021 4:20:51 PM	62531
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	58	20		mg/Kg	2	9/10/2021 1:29:55 PM	62465
Motor Oil Range Organics (MRO)	240	99		mg/Kg	2	9/10/2021 1:29:55 PM	62465
Surr: DNOP	116	70-130		%Rec	2	9/10/2021 1:29:55 PM	62465
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/10/2021 10:22:00 PM	62460
Surr: BFB	88.5	70-130		%Rec	1	9/10/2021 10:22:00 PM	62460
EPA METHOD 8021B: VOLATILES						Analyst: **mb**	
Benzene	ND	0.025		mg/Kg	1	9/10/2021 10:22:00 PM	62460
Toluene	ND	0.050		mg/Kg	1	9/10/2021 10:22:00 PM	62460
Ethylbenzene	ND	0.050		mg/Kg	1	9/10/2021 10:22:00 PM	62460
Xylenes, Total	ND	0.10		mg/Kg	1	9/10/2021 10:22:00 PM	62460
Surr: 4-Bromofluorobenzene	79.1	70-130		%Rec	1	9/10/2021 10:22:00 PM	62460

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 **2109228**
Date Reported: **9/15/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG **Client Sample ID:** S-2/1'
Project: Nicholas BJ T-Post **Collection Date:** 9/2/2021 4:25:00 PM
Lab ID: 2109228-004 **Matrix:** SOIL **Received Date:** 9/4/2021 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	240	60		mg/Kg	20	9/13/2021 4:33:13 PM	62531
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	9/9/2021 5:17:33 PM	62465
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/9/2021 5:17:33 PM	62465
Surr: DNOP	143	70-130	S	%Rec	1	9/9/2021 5:17:33 PM	62465
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/10/2021 10:42:00 PM	62460
Surr: BFB	90.1	70-130		%Rec	1	9/10/2021 10:42:00 PM	62460
EPA METHOD 8021B: VOLATILES						Analyst: **mb**	
Benzene	ND	0.024		mg/Kg	1	9/10/2021 10:42:00 PM	62460
Toluene	ND	0.047		mg/Kg	1	9/10/2021 10:42:00 PM	62460
Ethylbenzene	ND	0.047		mg/Kg	1	9/10/2021 10:42:00 PM	62460
Xylenes, Total	ND	0.095		mg/Kg	1	9/10/2021 10:42:00 PM	62460
Surr: 4-Bromofluorobenzene	79.1	70-130		%Rec	1	9/10/2021 10:42:00 PM	62460

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 **2109228**
Date Reported: **9/15/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: S-3/Surface
Project: Nicholas BJ T-Post
Collection Date: 9/2/2021 4:27:00 PM
Lab ID: 2109228-005 **Matrix:** SOIL **Received Date:** 9/4/2021 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	260	61		mg/Kg	20	9/13/2021 4:45:35 PM	62531
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	19	9.4		mg/Kg	1	9/10/2021 11:24:34 AM	62465
Motor Oil Range Organics (MRO)	95	47		mg/Kg	1	9/10/2021 11:24:34 AM	62465
Surr: DNOP	87.2	70-130		%Rec	1	9/10/2021 11:24:34 AM	62465
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/10/2021 11:01:00 PM	62460
Surr: BFB	89.2	70-130		%Rec	1	9/10/2021 11:01:00 PM	62460
EPA METHOD 8021B: VOLATILES						Analyst: **mb**	
Benzene	ND	0.024		mg/Kg	1	9/10/2021 11:01:00 PM	62460
Toluene	ND	0.049		mg/Kg	1	9/10/2021 11:01:00 PM	62460
Ethylbenzene	ND	0.049		mg/Kg	1	9/10/2021 11:01:00 PM	62460
Xylenes, Total	ND	0.097		mg/Kg	1	9/10/2021 11:01:00 PM	62460
Surr: 4-Bromofluorobenzene	79.3	70-130		%Rec	1	9/10/2021 11:01:00 PM	62460

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 **2109228**
Date Reported: **9/15/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: S-3/1'
Project: Nicholas BJ T-Post
Collection Date: 9/2/2021 4:30:00 PM
Lab ID: 2109228-006 **Matrix:** SOIL **Received Date:** 9/4/2021 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**VP**
Chloride	410	60		mg/Kg	20	9/13/2021 4:57:57 PM	62531
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**SB**
Diesel Range Organics (DRO)	250	48		mg/Kg	5	9/13/2021 12:52:34 PM	62465
Motor Oil Range Organics (MRO)	530	240		mg/Kg	5	9/13/2021 12:52:34 PM	62465
Surr: DNOP	123	70-130		%Rec	5	9/13/2021 12:52:34 PM	62465
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**mb**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/10/2021 11:21:00 PM	62460
Surr: BFB	89.8	70-130		%Rec	1	9/10/2021 11:21:00 PM	62460
EPA METHOD 8021B: VOLATILES						Analyst:	**mb**
Benzene	ND	0.025		mg/Kg	1	9/10/2021 11:21:00 PM	62460
Toluene	ND	0.049		mg/Kg	1	9/10/2021 11:21:00 PM	62460
Ethylbenzene	ND	0.049		mg/Kg	1	9/10/2021 11:21:00 PM	62460
Xylenes, Total	ND	0.099		mg/Kg	1	9/10/2021 11:21:00 PM	62460
Surr: 4-Bromofluorobenzene	78.7	70-130		%Rec	1	9/10/2021 11:21:00 PM	62460

