RANGER
ENVIRONMENTAL SERVICES, INC.

SITE ASSESSMENT/CHARACTERIZATION REPORT

CROSSROADS AFX FEDERAL #1
UNIT P, SECTION 22, TOWNSHIP 7S, RANGE 35E
ROOSEVELT COUNTY, NEW MEXICO
33.68760, -103.34329
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 14, 2022

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

William Kierdorf, REM
Project Manager

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1.0 SITE LOCATION AND BACKGROUND

The Crossroads AFX #1 (Site) is an active oil and gas well location located on state land, approximately 12.5 miles north of Crossroads, within Roosevelt County, New Mexico. The facility is situated in Unit P, Section 22, T7S-R35E at GPS coordinates 33.68760, -103.34329. In June 2021, EOG Resources, Inc. (EOG) engaged Ranger Environmental Services, Inc. (Ranger) to assist in the assessment and remediation of an historic release which occurred in the facility tank battery area.

On June 21, 2021, Ranger personnel conducted an initial inspection of the release area and observed stained soils surrounding one of the tanks. The impacts were observed to have been contained within the tank battery secondary containment. The affected area was subsequently reported to the NMOCD on June 21, 2021 (NMOCD Incident # nAPP2117330665).

This *Site Assessment/Characterization Report* has been prepared to detail the results of the completed site assessment activities and to characterize the site for remediation purposes. It should be noted that the depth to groundwater at the site still must be confirmed via the installation of a soil boring/temporary well since there is no existing depth to groundwater data for the area within a one-half mile radius of the subject site.

On December 14, 2021, EOG requested an extension for this report since there was no driller availability until late January, 2022 in order to install a soil boring/temporary well. The NMOCD denied this request on December 22, 2021 and as such this report has been submitted based upon the assumption that the depth to groundwater is between 51'-100' below ground surface (bgs). EOG will be proceeding with the installation of the temporary monitor well in January 2022 to confirm the site-specific depth to groundwater and will prepare an updated Site Assessment/Characterization Report and Remediation Plan upon completion of this activity.

A copy of the previously submitted Form C-141 Release Notification, as well as the Site Assessment/Characterization section 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 attempt 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. No recent water well information within a one-half mile radius of the Site was found. The closest water well to the subject site which was found during the records review to have recent (<20 years old) depth to groundwater data was USGS Well ID 334024103200901. The records for this well indicate the depth to groundwater is currently between 50' and 100' bgs.

Due to the lack of recent (<20 years old) depth to groundwater data within a one-half mile radius of the subject site, and due to the possibility that the depth-to-groundwater may be greater than 50' bgs, EOG plans on installing a soil boring/temporary well at the site in order to obtain site-specific depth to groundwater data. The soil boring/temporary well will be installed in January 2022 and will be left open for approximately 72 hours prior to plugging in order to obtain depth to groundwater data. The temporary well will then be plugged and abandoned.

Copies of the reviewed depth-to-groundwater information are attached, as well as a Water Well Location Map, for the nearest water wells found outside of the 0.5-mile radius search area.

2.2 Wellhead Protection Area

Based upon the USGS and NMOSE information, no water wells were reported within a half-mile radius of the Site.

Upon review of the National Wetland Inventory Mapper, 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 into an area of undetermined flood hazard.

The Site is not located in a Karst Topography area.

2.3 Distance to Nearest Significant Watercourse

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

3.0 SITE ASSESSMENT

3.1 June 21, 2021 – Initial Site Inspection

On June 21, 2021, Ranger personnel mobilized to the Site to conduct an initial inspection of the tank battery area impacted by the historic release. Soil discoloration was noted to be present surrounding the base of one of the tanks. Ranger also observed that portions of the impact area appeared to have been historically excavated to a depth of approximately two feet bgs. Soil discoloration and staining were also observed in this excavated area. All impacts were noted to be contained within the tank battery secondary containment area.

During the site inspection, Ranger personnel also screened the affected soil area using an organic vapor monitor (OVM) and field chloride titration kit. The stained soils exhibited strong hydrocarbon odor and elevated OVM readings up to 1,872 ppm. No elevated field chloride readings were obtained. Two hand auger borings were installed within the affected area to depths of 7' and 9' bgs. Elevated OVM readings and hydrocarbon odors were documented to the terminal depths of each of these borings.

Based on the initial inspection results, the affected area was subsequently reported to the NMOCD (Incident # nAPP2117330665) and plans were made to return to the site to conduct a formal site assessment.

3.2 Tank Battery Relocation

Due to the proximity of the impacted area to the tanks within the secondary containment area, it was deemed necessary to relocate the tanks to allow for the performance of the site assessment and remediation efforts. In July and August 2021, representatives from EOG conducted relocation activities to move the tanks. Due to the amount of time required for planning and performing the relocation of the tanks, and further delays due to the unseasonal amount of precipitation received in the area, on September 16, 2021 EOG requested an extension from NMOCD for the submittal of the site characterization and remediation plan. The NMOCD approved of this request on September 17, 2021.

3.3 September 22, 2021 – Site Assessment

On September 22, 2021, Ranger personnel and representatives for EOG mobilized to the Site to assess the affected area. The assessment process included the installation of five test excavations, two hand auger soil borings, and the collection of soil samples for laboratory analysis. The test excavations were completed with a trackhoe capable of reaching a maximum depth of approximately 19 feet bgs. The attached *Assessment Sample Location Map* illustrates the assessment sampling locations.

A total of five test excavations (TH-1 through TH-5) were completed at the site. Test excavations TH-1 and TH-3 were completed within the observed approximate two-foot deep excavated area. Test excavations TH-2 and TH-4 were completed to the north and south, respectively, of the stained/excavated area. Test excavation TH-5 was located immediately east of the tank battery area on the well/facility pad.

The utility one-call completed for the Site indicated the presence of an active flowline operated by Targa Resources (Targa) immediately west of the western pad/facility boundary. Due to the presence of the active flowline, the assessment activities west of the tank battery area were completed with a hand auger for safety purposes. Two hand auger borings (TH-6 and TH-7) were installed and sampled immediately west of the impacted area along the well/facility pad boundary.

During the test excavation and hand auger boring installation process, Ranger personnel conducted field screening of the generated soils using an OVM and field chloride titration kit. The OVM screening of the encountered soils was conducted at the surface and at one-foot increments to the total test excavation and boring depths. The field chloride readings were collected at select intervals based upon field observations and the OVM results.

The field chloride titration results did not document any apparent elevated chloride concentrations in excess of the most stringent Table 1 Criteria. Thus, the OVM results were primarily utilized to determine the excavation/boring depths. All excavations/borings were advanced until OVM readings of 3 ppm or less were achieved, or in the case of test excavation TH-1, the test excavation was halted at a depth of 19' bgs which was the limitation of the trackhoe.

Discolored soils and significantly elevated OVM readings were encountered during the assessment process in test excavations TH-1 and TH-3. At the TH-1 location, a maximum OVM reading of 1,424 ppm was detected at an approximate depth of 9' bgs, which significantly declined by approximately 17'-19' bgs where readings of 17-65 ppm were obtained. The soils in test excavation TH-3 only exhibited significantly elevated OVM readings in the upper several feet of soil, with readings ranging from 597 ppm at the surface and declining to 7 ppm by a depth of three feet.

Soil samples were subsequently collected for laboratory analysis from each test excavation and hand auger boring in order to delineate the soil impacts. This included the collection of samples for laboratory analysis from the depth intervals exhibiting the highest OVM readings, from the excavation/boring total depths, and from other select intervals based upon the results of the field screening activities and visual observations of potential impact. A total of 21 soil samples were collected for laboratory analysis.

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.

The results of the laboratory analyses documented BTEX and/or TPH exceedances of the 19.15.29.12 NMAC Table 1 Closure Criteria for Soils Impacted by a Release (GW 51'-100') and/or the 19.15.29.13 NMAC Reclamation Criteria in select samples from test excavations TH-1 through TH-5. No impacts were detected to the west of the well/facility pad boundary in hand auger borings TH-6 and TH-7. No samples were found to contain elevated chloride in excess of 600 mg/Kg. The vertical extent of impact in each test excavation/boring was successfully delineated.

The soil sample analytical results are summarized in the attached soil analytical table. Copies of the laboratory analytical reports are also attached. Ranger notes that if the depth to groundwater at the site is found to be different than that assumed in this report (i.e., 51'-100' bgs) following the installation of the proposed soil boring/temporary well, then the site analytical results will have to be reevaluated using the appropriate 19.15.29.12 NMAC Table 1 Closure Criteria.

3.4 Proposed January 2022 Depth-to-Groundwater Investigation

As summarized in Section 2.1, above, due to the lack of recent (<20 years old) depth to groundwater data within a one-half mile radius of the subject site, and due to the possibility that the depth-to-groundwater may be greater than 50' bgs, EOG plans on installing a soil boring/temporary well at the site in order to obtain site-specific depth to groundwater data. The soil boring/temporary well will be installed in January 2022 and will be completed to a depth of approximately 55' bgs. Upon completion the soil boring/temporary well will be left open for approximately 72 hours prior to plugging in order to obtain depth to groundwater data. The temporary well will then be properly plugged and abandoned.

4.0 PROPOSED REMEDIATION PLAN

Upon completion of the depth-to-groundwater confirmation activities a Remediation Plan designed to bring the site into compliance with the appropriate 19.15.29.12 NMAC Table 1 Closure Criteria will be prepared and submitted for NMOCD approval.