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 **2109228**
Date Reported: **9/15/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: S-4/Surface
Project: Nicholas BJ T-Post
Collection Date: 9/2/2021 4:32:00 PM
Lab ID: 2109228-007 **Matrix:** SOIL **Received Date:** 9/4/2021 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	59		mg/Kg	20	9/13/2021 5:10:18 PM	62531
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	9/9/2021 5:46:56 PM	62465
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/9/2021 5:46:56 PM	62465
Surr: DNOP	128	70-130		%Rec	1	9/9/2021 5:46:56 PM	62465
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/11/2021 12:20:00 AM	62460
Surr: BFB	87.0	70-130		%Rec	1	9/11/2021 12:20:00 AM	62460
EPA METHOD 8021B: VOLATILES						Analyst: **mb**	
Benzene	ND	0.025		mg/Kg	1	9/11/2021 12:20:00 AM	62460
Toluene	ND	0.049		mg/Kg	1	9/11/2021 12:20:00 AM	62460
Ethylbenzene	ND	0.049		mg/Kg	1	9/11/2021 12:20:00 AM	62460
Xylenes, Total	ND	0.098		mg/Kg	1	9/11/2021 12:20:00 AM	62460
Surr: 4-Bromofluorobenzene	80.3	70-130		%Rec	1	9/11/2021 12:20:00 AM	62460

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 **2109228**
Date Reported: **9/15/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG **Client Sample ID:** S-4/1'
Project: Nicholas BJ T-Post **Collection Date:** 9/2/2021 4:35:00 PM
Lab ID: 2109228-008 **Matrix:** SOIL **Received Date:** 9/4/2021 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	60		mg/Kg	20	9/13/2021 5:22:39 PM	62531
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/9/2021 5:56:46 PM	62465
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/9/2021 5:56:46 PM	62465
Surr: DNOP	111	70-130		%Rec	1	9/9/2021 5:56:46 PM	62465
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/11/2021 12:40:00 AM	62460
Surr: BFB	92.4	70-130		%Rec	1	9/11/2021 12:40:00 AM	62460
EPA METHOD 8021B: VOLATILES						Analyst: **mb**	
Benzene	ND	0.024		mg/Kg	1	9/11/2021 12:40:00 AM	62460
Toluene	ND	0.049		mg/Kg	1	9/11/2021 12:40:00 AM	62460
Ethylbenzene	ND	0.049		mg/Kg	1	9/11/2021 12:40:00 AM	62460
Xylenes, Total	ND	0.098		mg/Kg	1	9/11/2021 12:40:00 AM	62460
Surr: 4-Bromofluorobenzene	82.1	70-130		%Rec	1	9/11/2021 12:40:00 AM	62460

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 **2109228**
Date Reported: **9/15/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: S-5/Surface
Project: Nicholas BJ T-Post
Collection Date: 9/2/2021 4:38:00 PM
Lab ID: 2109228-009 **Matrix:** SOIL **Received Date:** 9/4/2021 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	61		mg/Kg	20	9/13/2021 5:59:44 PM	62531
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	9/9/2021 6:06:32 PM	62465
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/9/2021 6:06:32 PM	62465
Surr: DNOP	72.9	70-130		%Rec	1	9/9/2021 6:06:32 PM	62465
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/11/2021 12:59:00 AM	62460
Surr: BFB	95.8	70-130		%Rec	1	9/11/2021 12:59:00 AM	62460
EPA METHOD 8021B: VOLATILES						Analyst: **mb**	
Benzene	ND	0.024		mg/Kg	1	9/11/2021 12:59:00 AM	62460
Toluene	ND	0.048		mg/Kg	1	9/11/2021 12:59:00 AM	62460
Ethylbenzene	ND	0.048		mg/Kg	1	9/11/2021 12:59:00 AM	62460
Xylenes, Total	ND	0.097		mg/Kg	1	9/11/2021 12:59:00 AM	62460
Surr: 4-Bromofluorobenzene	82.5	70-130		%Rec	1	9/11/2021 12:59:00 AM	62460

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 **2109228**
Date Reported: **9/15/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG **Client Sample ID:** S-5/1'
Project: Nicholas BJ T-Post **Collection Date:** 9/2/2021 4:40:00 PM
Lab ID: 2109228-010 **Matrix:** SOIL **Received Date:** 9/4/2021 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	60		mg/Kg	20	9/13/2021 6:12:04 PM	62531
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/9/2021 6:16:25 PM	62465
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/9/2021 6:16:25 PM	62465
Surr: DNOP	105	70-130		%Rec	1	9/9/2021 6:16:25 PM	62465
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/11/2021 1:19:00 AM	62460
Surr: BFB	89.3	70-130		%Rec	1	9/11/2021 1:19:00 AM	62460
EPA METHOD 8021B: VOLATILES						Analyst: **mb**	
Benzene	ND	0.025		mg/Kg	1	9/11/2021 1:19:00 AM	62460
Toluene	ND	0.049		mg/Kg	1	9/11/2021 1:19:00 AM	62460
Ethylbenzene	ND	0.049		mg/Kg	1	9/11/2021 1:19:00 AM	62460
Xylenes, Total	ND	0.099		mg/Kg	1	9/11/2021 1:19:00 AM	62460
Surr: 4-Bromofluorobenzene	80.9	70-130		%Rec	1	9/11/2021 1:19:00 AM	62460