5.0 SCHEDULE

The proposed soil boring/temporary well is scheduled to be installed in January 2022. An updated Site Assessment/Characterization Report and Remediation Plan will be prepared following this activity. It is estimated that the updated Site Assessment/Characterization Report and Remediation Plan can be prepared and submitted by March 2022.

FORMS C-141

(ORIGINAL RELEASE NOTIFICATION SECTION AND CURRENT SITE ASSESSMENT/CHARACTERIZATION SECTION)

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	nAPP2117330665
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

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

Location of Release Source

Latitude 33.68760 Longitude -103.34329
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Crossroads AFX Federal #1	Site Type Battery
Date Release Discovered 06/21/2021	API# *(if applicable)* 30-041-20841

Unit Letter	Section	Township	Range	County
P	22	7S	35E	Roosevelt

Surface Owner: ☑ State ☐ Federal ☐ Tribal ☐ Private (*Name:* _____)

Nature and Volume of Release

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

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

Cause of Release A third party environmental consultant found stained soils around the oil tank from an unknown release. The consultant firm estimates that the volume released is above the reportable threshold.

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State of New Mexico
Oil Conservation Division

Incident ID	NAPP2117330665
District RP	
Facility ID	
Application ID	

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

Initial Response

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

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

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

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

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

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

Signature: Chase Settle
Date: 06/22/2021

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

OCD Only

Received by: Ramona Marcus
Date: 6/28/2021

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2117330665
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? ***The depth to groundwater still has to be confirmed via the installation of a temporary monitoring well. On 12/14/2021 EOG requested an extension for this Site Assessment/Characterization Plan since there was no driller availability until the week of 1/10/2022. The NMOCD denied this request on 12/22/2021 and as such this plan has been submitted based upon the assumption that the depth to groundwater is between 51'-100'. EOG will be proceeding with the installation of the temporary monitor well in January 2022 in order to confirm the site-specific depth to groundwater.***	51'-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

***This data will be garnered through the installation of a temporary monitoring well at the subject site in January 2022.**

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State of New Mexico
Oil Conservation Division

Incident ID	nAPP2117330665
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Application ID	

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.

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: 01/14/2022

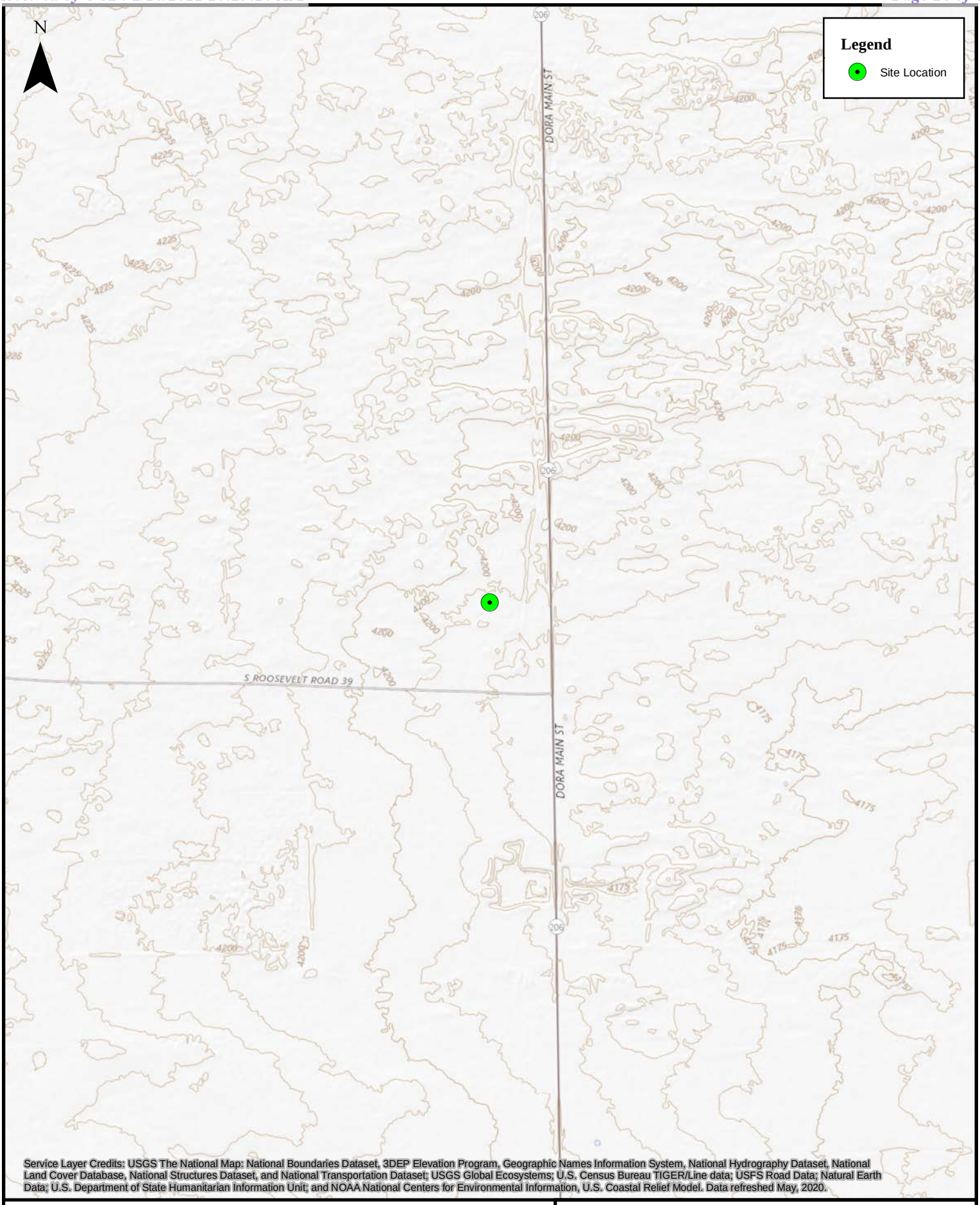
email: Chase_Settle@eogresources.com Telephone: 575-748-1471

OCD Only

Received by: _____ Date: _____

FIGURES

Topographic Map
Area Map
Water Well Location Map
National Wetland Inventory Map
FEMA Floodplain Map
Assessment Sample Location Map



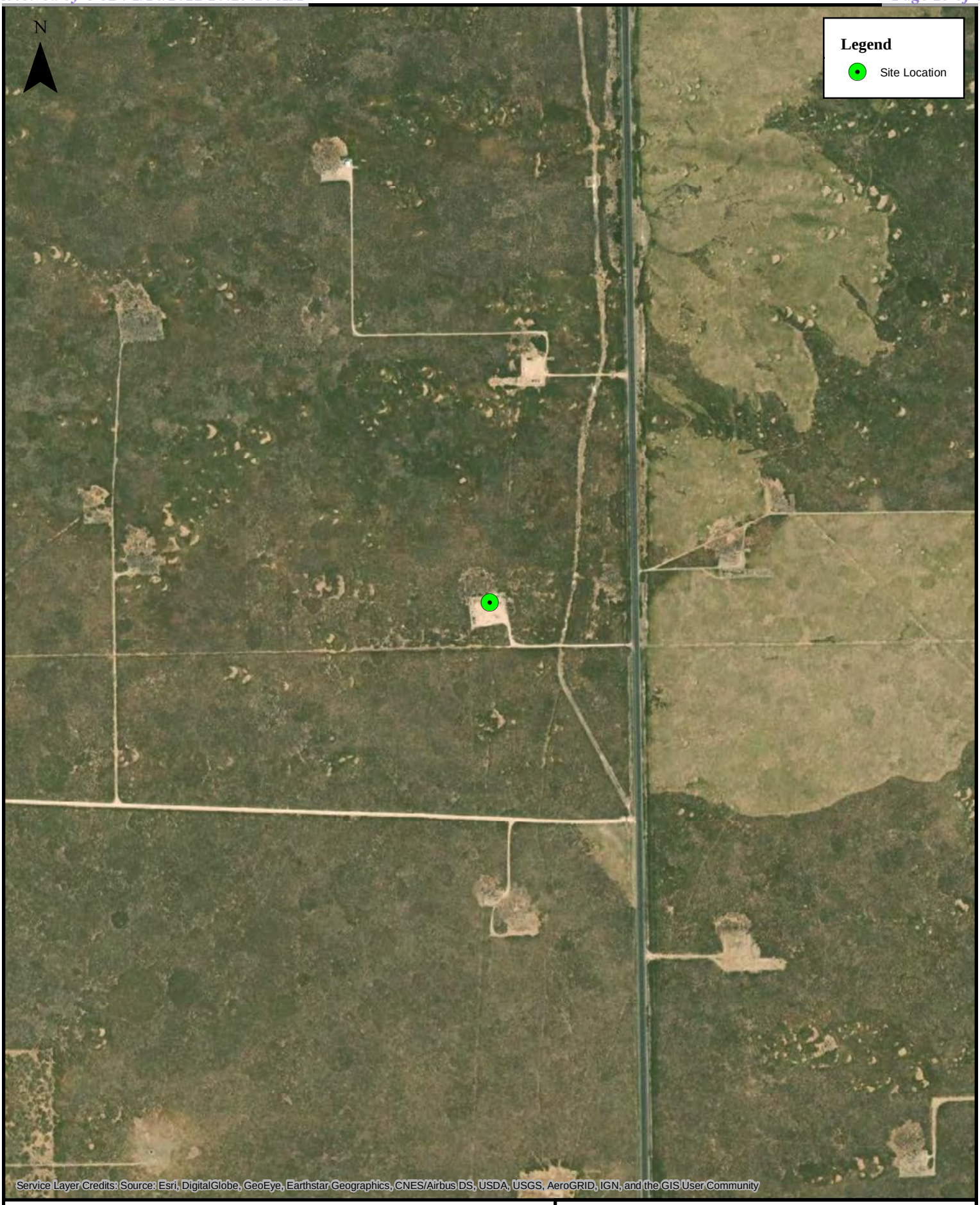
Service Layer Credits: USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau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

RANGER ENVIRONMENTAL SERVICES, INC.