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#: **2109228**

15-Sep-21

Client: EOG

Project: Nicholas BJ T-Post

Sample ID: **MB-62531**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **62531**	RunNo: **81222**
Prep Date: **9/13/2021**	Analysis Date: **9/13/2021**	SeqNo: **2868437** Units: **mg/Kg**

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

Sample ID: **LCS-62531**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **62531**	RunNo: **81222**
Prep Date: **9/13/2021**	Analysis Date: **9/13/2021**	SeqNo: **2868438** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.0	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#: **2109228**

15-Sep-21

Client: EOG

Project: Nicholas BJ T-Post

Sample ID: **LCS-62465**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **62465**	RunNo: **81156**
Prep Date: **9/8/2021**	Analysis Date: **9/9/2021**	SeqNo: **2864692** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	10	50.00	0	104	68.9	135			
Surr: DNOP	4.3		5.000		86.2	70	130			

Sample ID: **MB-62465**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **62465**	RunNo: **81156**
Prep Date: **9/8/2021**	Analysis Date: **9/9/2021**	SeqNo: **2864694** 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	14		10.00		135	70	130			S

Sample ID: **LCS-62445**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **62445**	RunNo: **81156**
Prep Date: **9/8/2021**	Analysis Date: **9/9/2021**	SeqNo: **2865704** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.6		5.000		72.6	70	130			

Sample ID: **LCS-62457**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **62457**	RunNo: **81156**
Prep Date: **9/8/2021**	Analysis Date: **9/9/2021**	SeqNo: **2865705** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.3		5.000		85.8	70	130			

Sample ID: **MB-62445**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **62445**	RunNo: **81156**
Prep Date: **9/8/2021**	Analysis Date: **9/9/2021**	SeqNo: **2865706** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.0		10.00		90.1	70	130			

Sample ID: **MB-62457**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **62457**	RunNo: **81156**
Prep Date: **9/8/2021**	Analysis Date: **9/9/2021**	SeqNo: **2865707** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		109	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical 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#: **2109228**

15-Sep-21

Client: EOG

Project: Nicholas BJ T-Post

Sample ID: **mb-62460**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **62460**	RunNo: **81208**
Prep Date: **9/8/2021**	Analysis Date: **9/10/2021**	SeqNo: **2866769** 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	70	130			

Sample ID: **lcs-62460**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **62460**	RunNo: **81208**
Prep Date: **9/8/2021**	Analysis Date: **9/10/2021**	SeqNo: **2866771** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	108	78.6	131			
Surr: BFB	1000		1000		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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2109228**

15-Sep-21

Client: EOG

Project: Nicholas BJ T-Post

Sample ID: **mb-62460**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **62460**	RunNo: **81208**
Prep Date: **9/8/2021**	Analysis Date: **9/10/2021**	SeqNo: **2866837** 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	0.80		1.000		80.0	70	130			

Sample ID: **lcs-62460**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **62460**	RunNo: **81208**
Prep Date: **9/8/2021**	Analysis Date: **9/10/2021**	SeqNo: **2866839** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.86	0.025	1.000	0	85.6	80	120			
Toluene	0.85	0.050	1.000	0	85.4	80	120			
Ethylbenzene	0.86	0.050	1.000	0	86.5	80	120			
Xylenes, Total	2.6	0.10	3.000	0	86.8	80	120			
Surr: 4-Bromofluorobenzene	0.81		1.000		81.5	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: 2109228 RcptNo: 1

Received By: Juan Rojas 9/4/2021 8:30:00 AM

Completed By: Cheyenne Cason 9/4/2021 10:34:47 AM

Reviewed By: KPG 9/7/21

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: JR 9/7/21

Special Handling (if applicable)

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

Person Notified: Date:

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

Regarding:

Client Instructions:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.0	Good				
2	0.4	Good				
3	0.1	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:
☑ Standard ☐ **Rush** 5 Days

Project Name: Nicholas BJ T-Post

Project #: 5375

Project Manager: W. Kierdorf

Sampler: M. Cook

On Ice: ☑ Yes ☐ No

# of Coolers: 3

Cooler Temp (including CF): See Remarks

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. 2109228	BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride (EPA 300)
9/2/21	1617	Soil	S-1/surface	4oz, 1	None	001	X	X	X
	1620		S-1/1'			002	X	X	X
	1622		S-2/surface			003	X	X	X
	1625		S-2/1'			004	X	X	X
	1627		S-3/surface			005	X	X	X
	1630		S-3/1'			006	X	X	X
	1632		S-4/surface			007	X	X	X
	1635		S-4/1'			008	X	X	X
	1638		S-5/surface			009	X	X	X
	1640		S-5/1'			010	X	X	X

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
9/2/21	2130		Rebecca Martin	hand OFF	9/2/21	2130
9/3/21	0810	Rebecca Martin			9/3/21	810