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

1:24,000

Topographic Map
Crossroads AFX #1
EOG Resources, Inc.

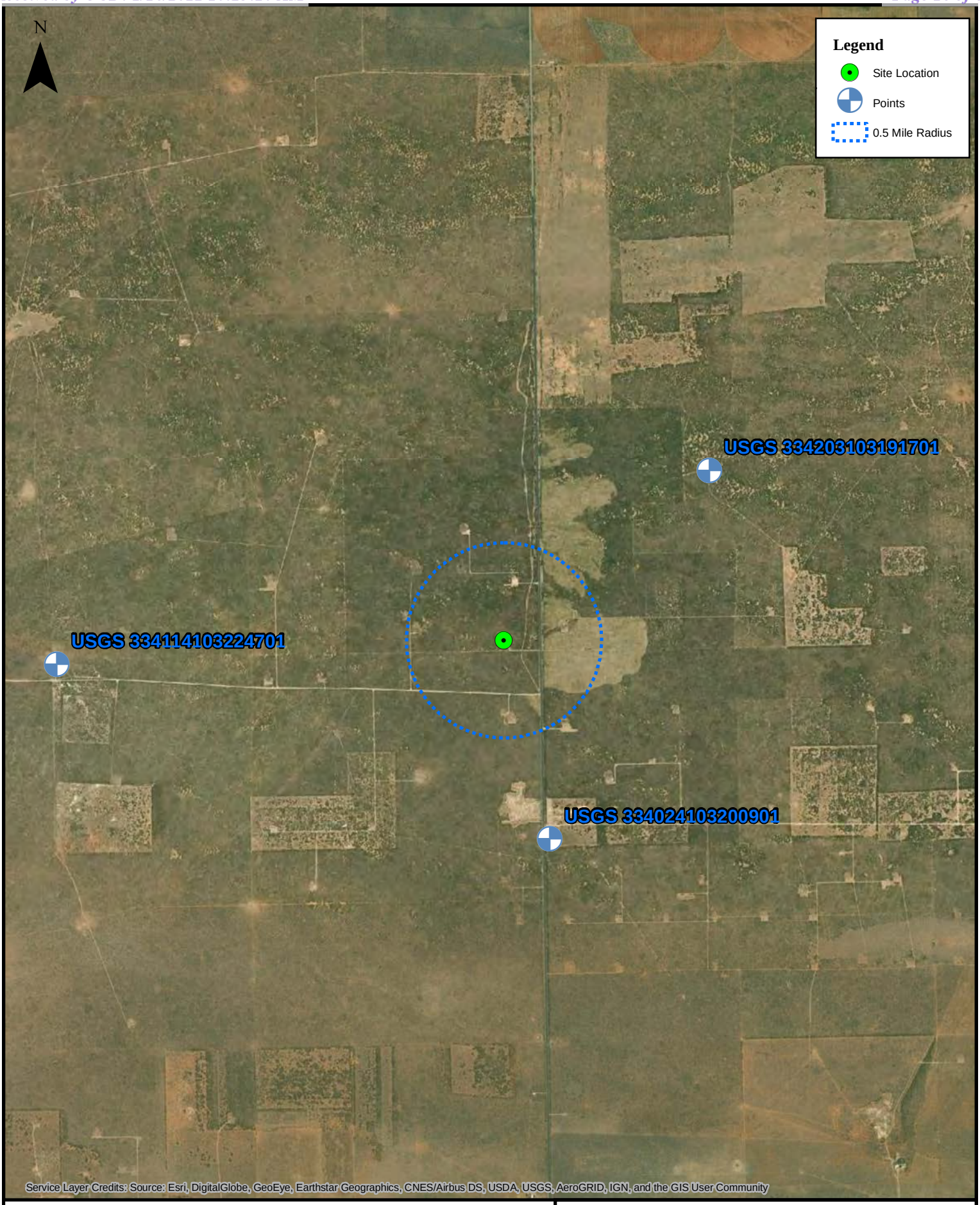


RANGER ENVIRONMENTAL SERVICES, INC.

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

1:10,000

Area Map
Crossroads AFX #1
EOG Resources, Inc.

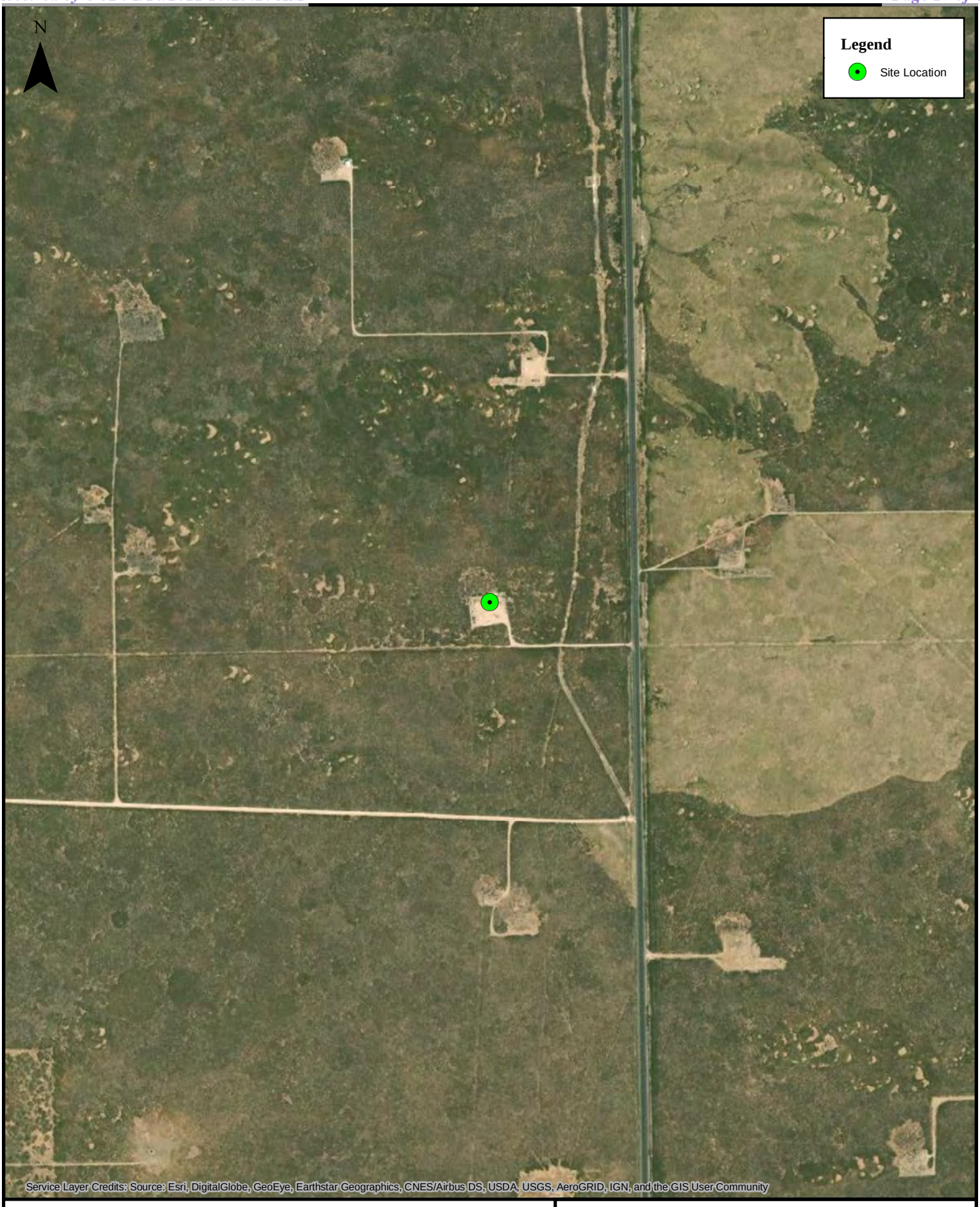


RANGER ENVIRONMENTAL SERVICES, INC.

0 1,000 2,000 4,000 6,000 8,000 Feet

1:40,000

Water Well Location Map
Crossroads AFX #1
EOG Resources, Inc.