Remarks: Bill to EOG Artesia
0.2 - 0.2 = 0
0.6 - 0.2 = 0.4
0.3 - 0.2 = 0.1

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

9/3/21 1900

9/4/21 8:30

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

Will Kierdorf

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

RE: Nicholas BJ 1 Pipeline OrderNo.: 2112D57

Dear Will Kierdorf:

Hall Environmental Analysis Laboratory received 14 sample(s) on 12/23/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2112D57**
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: S-12/3
Project: Nicholas BJ 1 Pipeline
Collection Date: 12/22/2021 8:20:00 AM
Lab ID: 2112D57-001 **Matrix:** SOIL **Received Date:** 12/23/2021 7:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	920	60		mg/Kg	20	1/3/2022 11:59:29 AM	64806
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/29/2021 4:54:03 PM	64752
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/29/2021 4:54:03 PM	64752
Surr: DNOP	92.2	70-130		%Rec	1	12/29/2021 4:54:03 PM	64752
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/29/2021 1:19:00 AM	64732
Surr: BFB	97.2	70-130		%Rec	1	12/29/2021 1:19:00 AM	64732
EPA METHOD 8021B: VOLATILES						Analyst: **mb**	
Benzene	ND	0.023		mg/Kg	1	12/29/2021 1:19:00 AM	64732
Toluene	ND	0.046		mg/Kg	1	12/29/2021 1:19:00 AM	64732
Ethylbenzene	ND	0.046		mg/Kg	1	12/29/2021 1:19:00 AM	64732
Xylenes, Total	ND	0.092		mg/Kg	1	12/29/2021 1:19:00 AM	64732
Surr: 4-Bromofluorobenzene	87.9	70-130		%Rec	1	12/29/2021 1:19:00 AM	64732

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

Qualifiers:

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

Analytical Report
Lab Order **2112D57**
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: S-12/6
Project: Nicholas BJ 1 Pipeline
Collection Date: 12/22/2021 8:42:00 AM
Lab ID: 2112D57-002 **Matrix:** SOIL **Received Date:** 12/23/2021 7:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CAS**
Chloride	340	60		mg/Kg	20	1/3/2022 12:36:42 PM	64806
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**SB**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/29/2021 5:04:42 PM	64752
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/29/2021 5:04:42 PM	64752
Surr: DNOP	108	70-130		%Rec	1	12/29/2021 5:04:42 PM	64752
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**mb**
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/29/2021 1:39:00 AM	64732
Surr: BFB	95.1	70-130		%Rec	1	12/29/2021 1:39:00 AM	64732
EPA METHOD 8021B: VOLATILES						Analyst:	**mb**
Benzene	ND	0.023		mg/Kg	1	12/29/2021 1:39:00 AM	64732
Toluene	ND	0.046		mg/Kg	1	12/29/2021 1:39:00 AM	64732
Ethylbenzene	ND	0.046		mg/Kg	1	12/29/2021 1:39:00 AM	64732
Xylenes, Total	ND	0.091		mg/Kg	1	12/29/2021 1:39:00 AM	64732
Surr: 4-Bromofluorobenzene	85.5	70-130		%Rec	1	12/29/2021 1:39:00 AM	64732

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 **2112D57**
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: S-11/0
Project: Nicholas BJ 1 Pipeline
Collection Date: 12/22/2021 9:02:00 AM
Lab ID: 2112D57-003 **Matrix:** SOIL **Received Date:** 12/23/2021 7:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CAS**
Chloride	ND	60		mg/Kg	20	1/3/2022 1:13:54 PM	64806
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**SB**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	12/29/2021 5:15:23 PM	64752
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/29/2021 5:15:23 PM	64752
Surr: DNOP	94.6	70-130		%Rec	1	12/29/2021 5:15:23 PM	64752
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**mb**
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/29/2021 1:59:00 AM	64732
Surr: BFB	93.3	70-130		%Rec	1	12/29/2021 1:59:00 AM	64732
EPA METHOD 8021B: VOLATILES						Analyst:	**mb**
Benzene	ND	0.023		mg/Kg	1	12/29/2021 1:59:00 AM	64732
Toluene	ND	0.046		mg/Kg	1	12/29/2021 1:59:00 AM	64732
Ethylbenzene	ND	0.046		mg/Kg	1	12/29/2021 1:59:00 AM	64732
Xylenes, Total	ND	0.092		mg/Kg	1	12/29/2021 1:59:00 AM	64732
Surr: 4-Bromofluorobenzene	87.0	70-130		%Rec	1	12/29/2021 1:59:00 AM	64732

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 **2112D57**
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: S-11/4
Project: Nicholas BJ 1 Pipeline
Collection Date: 12/22/2021 9:12:00 AM
Lab ID: 2112D57-004 **Matrix:** SOIL **Received Date:** 12/23/2021 7:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	140	60		mg/Kg	20	1/3/2022 1:26:18 PM	64806
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/29/2021 5:26:05 PM	64752
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/29/2021 5:26:05 PM	64752
Surr: DNOP	94.6	70-130		%Rec	1	12/29/2021 5:26:05 PM	64752
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/29/2021 2:18:00 AM	64732
Surr: BFB	97.3	70-130		%Rec	1	12/29/2021 2:18:00 AM	64732
EPA METHOD 8021B: VOLATILES						Analyst: **mb**	
Benzene	ND	0.024		mg/Kg	1	12/29/2021 2:18:00 AM	64732
Toluene	ND	0.048		mg/Kg	1	12/29/2021 2:18:00 AM	64732
Ethylbenzene	ND	0.048		mg/Kg	1	12/29/2021 2:18:00 AM	64732
Xylenes, Total	ND	0.097		mg/Kg	1	12/29/2021 2:18:00 AM	64732
Surr: 4-Bromofluorobenzene	86.8	70-130		%Rec	1	12/29/2021 2:18:00 AM	64732

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

Qualifiers:

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

Analytical Report
Lab Order **2112D57**
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: S-10/0
Project: Nicholas BJ 1 Pipeline
Collection Date: 12/22/2021 11:05:00 AM
Lab ID: 2112D57-005 **Matrix:** SOIL **Received Date:** 12/23/2021 7:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	61		mg/Kg	20	1/3/2022 1:38:42 PM	64806
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/29/2021 5:36:45 PM	64752
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/29/2021 5:36:45 PM	64752
Surr: DNOP	83.1	70-130		%Rec	1	12/29/2021 5:36:45 PM	64752
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/29/2021 2:38:00 AM	64732
Surr: BFB	91.4	70-130		%Rec	1	12/29/2021 2:38:00 AM	64732
EPA METHOD 8021B: VOLATILES						Analyst: **mb**	
Benzene	ND	0.024		mg/Kg	1	12/29/2021 2:38:00 AM	64732
Toluene	ND	0.049		mg/Kg	1	12/29/2021 2:38:00 AM	64732
Ethylbenzene	ND	0.049		mg/Kg	1	12/29/2021 2:38:00 AM	64732
Xylenes, Total	ND	0.097		mg/Kg	1	12/29/2021 2:38:00 AM	64732
Surr: 4-Bromofluorobenzene	84.7	70-130		%Rec	1	12/29/2021 2:38:00 AM	64732

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 **2112D57**
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: S-10/5
Project: Nicholas BJ 1 Pipeline
Collection Date: 12/22/2021 11:15:00 AM
Lab ID: 2112D57-006 **Matrix:** SOIL **Received Date:** 12/23/2021 7:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CAS**
Chloride	150	60		mg/Kg	20	1/3/2022 1:51:07 PM	64806
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**SB**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/29/2021 5:47:24 PM	64752
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/29/2021 5:47:24 PM	64752
Surr: DNOP	90.7	70-130		%Rec	1	12/29/2021 5:47:24 PM	64752
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**mb**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/29/2021 2:57:00 AM	64732
Surr: BFB	88.5	70-130		%Rec	1	12/29/2021 2:57:00 AM	64732
EPA METHOD 8021B: VOLATILES						Analyst:	**mb**
Benzene	ND	0.023		mg/Kg	1	12/29/2021 2:57:00 AM	64732
Toluene	ND	0.047		mg/Kg	1	12/29/2021 2:57:00 AM	64732
Ethylbenzene	ND	0.047		mg/Kg	1	12/29/2021 2:57:00 AM	64732
Xylenes, Total	ND	0.094		mg/Kg	1	12/29/2021 2:57:00 AM	64732
Surr: 4-Bromofluorobenzene	81.1	70-130		%Rec	1	12/29/2021 2:57:00 AM	64732

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 **2112D57**
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: S-9/0
Project: Nicholas BJ 1 Pipeline
Collection Date: 12/22/2021 10:40:00 AM
Lab ID: 2112D57-007 **Matrix:** SOIL **Received Date:** 12/23/2021 7:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CAS**
Chloride	ND	59		mg/Kg	20	1/3/2022 2:03:31 PM	64806
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**SB**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/29/2021 5:58:00 PM	64752
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/29/2021 5:58:00 PM	64752
Surr: DNOP	79.2	70-130		%Rec	1	12/29/2021 5:58:00 PM	64752
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**mb**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/29/2021 3:17:00 AM	64732
Surr: BFB	89.5	70-130		%Rec	1	12/29/2021 3:17:00 AM	64732
EPA METHOD 8021B: VOLATILES						Analyst:	**mb**
Benzene	ND	0.025		mg/Kg	1	12/29/2021 3:17:00 AM	64732
Toluene	ND	0.049		mg/Kg	1	12/29/2021 3:17:00 AM	64732
Ethylbenzene	ND	0.049		mg/Kg	1	12/29/2021 3:17:00 AM	64732
Xylenes, Total	ND	0.098		mg/Kg	1	12/29/2021 3:17:00 AM	64732
Surr: 4-Bromofluorobenzene	81.6	70-130		%Rec	1	12/29/2021 3:17:00 AM	64732

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

Qualifiers:

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

Analytical Report
Lab Order **2112D57**
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: S-9/4
Project: Nicholas BJ 1 Pipeline
Collection Date: 12/22/2021 10:48:00 AM
Lab ID: 2112D57-008 **Matrix:** SOIL
Received Date: 12/23/2021 7:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CAS**
Chloride	120	60		mg/Kg	20	1/3/2022 2:15:56 PM	64806
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**SB**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/29/2021 6:08:35 PM	64752
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/29/2021 6:08:35 PM	64752
Surr: DNOP	92.2	70-130		%Rec	1	12/29/2021 6:08:35 PM	64752
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**mb**
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/29/2021 3:37:00 AM	64732
Surr: BFB	88.2	70-130		%Rec	1	12/29/2021 3:37:00 AM	64732
EPA METHOD 8021B: VOLATILES						Analyst:	**mb**
Benzene	ND	0.023		mg/Kg	1	12/29/2021 3:37:00 AM	64732
Toluene	ND	0.046		mg/Kg	1	12/29/2021 3:37:00 AM	64732
Ethylbenzene	ND	0.046		mg/Kg	1	12/29/2021 3:37:00 AM	64732
Xylenes, Total	ND	0.093		mg/Kg	1	12/29/2021 3:37:00 AM	64732
Surr: 4-Bromofluorobenzene	81.3	70-130		%Rec	1	12/29/2021 3:37:00 AM	64732

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

Qualifiers:

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

Analytical Report
Lab Order **2112D57**
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: S-8/0
Project: Nicholas BJ 1 Pipeline
Collection Date: 12/22/2021 10:20:00 AM
Lab ID: 2112D57-009 **Matrix:** SOIL **Received Date:** 12/23/2021 7:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	1/3/2022 2:28:20 PM	64806
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/29/2021 6:19:09 PM	64752
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/29/2021 6:19:09 PM	64752
Surr: DNOP	71.9	70-130		%Rec	1	12/29/2021 6:19:09 PM	64752
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/29/2021 3:56:00 AM	64732
Surr: BFB	87.9	70-130		%Rec	1	12/29/2021 3:56:00 AM	64732
EPA METHOD 8021B: VOLATILES						Analyst: **mb**	
Benzene	ND	0.024		mg/Kg	1	12/29/2021 3:56:00 AM	64732
Toluene	ND	0.048		mg/Kg	1	12/29/2021 3:56:00 AM	64732
Ethylbenzene	ND	0.048		mg/Kg	1	12/29/2021 3:56:00 AM	64732
Xylenes, Total	ND	0.097		mg/Kg	1	12/29/2021 3:56:00 AM	64732
Surr: 4-Bromofluorobenzene	81.1	70-130		%Rec	1	12/29/2021 3:56:00 AM	64732

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 **2112D57**
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: S-8/3
Project: Nicholas BJ 1 Pipeline
Collection Date: 12/22/2021 10:28:00 AM
Lab ID: 2112D57-010 **Matrix:** SOIL
Received Date: 12/23/2021 7:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CAS**
Chloride	210	60		mg/Kg	20	1/3/2022 2:40:44 PM	64806
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**SB**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	12/29/2021 6:29:42 PM	64752
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/29/2021 6:29:42 PM	64752
Surr: DNOP	71.6	70-130		%Rec	1	12/29/2021 6:29:42 PM	64752
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**mb**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/29/2021 4:55:00 AM	64732
Surr: BFB	88.6	70-130		%Rec	1	12/29/2021 4:55:00 AM	64732
EPA METHOD 8021B: VOLATILES						Analyst:	**mb**
Benzene	ND	0.023		mg/Kg	1	12/29/2021 4:55:00 AM	64732
Toluene	ND	0.047		mg/Kg	1	12/29/2021 4:55:00 AM	64732
Ethylbenzene	ND	0.047		mg/Kg	1	12/29/2021 4:55:00 AM	64732
Xylenes, Total	ND	0.094		mg/Kg	1	12/29/2021 4:55:00 AM	64732
Surr: 4-Bromofluorobenzene	79.5	70-130		%Rec	1	12/29/2021 4:55:00 AM	64732

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 **2112D57**
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: S-7/0
Project: Nicholas BJ 1 Pipeline
Collection Date: 12/22/2021 10:00:00 AM
Lab ID: 2112D57-011 **Matrix:** SOIL
Received Date: 12/23/2021 7:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CAS**
Chloride	ND	60		mg/Kg	20	1/3/2022 2:53:08 PM	64806
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**SB**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	1/4/2022 9:33:26 AM	64827
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/4/2022 9:33:26 AM	64827
Surr: DNOP	70.8	70-130		%Rec	1	1/4/2022 9:33:26 AM	64827
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**mb**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/29/2021 5:15:00 AM	64732
Surr: BFB	86.6	70-130		%Rec	1	12/29/2021 5:15:00 AM	64732
EPA METHOD 8021B: VOLATILES						Analyst:	**mb**
Benzene	ND	0.023		mg/Kg	1	12/29/2021 5:15:00 AM	64732
Toluene	ND	0.047		mg/Kg	1	12/29/2021 5:15:00 AM	64732
Ethylbenzene	ND	0.047		mg/Kg	1	12/29/2021 5:15:00 AM	64732
Xylenes, Total	ND	0.093		mg/Kg	1	12/29/2021 5:15:00 AM	64732
Surr: 4-Bromofluorobenzene	80.7	70-130		%Rec	1	12/29/2021 5:15:00 AM	64732