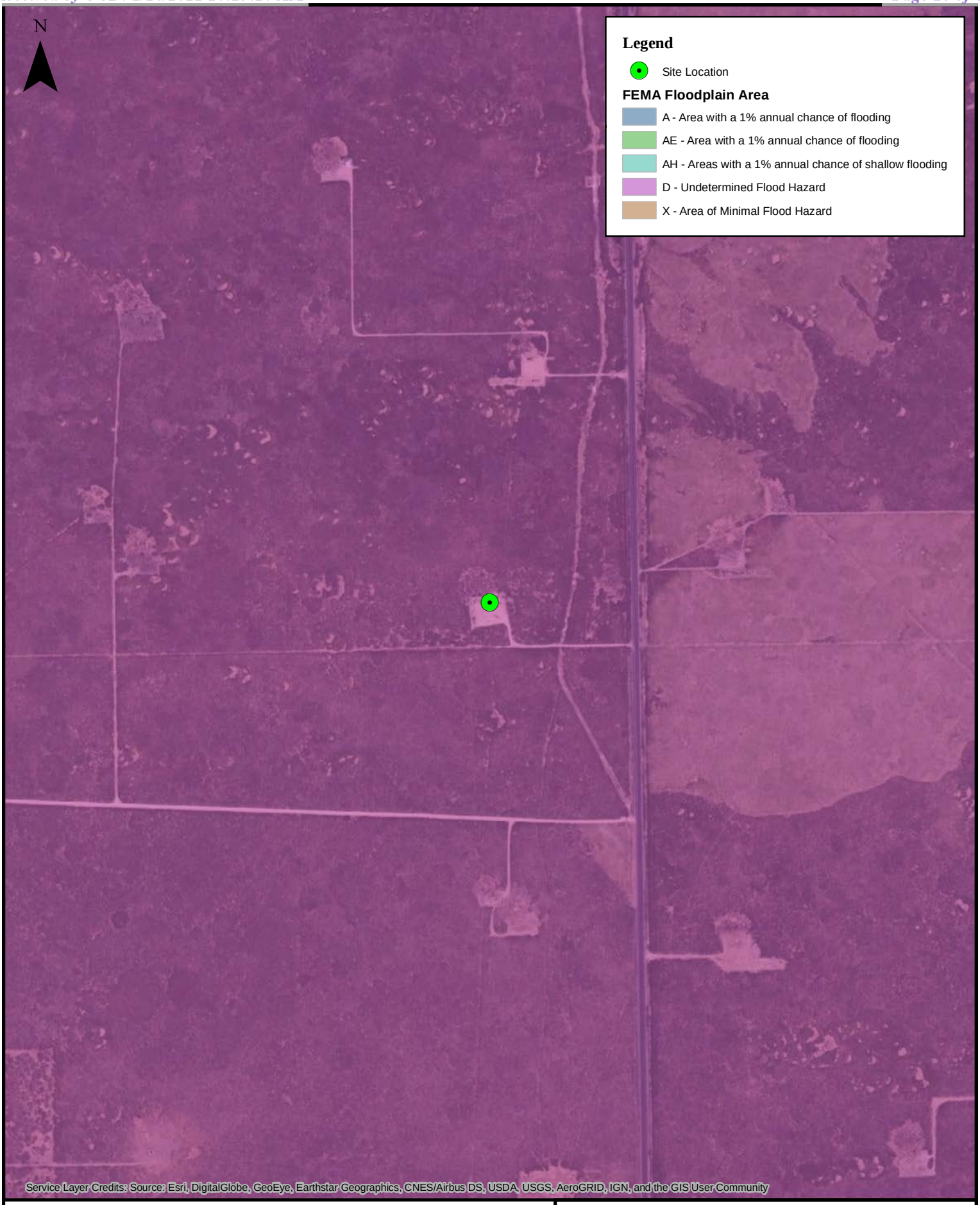


RANGER ENVIRONMENTAL SERVICES, INC.

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

1:10,000

National Wetland Inventory Map
Crossroads AFX #1
EOG Resources, Inc.



RANGER ENVIRONMENTAL SERVICES, INC.

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

1:10,000

FEMA Floodplain Map
Crossroads AFX #1
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.
Image Source: Ranger Environmental Services, Inc.
Image Date: 08/31/2021

RANGER ENVIRONMENTAL SERVICES, INC.

0 5 10 20 30 40 Feet

1:200

Assessment Sample Location Map
Crossroads AFX #1
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.
CROSSROADS AFX FEDERAL #1

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
September 22, 2021 Soil Samples													
TH-1/5'	9/22/2021	5'	6.3	35	21	58	**120.3**	2,000	1,900	3,300	**3,900**	**7,200**	<60
TH-1/9'	9/22/2021	9'	4.6	21	14	38	**77.6**	1,600	5,300	2,800	**6,900**	**9,700**	<60
TH-1/17'	9/22/2021	17'	<0.12	<0.23	<0.23	<0.47	<0.47	<23	87	86	87	173	<60
TH-1/19'	9/22/2021	19'	<0.12	<0.24	<0.24	<0.48	<0.48	<24	74	55	74	129	<60
TH-2/1'	9/22/2021	1'	<0.024	<0.049	<0.049	<0.098	<0.10	<4.9	99	340	99	**439**	<59
TH-2/3'	9/22/2021	3'	<0.024	<0.048	<0.048	<0.095	<0.10	<4.8	160	530	160	**690**	<60
TH-2/6'	9/22/2021	6'	<0.024	<0.048	<0.048	<0.096	<0.10	<4.8	90	350	90	440	<60
TH-3/0'	9/22/2021	0'	1.1	8.1	3.7	38	**50.9**	1,800	11,000	7,800	**12,800**	**20,600**	210
TH-3/4'	9/22/2021	4'	<0.025	<0.049	<0.049	<0.099	<0.10	<4.9	1,000	1,700	1,000	**2,800**	470
TH-3/6'	9/22/2021	6'	<0.024	<0.047	<0.047	<0.094	<0.09	<4.7	<8.8	<44	<8.8	<44	680
TH-4/1'	9/22/2021	1'	<0.024	<0.048	<0.048	<0.096	<0.10	<4.8	<7.9	<40	<7.9	<40	<60
TH-4/4'	9/22/2021	4'	<0.024	<0.048	<0.048	<0.096	<0.10	<4.8	<9.7	<49	<9.7	<49	<61
TH-4/6'	9/22/2021	6'	<0.025	<0.049	<0.049	<0.098	<0.10	<4.9	<10	<50	<10	<50	<60
TH-5/1'	9/22/2021	1'	<0.023	<0.047	<0.047	<0.093	<0.09	<4.7	790	2,000	790	**2,790**	<60
TH-5/4'	9/22/2021	4'	<0.024	<0.048	<0.048	<0.095	<0.10	<4.8	<9.0	<45	<9.0	<45	<60
TH-5/6'	9/22/2021	6'	<0.024	<0.048	<0.048	<0.097	<0.10	<4.8	<9.3	<47	<9.3	<47	<60
TH-6/1'	9/22/2021	1'	<0.024	<0.047	<0.047	<0.094	<0.09	<4.7	<9.4	<47	<9.4	<47	<59
TH-6/4'	9/22/2021	4'	<0.023	<0.047	<0.047	<0.094	<0.09	<4.7	<9.7	<48	<9.7	<48	<60
TH-6/6'	9/22/2021	6'	<0.024	<0.048	<0.048	<0.097	<0.10	<4.8	<8.8	<44	<8.8	<44	<59
TH-7/1'	9/22/2021	1'	<0.023	<0.047	<0.047	<0.093	<0.09	<4.7	<9.7	<48	<9.7	<48	<61
TH-7/4'	9/22/2021	4'	<0.024	<0.047	<0.047	<0.095	<0.09	<4.7	<8.2	<41	<8.2	<41	<60
TH-7/6'	9/22/2021	6'	<0.025	<0.049	<0.049	<0.099	<0.10	<4.9	<9.9	<49	<9.9	<49	<60
19.15.29.12 NMAC Table 1 Closure Criteria for Soils Impacted by a Release (GW 51'-100')			**10**	**---**	**---**	**---**	**50**	**---**	**---**	**---**	**1,000**	**2,500**	**10,000**
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

PHOTOGRAPHIC DOCUMENTATION

PHOTOGRAPH NO. 1 – A view of the Site during the June 21, 2021 site inspection. The view is towards the southeast.

(Approximate GPS: 33.687332, -103.343666)

PHOTOGRAPH NO. 2 – A view of the Site during the September 22, 2021 assessment activities. The view is towards the southwest.

PHOTOGRAPH NO. 3 – A view of the hand auger assessment activities on September 22, 2021. The view is towards the southwest.

(Approximate GPS: 33.687246, -103.343667)

ATTACHMENT 2

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

October 05, 2021

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

RE: Cross Roads AFX 1 OrderNo.: 2109C67

Dear Will Kierdorf:

Hall Environmental Analysis Laboratory received 22 sample(s) on 9/23/2021 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 **2109C67**
Date Reported: **10/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: TH-1/5'
Project: Cross Roads AFX 1
Collection Date: 9/22/2021 8:44:00 AM
Lab ID: 2109C67-001 **Matrix:** SOIL **Received Date:** 9/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	60		mg/Kg	20	9/29/2021 4:53:38 AM	62881
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	1900	470		mg/Kg	50	9/24/2021 2:57:22 PM	62795
Motor Oil Range Organics (MRO)	3300	2300		mg/Kg	50	9/24/2021 2:57:22 PM	62795
Surr: DNOP	0	70-130	S	%Rec	50	9/24/2021 2:57:22 PM	62795
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	2000	240		mg/Kg	50	9/24/2021 5:31:00 PM	62793
Surr: BFB	222	70-130	S	%Rec	50	9/24/2021 5:31:00 PM	62793
EPA METHOD 8021B: VOLATILES						Analyst: **mb**	
Benzene	6.3	1.2		mg/Kg	50	9/24/2021 5:31:00 PM	62793
Toluene	35	2.4		mg/Kg	50	9/24/2021 5:31:00 PM	62793
Ethylbenzene	21	2.4		mg/Kg	50	9/24/2021 5:31:00 PM	62793
Xylenes, Total	58	4.8		mg/Kg	50	9/24/2021 5:31:00 PM	62793
Surr: 4-Bromofluorobenzene	109	70-130		%Rec	50	9/24/2021 5:31:00 PM	62793

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 **2109C67**
Date Reported: **10/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: TH-1/9'
Project: Cross Roads AFX 1
Collection Date: 9/22/2021 8:51:00 AM
Lab ID: 2109C67-002 **Matrix:** SOIL **Received Date:** 9/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	60		mg/Kg	20	9/29/2021 5:30:53 AM	62881
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	5300	480		mg/Kg	50	9/24/2021 3:09:51 PM	62795
Motor Oil Range Organics (MRO)	2800	2400		mg/Kg	50	9/24/2021 3:09:51 PM	62795
Surr: DNOP	0	70-130	S	%Rec	50	9/24/2021 3:09:51 PM	62795
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	1600	99		mg/Kg	20	9/24/2021 5:51:00 PM	62793
Surr: BFB	226	70-130	S	%Rec	20	9/24/2021 5:51:00 PM	62793
EPA METHOD 8021B: VOLATILES						Analyst: **mb**	
Benzene	4.6	0.49		mg/Kg	20	9/24/2021 5:51:00 PM	62793
Toluene	21	0.99		mg/Kg	20	9/24/2021 5:51:00 PM	62793
Ethylbenzene	14	0.99		mg/Kg	20	9/24/2021 5:51:00 PM	62793
Xylenes, Total	38	2.0		mg/Kg	20	9/24/2021 5:51:00 PM	62793
Surr: 4-Bromofluorobenzene	133	70-130	S	%Rec	20	9/24/2021 5:51:00 PM	62793

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 **2109C67**
Date Reported: **10/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: TH-1/17'
Project: Cross Roads AFX 1
Collection Date: 9/22/2021 9:08:00 AM
Lab ID: 2109C67-003 **Matrix:** SOIL **Received Date:** 9/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**VP**
Chloride	ND	60		mg/Kg	20	9/29/2021 5:43:18 AM	62881
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**SB**
Diesel Range Organics (DRO)	87	10		mg/Kg	1	9/27/2021 9:46:45 PM	62795
Motor Oil Range Organics (MRO)	86	50		mg/Kg	1	9/27/2021 9:46:45 PM	62795
Surr: DNOP	96.9	70-130		%Rec	1	9/27/2021 9:46:45 PM	62795
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**mb**
Gasoline Range Organics (GRO)	ND	23		mg/Kg	5	9/24/2021 6:11:00 PM	62793
Surr: BFB	97.8	70-130		%Rec	5	9/24/2021 6:11:00 PM	62793
EPA METHOD 8021B: VOLATILES						Analyst:	**mb**
Benzene	ND	0.12		mg/Kg	5	9/24/2021 6:11:00 PM	62793
Toluene	ND	0.23		mg/Kg	5	9/24/2021 6:11:00 PM	62793
Ethylbenzene	ND	0.23		mg/Kg	5	9/24/2021 6:11:00 PM	62793
Xylenes, Total	ND	0.47		mg/Kg	5	9/24/2021 6:11:00 PM	62793
Surr: 4-Bromofluorobenzene	84.4	70-130		%Rec	5	9/24/2021 6:11:00 PM	62793

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 **2109C67**
Date Reported: **10/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: TH-1/19'
Project: Cross Roads AFX 1
Collection Date: 9/22/2021 9:10:00 AM
Lab ID: 2109C67-004 **Matrix:** SOIL **Received Date:** 9/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	60		mg/Kg	20	9/29/2021 5:55:43 AM	62881
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	74	9.6		mg/Kg	1	9/27/2021 9:22:18 PM	62795
Motor Oil Range Organics (MRO)	55	48		mg/Kg	1	9/27/2021 9:22:18 PM	62795
Surr: DNOP	100	70-130		%Rec	1	9/27/2021 9:22:18 PM	62795
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	ND	24		mg/Kg	5	9/24/2021 6:30:00 PM	62793
Surr: BFB	95.4	70-130		%Rec	5	9/24/2021 6:30:00 PM	62793
EPA METHOD 8021B: VOLATILES						Analyst: **mb**	
Benzene	ND	0.12		mg/Kg	5	9/24/2021 6:30:00 PM	62793
Toluene	ND	0.24		mg/Kg	5	9/24/2021 6:30:00 PM	62793
Ethylbenzene	ND	0.24		mg/Kg	5	9/24/2021 6:30:00 PM	62793
Xylenes, Total	ND	0.48		mg/Kg	5	9/24/2021 6:30:00 PM	62793
Surr: 4-Bromofluorobenzene	84.3	70-130		%Rec	5	9/24/2021 6:30:00 PM	62793

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 **2109C67**
Date Reported: **10/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: TH-2/1'
Project: Cross Roads AFX 1
Collection Date: 9/22/2021 10:17:00 AM
Lab ID: 2109C67-005 **Matrix:** SOIL
Received Date: 9/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	59		mg/Kg	20	9/29/2021 6:32:57 AM	62881
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	99	47		mg/Kg	5	9/28/2021 5:15:08 PM	62795
Motor Oil Range Organics (MRO)	340	240		mg/Kg	5	9/28/2021 5:15:08 PM	62795
Surr: DNOP	118	70-130		%Rec	5	9/28/2021 5:15:08 PM	62795
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/25/2021 12:22:17 AM	62793
Surr: BFB	98.9	70-130		%Rec	1	9/25/2021 12:22:17 AM	62793
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/25/2021 12:22:17 AM	62793
Toluene	ND	0.049		mg/Kg	1	9/25/2021 12:22:17 AM	62793
Ethylbenzene	ND	0.049		mg/Kg	1	9/25/2021 12:22:17 AM	62793
Xylenes, Total	ND	0.098		mg/Kg	1	9/25/2021 12:22:17 AM	62793
Surr: 4-Bromofluorobenzene	88.7	70-130		%Rec	1	9/25/2021 12:22:17 AM	62793

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 **2109C67**
Date Reported: **10/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: TH-2/3'
Project: Cross Roads AFX 1
Collection Date: 9/22/2021 10:20:00 AM
Lab ID: 2109C67-006 **Matrix:** SOIL
Received Date: 9/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	60		mg/Kg	20	9/29/2021 6:45:22 AM	62881
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	160	19		mg/Kg	2	9/30/2021 8:14:25 AM	62828
Motor Oil Range Organics (MRO)	530	97		mg/Kg	2	9/30/2021 8:14:25 AM	62828
Surr: DNOP	89.5	70-130		%Rec	2	9/30/2021 8:14:25 AM	62828
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/26/2021 3:07:52 PM	62821
Surr: BFB	102	70-130		%Rec	1	9/26/2021 3:07:52 PM	62821
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/26/2021 3:07:52 PM	62821
Toluene	ND	0.048		mg/Kg	1	9/26/2021 3:07:52 PM	62821
Ethylbenzene	ND	0.048		mg/Kg	1	9/26/2021 3:07:52 PM	62821
Xylenes, Total	ND	0.095		mg/Kg	1	9/26/2021 3:07:52 PM	62821
Surr: 4-Bromofluorobenzene	87.5	70-130		%Rec	1	9/26/2021 3:07:52 PM	62821

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 **2109C67**
Date Reported: **10/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: TH-2/6'
Project: Cross Roads AFX 1
Collection Date: 9/22/2021 10:25:00 AM
Lab ID: 2109C67-007 **Matrix:** SOIL
Received Date: 9/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	9/28/2021 10:44:36 PM	62886
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	90	20		mg/Kg	2	9/28/2021 5:10:17 PM	62828
Motor Oil Range Organics (MRO)	350	98		mg/Kg	2	9/28/2021 5:10:17 PM	62828
Surr: DNOP	94.7	70-130		%Rec	2	9/28/2021 5:10:17 PM	62828
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/26/2021 4:18:43 PM	62821
Surr: BFB	100	70-130		%Rec	1	9/26/2021 4:18:43 PM	62821
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/26/2021 4:18:43 PM	62821
Toluene	ND	0.048		mg/Kg	1	9/26/2021 4:18:43 PM	62821
Ethylbenzene	ND	0.048		mg/Kg	1	9/26/2021 4:18:43 PM	62821
Xylenes, Total	ND	0.096		mg/Kg	1	9/26/2021 4:18:43 PM	62821
Surr: 4-Bromofluorobenzene	88.1	70-130		%Rec	1	9/26/2021 4:18:43 PM	62821

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 **2109C67**
Date Reported: **10/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: TH-3/0'
Project: Cross Roads AFX 1
Collection Date: 9/22/2021 9:41:00 AM
Lab ID: 2109C67-008 **Matrix:** SOIL **Received Date:** 9/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	210	60		mg/Kg	20	9/28/2021 11:21:49 PM	62886
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	11000	980		mg/Kg	100	9/27/2021 2:57:31 PM	62828
Motor Oil Range Organics (MRO)	7800	4900		mg/Kg	100	9/27/2021 2:57:31 PM	62828
Surr: DNOP	0	70-130	S	%Rec	100	9/27/2021 2:57:31 PM	62828
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	1800	250		mg/Kg	50	9/26/2021 5:29:09 PM	62821
Surr: BFB	204	70-130	S	%Rec	50	9/26/2021 5:29:09 PM	62821
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	1.1	0.98		mg/Kg	50	9/26/2021 5:29:09 PM	62821
Toluene	8.1	2.5		mg/Kg	50	9/26/2021 5:29:09 PM	62821
Ethylbenzene	3.7	2.5		mg/Kg	50	9/26/2021 5:29:09 PM	62821
Xylenes, Total	38	4.9		mg/Kg	50	9/26/2021 5:29:09 PM	62821
Surr: 4-Bromofluorobenzene	95.9	70-130		%Rec	50	9/26/2021 5:29:09 PM	62821