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 **2112D57**
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: S-7/4
Project: Nicholas BJ 1 Pipeline
Collection Date: 12/22/2021 10:08:00 AM
Lab ID: 2112D57-012 **Matrix:** SOIL **Received Date:** 12/23/2021 7:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	1/3/2022 3:05:33 PM	64806
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/29/2021 6:50:43 PM	64752
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/29/2021 6:50:43 PM	64752
Surr: DNOP	77.8	70-130		%Rec	1	12/29/2021 6:50:43 PM	64752
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/29/2021 5:34:00 AM	64732
Surr: BFB	85.4	70-130		%Rec	1	12/29/2021 5:34:00 AM	64732
EPA METHOD 8021B: VOLATILES						Analyst: **mb**	
Benzene	ND	0.024		mg/Kg	1	12/29/2021 5:34:00 AM	64732
Toluene	ND	0.049		mg/Kg	1	12/29/2021 5:34:00 AM	64732
Ethylbenzene	ND	0.049		mg/Kg	1	12/29/2021 5:34:00 AM	64732
Xylenes, Total	ND	0.098		mg/Kg	1	12/29/2021 5:34:00 AM	64732
Surr: 4-Bromofluorobenzene	78.8	70-130		%Rec	1	12/29/2021 5:34:00 AM	64732

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 **2112D57**
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: S-6/0
Project: Nicholas BJ 1 Pipeline
Collection Date: 12/22/2021 9:32:00 AM
Lab ID: 2112D57-013 **Matrix:** SOIL
Received Date: 12/23/2021 7:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CAS**
Chloride	ND	59		mg/Kg	20	1/3/2022 5:01:53 PM	64806
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**SB**
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	12/29/2021 7:01:13 PM	64752
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/29/2021 7:01:13 PM	64752
Surr: DNOP	104	70-130		%Rec	1	12/29/2021 7:01:13 PM	64752
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**mb**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/29/2021 5:54:00 AM	64732
Surr: BFB	87.8	70-130		%Rec	1	12/29/2021 5:54:00 AM	64732
EPA METHOD 8021B: VOLATILES						Analyst:	**mb**
Benzene	ND	0.024		mg/Kg	1	12/29/2021 5:54:00 AM	64732
Toluene	ND	0.047		mg/Kg	1	12/29/2021 5:54:00 AM	64732
Ethylbenzene	ND	0.047		mg/Kg	1	12/29/2021 5:54:00 AM	64732
Xylenes, Total	ND	0.095		mg/Kg	1	12/29/2021 5:54:00 AM	64732
Surr: 4-Bromofluorobenzene	81.1	70-130		%Rec	1	12/29/2021 5:54:00 AM	64732

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 **2112D57**
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: S-6/4
Project: Nicholas BJ 1 Pipeline
Collection Date: 12/22/2021 9:40:00 AM
Lab ID: 2112D57-014 **Matrix:** SOIL **Received Date:** 12/23/2021 7:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	59		mg/Kg	20	1/3/2022 5:14:18 PM	64806
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/29/2021 7:11:41 PM	64752
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/29/2021 7:11:41 PM	64752
Surr: DNOP	79.8	70-130		%Rec	1	12/29/2021 7:11:41 PM	64752
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/28/2021 6:21:38 PM	64736
Surr: BFB	95.9	70-130		%Rec	1	12/28/2021 6:21:38 PM	64736
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	12/28/2021 6:21:38 PM	64736
Toluene	ND	0.048		mg/Kg	1	12/28/2021 6:21:38 PM	64736
Ethylbenzene	ND	0.048		mg/Kg	1	12/28/2021 6:21:38 PM	64736
Xylenes, Total	ND	0.096		mg/Kg	1	12/28/2021 6:21:38 PM	64736
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	12/28/2021 6:21:38 PM	64736

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#: **2112D57**

07-Jan-22

Client: EOG

Project: Nicholas BJ 1 Pipeline

Sample ID: **MB-64806** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**

Client ID: **PBS** Batch ID: **64806** RunNo: **84914**

Prep Date: **12/30/2021** Analysis Date: **1/3/2022** SeqNo: **2987201** Units: **mg/Kg**

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

Sample ID: **LCS-64806** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**

Client ID: **LCSS** Batch ID: **64806** RunNo: **84914**

Prep Date: **12/30/2021** Analysis Date: **1/3/2022** SeqNo: **2987202** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.0	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 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#: **2112D57**

07-Jan-22

Client: EOG

Project: Nicholas BJ 1 Pipeline

Sample ID: **LCS-64752** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **64752** RunNo: **84858**

Prep Date: **12/28/2021** Analysis Date: **12/29/2021** SeqNo: **2985135** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	56	10	50.00	0	113	68.9	135			
Surr: DNOP	4.8		5.000		95.6	70	130			

Sample ID: **MB-64752** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **64752** RunNo: **84858**

Prep Date: **12/28/2021** Analysis Date: **12/29/2021** SeqNo: **2985137** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		100	70	130			

Sample ID: **LCS-64827** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **64827** RunNo: **84921**

Prep Date: **1/3/2022** Analysis Date: **1/4/2022** SeqNo: **2987505** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.3	68.9	135			
Surr: DNOP	3.9		5.000		78.6	70	130			

Sample ID: **MB-64827** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **64827** RunNo: **84921**

Prep Date: **1/3/2022** Analysis Date: **1/4/2022** SeqNo: **2987507** 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	8.4		10.00		84.1	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical 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#: **2112D57**

07-Jan-22

Client: EOG

Project: Nicholas BJ 1 Pipeline

Sample ID: **mb-64736** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBS** Batch ID: **64736** RunNo: **84801**