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

Qualifiers:

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

Analytical Report
Lab Order **2109C67**
Date Reported: **10/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: TH-3/4'
Project: Cross Roads AFX 1
Collection Date: 9/22/2021 9:52:00 AM
Lab ID: 2109C67-009 **Matrix:** SOIL **Received Date:** 9/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	470	60		mg/Kg	20	9/28/2021 11:59:01 PM	62886
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	1000	93		mg/Kg	10	9/28/2021 5:47:27 PM	62828
Motor Oil Range Organics (MRO)	1700	460		mg/Kg	10	9/28/2021 5:47:27 PM	62828
Surr: DNOP	0	70-130	S	%Rec	10	9/28/2021 5:47:27 PM	62828
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/26/2021 5:52:36 PM	62821
Surr: BFB	99.1	70-130		%Rec	1	9/26/2021 5:52:36 PM	62821
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	9/26/2021 5:52:36 PM	62821
Toluene	ND	0.049		mg/Kg	1	9/26/2021 5:52:36 PM	62821
Ethylbenzene	ND	0.049		mg/Kg	1	9/26/2021 5:52:36 PM	62821
Xylenes, Total	ND	0.099		mg/Kg	1	9/26/2021 5:52:36 PM	62821
Surr: 4-Bromofluorobenzene	85.9	70-130		%Rec	1	9/26/2021 5:52:36 PM	62821

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 **2109C67**
Date Reported: **10/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: TH-3/6'
Project: Cross Roads AFX 1
Collection Date: 9/22/2021 9:55:00 AM
Lab ID: 2109C67-010 **Matrix:** SOIL
Received Date: 9/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	680	60		mg/Kg	20	9/29/2021 12:11:26 AM	62886
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	8.8		mg/Kg	1	9/27/2021 5:04:19 PM	62828
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	9/27/2021 5:04:19 PM	62828
Surr: DNOP	103	70-130		%Rec	1	9/27/2021 5:04:19 PM	62828
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/26/2021 6:16:01 PM	62821
Surr: BFB	98.5	70-130		%Rec	1	9/26/2021 6:16:01 PM	62821
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/26/2021 6:16:01 PM	62821
Toluene	ND	0.047		mg/Kg	1	9/26/2021 6:16:01 PM	62821
Ethylbenzene	ND	0.047		mg/Kg	1	9/26/2021 6:16:01 PM	62821
Xylenes, Total	ND	0.094		mg/Kg	1	9/26/2021 6:16:01 PM	62821
Surr: 4-Bromofluorobenzene	86.4	70-130		%Rec	1	9/26/2021 6:16:01 PM	62821

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 **2109C67**
Date Reported: **10/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: TH-4/1'
Project: Cross Roads AFX 1
Collection Date: 9/22/2021 11:06:00 AM
Lab ID: 2109C67-011 **Matrix:** SOIL
Received Date: 9/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	9/29/2021 12:23:51 AM	62886
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	7.9		mg/Kg	1	9/27/2021 5:28:08 PM	62828
Motor Oil Range Organics (MRO)	ND	40		mg/Kg	1	9/27/2021 5:28:08 PM	62828
Surr: DNOP	99.7	70-130		%Rec	1	9/27/2021 5:28:08 PM	62828
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/26/2021 6:39:32 PM	62821
Surr: BFB	102	70-130		%Rec	1	9/26/2021 6:39:32 PM	62821
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/26/2021 6:39:32 PM	62821
Toluene	ND	0.048		mg/Kg	1	9/26/2021 6:39:32 PM	62821
Ethylbenzene	ND	0.048		mg/Kg	1	9/26/2021 6:39:32 PM	62821
Xylenes, Total	ND	0.096		mg/Kg	1	9/26/2021 6:39:32 PM	62821
Surr: 4-Bromofluorobenzene	89.1	70-130		%Rec	1	9/26/2021 6:39:32 PM	62821

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 **2109C67**
Date Reported: **10/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: TH-4/4'
Project: Cross Roads AFX 1
Collection Date: 9/22/2021 11:09:00 AM
Lab ID: 2109C67-012 **Matrix:** SOIL
Received Date: 9/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	61		mg/Kg	20	9/29/2021 12:36:15 AM	62886
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/27/2021 5:51:57 PM	62828
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/27/2021 5:51:57 PM	62828
Surr: DNOP	96.3	70-130		%Rec	1	9/27/2021 5:51:57 PM	62828
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/26/2021 9:00:40 PM	62821
Surr: BFB	102	70-130		%Rec	1	9/26/2021 9:00:40 PM	62821
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/26/2021 9:00:40 PM	62821
Toluene	ND	0.048		mg/Kg	1	9/26/2021 9:00:40 PM	62821
Ethylbenzene	ND	0.048		mg/Kg	1	9/26/2021 9:00:40 PM	62821
Xylenes, Total	ND	0.096		mg/Kg	1	9/26/2021 9:00:40 PM	62821
Surr: 4-Bromofluorobenzene	90.1	70-130		%Rec	1	9/26/2021 9:00:40 PM	62821

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 **2109C67**
Date Reported: **10/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: TH-4/6'
Project: Cross Roads AFX 1
Collection Date: 9/22/2021 11:15:00 AM
Lab ID: 2109C67-013 **Matrix:** SOIL
Received Date: 9/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	9/29/2021 1:13:27 AM	62886
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/27/2021 6:15:43 PM	62828
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/27/2021 6:15:43 PM	62828
Surr: DNOP	95.6	70-130		%Rec	1	9/27/2021 6:15:43 PM	62828
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/26/2021 9:24:14 PM	62821
Surr: BFB	102	70-130		%Rec	1	9/26/2021 9:24:14 PM	62821
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	9/26/2021 9:24:14 PM	62821
Toluene	ND	0.049		mg/Kg	1	9/26/2021 9:24:14 PM	62821
Ethylbenzene	ND	0.049		mg/Kg	1	9/26/2021 9:24:14 PM	62821
Xylenes, Total	ND	0.098		mg/Kg	1	9/26/2021 9:24:14 PM	62821
Surr: 4-Bromofluorobenzene	90.5	70-130		%Rec	1	9/26/2021 9:24:14 PM	62821

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 **2109C67**
Date Reported: **10/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: TH-5/1'
Project: Cross Roads AFX 1
Collection Date: 9/22/2021 11:34:00 AM
Lab ID: 2109C67-014 **Matrix:** SOIL
Received Date: 9/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	9/29/2021 1:25:52 AM	62886
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	790	88		mg/Kg	10	9/28/2021 4:45:11 PM	62828
Motor Oil Range Organics (MRO)	2000	440		mg/Kg	10	9/28/2021 4:45:11 PM	62828
Surr: DNOP	0	70-130	S	%Rec	10	9/28/2021 4:45:11 PM	62828
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/26/2021 9:47:48 PM	62821
Surr: BFB	101	70-130		%Rec	1	9/26/2021 9:47:48 PM	62821
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	9/26/2021 9:47:48 PM	62821
Toluene	ND	0.047		mg/Kg	1	9/26/2021 9:47:48 PM	62821
Ethylbenzene	ND	0.047		mg/Kg	1	9/26/2021 9:47:48 PM	62821
Xylenes, Total	ND	0.093		mg/Kg	1	9/26/2021 9:47:48 PM	62821
Surr: 4-Bromofluorobenzene	88.8	70-130		%Rec	1	9/26/2021 9:47:48 PM	62821

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 **2109C67**
Date Reported: **10/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: TH-5/4'
Project: Cross Roads AFX 1
Collection Date: 9/22/2021 11:36:00 AM
Lab ID: 2109C67-015 **Matrix:** SOIL
Received Date: 9/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	9/29/2021 1:38:16 AM	62886
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	9/27/2021 6:39:27 PM	62828
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	9/27/2021 6:39:27 PM	62828
Surr: DNOP	95.4	70-130		%Rec	1	9/27/2021 6:39:27 PM	62828
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/26/2021 10:11:23 PM	62821
Surr: BFB	101	70-130		%Rec	1	9/26/2021 10:11:23 PM	62821
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/26/2021 10:11:23 PM	62821
Toluene	ND	0.048		mg/Kg	1	9/26/2021 10:11:23 PM	62821
Ethylbenzene	ND	0.048		mg/Kg	1	9/26/2021 10:11:23 PM	62821
Xylenes, Total	ND	0.095		mg/Kg	1	9/26/2021 10:11:23 PM	62821
Surr: 4-Bromofluorobenzene	89.8	70-130		%Rec	1	9/26/2021 10:11:23 PM	62821

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 **2109C67**
Date Reported: **10/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: TH-5/6'
Project: Cross Roads AFX 1
Collection Date: 9/22/2021 11:39:00 AM
Lab ID: 2109C67-016 **Matrix:** SOIL
Received Date: 9/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	9/29/2021 1:50:40 AM	62886
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	9/27/2021 7:03:11 PM	62828
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/27/2021 7:03:11 PM	62828
Surr: DNOP	93.2	70-130		%Rec	1	9/27/2021 7:03:11 PM	62828
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/26/2021 10:35:01 PM	62821
Surr: BFB	101	70-130		%Rec	1	9/26/2021 10:35:01 PM	62821
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/26/2021 10:35:01 PM	62821
Toluene	ND	0.048		mg/Kg	1	9/26/2021 10:35:01 PM	62821
Ethylbenzene	ND	0.048		mg/Kg	1	9/26/2021 10:35:01 PM	62821
Xylenes, Total	ND	0.097		mg/Kg	1	9/26/2021 10:35:01 PM	62821
Surr: 4-Bromofluorobenzene	89.2	70-130		%Rec	1	9/26/2021 10:35:01 PM	62821

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 **2109C67**
Date Reported: **10/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: TH-6/1'
Project: Cross Roads AFX 1
Collection Date: 9/22/2021 12:09:00 PM
Lab ID: 2109C67-017 **Matrix:** SOIL **Received Date:** 9/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	59		mg/Kg	20	9/29/2021 2:03:04 AM	62886
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	9/27/2021 3:26:52 PM	62828
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/27/2021 3:26:52 PM	62828
Surr: DNOP	97.0	70-130		%Rec	1	9/27/2021 3:26:52 PM	62828
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/26/2021 10:58:36 PM	62821
Surr: BFB	101	70-130		%Rec	1	9/26/2021 10:58:36 PM	62821
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/26/2021 10:58:36 PM	62821
Toluene	ND	0.047		mg/Kg	1	9/26/2021 10:58:36 PM	62821
Ethylbenzene	ND	0.047		mg/Kg	1	9/26/2021 10:58:36 PM	62821
Xylenes, Total	ND	0.094		mg/Kg	1	9/26/2021 10:58:36 PM	62821
Surr: 4-Bromofluorobenzene	88.1	70-130		%Rec	1	9/26/2021 10:58:36 PM	62821

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 **2109C67**
Date Reported: **10/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: TH-6/4'
Project: Cross Roads AFX 1
Collection Date: 9/22/2021 12:18:00 PM
Lab ID: 2109C67-018 **Matrix:** SOIL **Received Date:** 9/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	9/29/2021 2:15:28 AM	62886
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/27/2021 7:26:56 PM	62828
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/27/2021 7:26:56 PM	62828
Surr: DNOP	90.2	70-130		%Rec	1	9/27/2021 7:26:56 PM	62828
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/26/2021 11:22:17 PM	62821
Surr: BFB	101	70-130		%Rec	1	9/26/2021 11:22:17 PM	62821
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	9/26/2021 11:22:17 PM	62821
Toluene	ND	0.047		mg/Kg	1	9/26/2021 11:22:17 PM	62821
Ethylbenzene	ND	0.047		mg/Kg	1	9/26/2021 11:22:17 PM	62821
Xylenes, Total	ND	0.094		mg/Kg	1	9/26/2021 11:22:17 PM	62821
Surr: 4-Bromofluorobenzene	88.8	70-130		%Rec	1	9/26/2021 11:22:17 PM	62821

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 **2109C67**
Date Reported: **10/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: TH-6/6'
Project: Cross Roads AFX 1
Collection Date: 9/22/2021 12:29:00 PM
Lab ID: 2109C67-019 **Matrix:** SOIL
Received Date: 9/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	59		mg/Kg	20	9/29/2021 2:27:52 AM	62886
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	8.8		mg/Kg	1	9/27/2021 4:14:42 PM	62828
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	9/27/2021 4:14:42 PM	62828
Surr: DNOP	97.2	70-130		%Rec	1	9/27/2021 4:14:42 PM	62828
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/26/2021 11:45:51 PM	62821
Surr: BFB	99.2	70-130		%Rec	1	9/26/2021 11:45:51 PM	62821
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/26/2021 11:45:51 PM	62821
Toluene	ND	0.048		mg/Kg	1	9/26/2021 11:45:51 PM	62821
Ethylbenzene	ND	0.048		mg/Kg	1	9/26/2021 11:45:51 PM	62821
Xylenes, Total	ND	0.097		mg/Kg	1	9/26/2021 11:45:51 PM	62821
Surr: 4-Bromofluorobenzene	87.7	70-130		%Rec	1	9/26/2021 11:45:51 PM	62821

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 **2109C67**
Date Reported: **10/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: TH-7/1'
Project: Cross Roads AFX 1
Collection Date: 9/22/2021 12:32:00 PM
Lab ID: 2109C67-020 **Matrix:** SOIL
Received Date: 9/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	61		mg/Kg	20	9/29/2021 2:40:17 AM	62886
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/27/2021 7:50:43 PM	62828
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/27/2021 7:50:43 PM	62828
Surr: DNOP	98.8	70-130		%Rec	1	9/27/2021 7:50:43 PM	62828
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/27/2021 12:09:23 AM	62821
Surr: BFB	101	70-130		%Rec	1	9/27/2021 12:09:23 AM	62821
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	9/27/2021 12:09:23 AM	62821
Toluene	ND	0.047		mg/Kg	1	9/27/2021 12:09:23 AM	62821
Ethylbenzene	ND	0.047		mg/Kg	1	9/27/2021 12:09:23 AM	62821
Xylenes, Total	ND	0.093		mg/Kg	1	9/27/2021 12:09:23 AM	62821
Surr: 4-Bromofluorobenzene	88.6	70-130		%Rec	1	9/27/2021 12:09:23 AM	62821

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

Qualifiers:

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

Analytical Report
Lab Order **2109C67**
Date Reported: **10/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: TH-7/4'
Project: Cross Roads AFX 1
Collection Date: 9/22/2021 12:41:00 PM
Lab ID: 2109C67-021 **Matrix:** SOIL
Received Date: 9/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	9/29/2021 2:52:42 AM	62886
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	8.2		mg/Kg	1	9/27/2021 8:14:28 PM	62828
Motor Oil Range Organics (MRO)	ND	41		mg/Kg	1	9/27/2021 8:14:28 PM	62828
Surr: DNOP	94.1	70-130		%Rec	1	9/27/2021 8:14:28 PM	62828
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/27/2021 12:32:52 AM	62821
Surr: BFB	102	70-130		%Rec	1	9/27/2021 12:32:52 AM	62821
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/27/2021 12:32:52 AM	62821
Toluene	ND	0.047		mg/Kg	1	9/27/2021 12:32:52 AM	62821
Ethylbenzene	ND	0.047		mg/Kg	1	9/27/2021 12:32:52 AM	62821
Xylenes, Total	ND	0.095		mg/Kg	1	9/27/2021 12:32:52 AM	62821
Surr: 4-Bromofluorobenzene	90.8	70-130		%Rec	1	9/27/2021 12:32:52 AM	62821

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 **2109C67**
Date Reported: **10/5/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: TH-7/6'
Project: Cross Roads AFX 1
Collection Date: 9/22/2021 12:47:00 PM
Lab ID: 2109C67-022 **Matrix:** SOIL
Received Date: 9/23/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	9/29/2021 3:05:06 AM	62886
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/27/2021 8:38:13 PM	62828
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/27/2021 8:38:13 PM	62828
Surr: DNOP	90.4	70-130		%Rec	1	9/27/2021 8:38:13 PM	62828
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/27/2021 1:19:49 AM	62821
Surr: BFB	105	70-130		%Rec	1	9/27/2021 1:19:49 AM	62821
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	9/27/2021 1:19:49 AM	62821
Toluene	ND	0.049		mg/Kg	1	9/27/2021 1:19:49 AM	62821
Ethylbenzene	ND	0.049		mg/Kg	1	9/27/2021 1:19:49 AM	62821
Xylenes, Total	ND	0.099		mg/Kg	1	9/27/2021 1:19:49 AM	62821
Surr: 4-Bromofluorobenzene	92.3	70-130		%Rec	1	9/27/2021 1:19:49 AM	62821

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#: **2109C67**

05-Oct-21

Client: EOG

Project: Cross Roads AFX 1

Sample ID: **MB-62886** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **62886** RunNo: **81636**
Prep Date: **9/28/2021** Analysis Date: **9/28/2021** SeqNo: **2885287** Units: **mg/Kg**

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

Sample ID: **LCS-62886** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **62886** RunNo: **81636**
Prep Date: **9/28/2021** Analysis Date: **9/28/2021** SeqNo: **2885288** Units: **mg/Kg**

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

Sample ID: **MB-62881** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **62881** RunNo: **81605**
Prep Date: **9/28/2021** Analysis Date: **9/29/2021** SeqNo: **2886065** Units: **mg/Kg**

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

Sample ID: **LCS-62881** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **62881** RunNo: **81605**
Prep Date: **9/28/2021** Analysis Date: **9/29/2021** SeqNo: **2886066** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.1	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#: **2109C67**
05-Oct-21

Client: EOG
Project: Cross Roads AFX 1

Sample ID: **MB-62795**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **62795**	RunNo: **81548**
Prep Date: **9/23/2021**	Analysis Date: **9/24/2021**	SeqNo: **2881822** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		107	70	130			

Sample ID: **LCS-62795**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **62795**	RunNo: **81548**
Prep Date: **9/23/2021**	Analysis Date: **9/24/2021**	SeqNo: **2881823** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	99.2	68.9	135			
Surr: DNOP	4.8		5.000		96.4	70	130			

Sample ID: **MB-62828**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **62828**	RunNo: **81612**
Prep Date: **9/24/2021**	Analysis Date: **9/27/2021**	SeqNo: **2884782** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.5		10.00		95.5	70	130			

Sample ID: **LCS-62828**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **62828**	RunNo: **81612**
Prep Date: **9/24/2021**	Analysis Date: **9/27/2021**	SeqNo: **2884783** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	89.3	68.9	135			
Surr: DNOP	4.7		5.000		94.2	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#: **2109C67**