Prep Date: **12/27/2021** Analysis Date: **12/28/2021** SeqNo: **2983402** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	970		1000		97.4	70	130			

Sample ID: **lcs-64736** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **64736** RunNo: **84801**

Prep Date: **12/27/2021** Analysis Date: **12/28/2021** SeqNo: **2983403** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	100	78.6	131			
Surr: BFB	1100		1000		109	70	130			

Sample ID: **mb-64732** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBS** Batch ID: **64732** RunNo: **84821**

Prep Date: **12/27/2021** Analysis Date: **12/28/2021** SeqNo: **2983481** 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	910		1000		90.6	70	130			

Sample ID: **lcs-64732** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **64732** RunNo: **84821**

Prep Date: **12/27/2021** Analysis Date: **12/28/2021** SeqNo: **2983483** 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	106	78.6	131			
Surr: BFB	1100		1000		109	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical 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#: **2112D57**

07-Jan-22

Client: EOG

Project: Nicholas BJ 1 Pipeline

Sample ID: **mb-64736** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **64736** RunNo: **84801**

Prep Date: **12/27/2021** Analysis Date: **12/28/2021** SeqNo: **2983430** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		106	70	130			

Sample ID: **LCS-64736** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **64736** RunNo: **84801**

Prep Date: **12/27/2021** Analysis Date: **12/28/2021** SeqNo: **2983431** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	100	80	120			
Toluene	0.99	0.050	1.000	0	99.5	80	120			
Ethylbenzene	0.99	0.050	1.000	0	99.2	80	120			
Xylenes, Total	3.0	0.10	3.000	0	99.3	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	70	130			

Sample ID: **mb-64732** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **64732** RunNo: **84821**

Prep Date: **12/27/2021** Analysis Date: **12/28/2021** SeqNo: **2983530** 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	0.81		1.000		81.1	70	130			

Sample ID: **lcs-64732** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **64732** RunNo: **84821**

Prep Date: **12/27/2021** Analysis Date: **12/28/2021** SeqNo: **2983532** 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	90.7	80	120			
Toluene	0.91	0.050	1.000	0	91.1	80	120			
Ethylbenzene	0.93	0.050	1.000	0	93.2	80	120			
Xylenes, Total	2.8	0.10	3.000	0	91.7	80	120			
Surr: 4-Bromofluorobenzene	0.85		1.000		84.9	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 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: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: EOG | Work Order Number: 2112D57 | RcptNo: 1

Received By: Isaiah Ortiz 12/23/2021 7:40:00 AM I_Ox

Completed By: Isaiah Ortiz 12/23/2021 3:20:11 PM I_Ox

Reviewed By: JMG 12/23/21

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° 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: JM 12/23/21

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

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

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.8	Good	Not Present			
2	4.6	Good	Not Present			

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:

☐ Standard ☒ Rush 5-day TAT

Project Name: Nicholas BJ #1 (Bipeline)

Project #: 5375

Project Manager: W. Kierdorf

Sampler: W. Kennedy

On Ice: ■ Yes ☐ No

# of Coolers: 2 0.9-0.1/cf/0.8°C

Cooler Temp(including CF) 4.7-0.1/cf/4.6°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2112057	BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride (EPA 300)
12/22/21	0820	S:1	S-12/3	1x4oz. Jar	Ice	001	X	X	X
	0842		S-12/6			002			
	0902		S-11/0			003			
	0912		S-11/4			004			
	1105		S-10/0			005			
	1115		S-10/5			006			
	1040		S-9/0			007			
	1048		S-9/4			008			
	1020		S-8/0			009			
	1028		S-8/3			010			
	1006		S-7/0			011			
	1008		S-7/4			012			

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
12/22/21	1430	W. Kennedy	Erin Cowin		12/23/21	0740
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

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.

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:
☐ Standard ☒ Rush 5-day TAT

Project Name: Nicholas BJ #1 (Pipeline)

Project #: 5375

Project Manager: W. Kierdorf

Sampler: W. Kennedy

On Ice: ☑ Yes ☐ No

# of Coolers: 2 0.9°C = 0.1 kf / 0.8°C

Cooler Temp (including CF): 4.7°C = 0.1 kf / 4.6°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. 2112057	BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride (EPA 300)
12/22/21	0932	Soil	S-6/0	1x 4oz. Jar	Ice	013	X	X	X
1	0940	1	S-6/4	1	1	014	1	1	1

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
12/22/21	14:30	W. K	T Ochoa	Courier	12/23/21	0740
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

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.

ATTACHMENT 4 – HOWELL RANCH SEED MIXTURE

James H & Betty R Howell Revocable Trust Seed Mix

1lb per acre of Plains Bristlegrass

2lbs per acre of Green Sprangletop

3lbs per acre of Side Oats Gramma

2lbs per acre of Blue Gramma

Increase to 16lbs per acre if broadcast.

Add Reclamation Mix

40% Ryegrass (Annual)

10% Millet

7.5% Kleingrass

5.7% Sideoats

5% Green Sprangletop

7.5% Bristlegrass

10% Western Wheatgrass

10% Buffalograss

2.5% Blue Grama

PLANTING RATE 20 lbs. per acre

Updated 5/23/2021

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

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

CONDITIONS

Action 89516

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 89516
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Remediation Plan Approved.	3/22/2022