05-Oct-21

Client: EOG

Project: Cross Roads AFX 1

Sample ID: **lcs-62793**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **62793**	RunNo: **81547**
Prep Date: **9/23/2021**	Analysis Date: **9/24/2021**	SeqNo: **2881959** 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	110	78.6	131			
Surr: BFB	1000		1000		101	70	130			

Sample ID: **mb-62793**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **62793**	RunNo: **81547**
Prep Date: **9/23/2021**	Analysis Date: **9/24/2021**	SeqNo: **2881960** 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	960		1000		95.6	70	130			

Sample ID: **mb-62821**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **62821**	RunNo: **81561**
Prep Date: **9/24/2021**	Analysis Date: **9/26/2021**	SeqNo: **2882172** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		100	70	130			

Sample ID: **lcs-62821**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **62821**	RunNo: **81561**
Prep Date: **9/24/2021**	Analysis Date: **9/26/2021**	SeqNo: **2882173** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	111	78.6	131			
Surr: BFB	1100		1000		113	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#: **2109C67**

05-Oct-21

Client: EOG

Project: Cross Roads AFX 1

Sample ID: **lcs-62793**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **62793**	RunNo: **81547**
Prep Date: **9/23/2021**	Analysis Date: **9/24/2021**	SeqNo: **2881994** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	1.000	0	87.9	80	120			
Toluene	0.89	0.050	1.000	0	89.1	80	120			
Ethylbenzene	0.90	0.050	1.000	0	90.1	80	120			
Xylenes, Total	2.7	0.10	3.000	0	90.4	80	120			
Surr: 4-Bromofluorobenzene	0.79		1.000		78.9	70	130			

Sample ID: **mb-62793**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **62793**	RunNo: **81547**
Prep Date: **9/23/2021**	Analysis Date: **9/24/2021**	SeqNo: **2881995** 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		81.0	70	130			

Sample ID: **mb-62821**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **62821**	RunNo: **81561**
Prep Date: **9/24/2021**	Analysis Date: **9/26/2021**	SeqNo: **2882203** 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	0.89		1.000		88.6	70	130			

Sample ID: **LCS-62821**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **62821**	RunNo: **81561**
Prep Date: **9/24/2021**	Analysis Date: **9/26/2021**	SeqNo: **2882204** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	1.000	0	88.2	80	120			
Toluene	0.91	0.050	1.000	0	91.1	80	120			
Ethylbenzene	0.91	0.050	1.000	0	91.5	80	120			
Xylenes, Total	2.7	0.10	3.000	0	90.1	80	120			
Surr: 4-Bromofluorobenzene	0.90		1.000		89.7	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
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: 2109C67 RcptNo: 1

Received By: Cheyenne Cason 9/23/2021 7:30:00 AM

Completed By: Sean Livingston 9/23/2021 8:38:54 AM

Reviewed By: KPG 9/23/21

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: JR 9/23/21

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	2.6	Good				
2	2.9	Good				

Chain-of-Custody Record

Client: EOG-Artesia / Ranger Env.

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

Ranger: PO Box 201179, Austin TX 78720

Phone #: 521-335-1785

email or Fax#: Will@RangerEnv.com

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

Accreditation: ☐ Az Compliance
■ NELAC ☐ Other

■ EDD (Type) Excel

Turn-Around Time: 5 days
☒ Standard ☐ Rush

Project Name: CROSS ROADS AFX #1

Project #: 5375

Project Manager: W. Kierdorf

Sampler: W. KIERDORF

On Ice: ☒ Yes ☐ No

# of Coolers: 2 2.7 - 0.1 = 2.6

Cooler Temp (including CF): 3.0 - 0.1 = 2.9

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. 2109607	BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride (EPA 300)
9/22/21	0844	SOIL	TH-1/5'	1 x 4oz JAR	ICE	001	X	X	X
	0851		TH-1/9'			002			
	0908		TH-1/17'			003			
	0910		TH-1/19			004			
	1017		TH-2/1'			005			
	1020		TH-2/3'			006			
	1025		TH-2/6'			007			
	0941		TH-3/0'			008			
	0952		TH-3/4'			009			
	0955		TH-3/6'			010			
	1105		TH-4/1'			011			
	1109		TH-4/4'			012			

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
9/22/21	1432				9/22/21	1432
9/22/21	1900		one courier		9/23/21	0230

Remarks: Bill to EOG Artesia

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: Cross Roads AFX #1

Project #: 5375

Project Manager: W. Kierdorf

Sampler: W. KIERDORF

On Ice: ☒ Yes ☐ No

# of Coolers: 2 2.7-0.1=2.6

Cooler Temp(including CF): 3.0-0.1=2.9

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.	BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride (EPA 300)
9/22/21	1115	SOIL	TH-4/6'	1 x 4oz JAR	ICE	013	X	X	X
	1134		TH-5/1'			014			
	1135		TH-5/4'			015			
	1139		TH-5/6'			016			
	1209		TH-6/1'			017			
	1218		TH-6/4'			018			
	1229		TH-6/6'			019			
	1232		TH-7/1'			020			
	1241		TH-7/4'			021			
	1247		TH-7/6'			022			

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
9/22/21	1432				9/22/21	1437
9/22/21	1900				9/23/21	0730

Remarks: Bill to EOG Artesia

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

ATTACHMENT 3

WATER WELL RECORDS

Click to hideNews Bulletins

- Explore the *NEW* USGS National Water Dashboard interactive map to access real-time water data from over 13,500 stations nationwide.
- Full News

Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

site_no list =
- 334024103200901

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

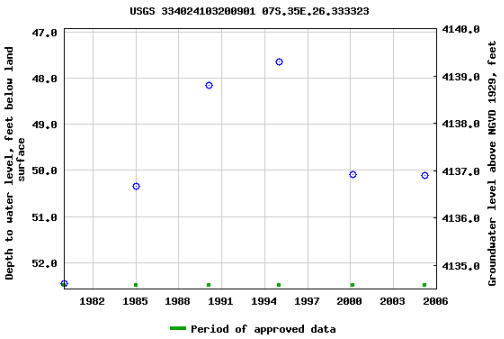
USGS 334024103200901 07S.35E.26.333323

Available data for this site Groundwater: Field measurements GO

Roosevelt County, New Mexico
Hydrologic Unit Code 12080001
Latitude 33°40'22", Longitude 103°20'22" NAD27
Land-surface elevation 4,187.00 feet above NGVD29
The depth of the well is 75 feet below land surface.
This well is completed in the High Plains aquifer (N100HGHPLN) national aquifer.
This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

Click to hideNews Bulletins

- Explore the *NEW* USGS National Water Dashboard interactive map to access real-time water data from over 13,500 stations nationwide.
- Full News

USGS 334114103224701 07S.35E.29.122222

Available data for this site SUMMARY OF ALL AVAILABLE DATA GO

Well Site

DESCRIPTION:
Latitude 33°41'11", Longitude 103°22'59" NAD27
Roosevelt County, New Mexico , Hydrologic Unit 12080001
Well depth: not determined.
Land surface altitude: 4,228.00 feet above NGVD29.
Well completed in "High Plains aquifer" (N100HGHPLN) national aquifer.
Well completed in "Ogallala Formation" (121OGLL) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1980-01-10	1990-02-07	3
Revisions	Unavailable (site:0) (timeseries:0)		

OPERATION:
Record for this site is maintained by the USGS New Mexico Water Science Center
Email questions about this site to New Mexico Water Science Center Water-Data Inquiries

Click to hideNews Bulletins

- Explore the *NEW* USGS National Water Dashboard interactive map to access real-time water data from over 13,500 stations nationwide.
- Full News

Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

site_no list =
- 334203103191701

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

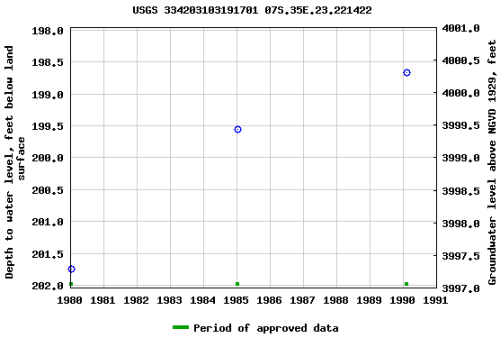
USGS 334203103191701 07S.35E.23.221422

Available data for this site Groundwater: Field measurements GO

Roosevelt County, New Mexico
Hydrologic Unit Code 12080001
Latitude 33°42'00", Longitude 103°19'29" NAD27
Land-surface elevation 4,199.00 feet above NGVD29
This well is completed in the High Plains aquifer (N100HGHPLN) national aquifer.
This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

ATTACHMENT 4

NMOCD CORRESPONDENCE

Chase Settle

From: Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>
Sent: Friday, September 17, 2021 7:58 AM
To: Tina Huerta
Cc: Artesia Regulatory; Chase Settle; Yvette Moore; Ashley Bravo; Bratcher, Mike, EMNRD; Hensley, Chad, EMNRD; Velez, Nelson, EMNRD
Subject: (Extension Approval) Crossroads AFX Federal 1 (nAPP2117330665) Characterization/Remediation Plan

RE: Incident **#NAPP2117330665**

Tina,

Your request for an extension to **December 17th, 2021** is approved.

Robert Hamlet • Environmental Specialist - Advanced
Environmental Bureau
EMNRD - Oil Conservation Division
811 S. First Street | Artesia, NM 88210
575.909.0302 | robert.hamlet@state.nm.us
http://www.emnrd.state.nm.us/OCD/

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Thursday, September 16, 2021 4:54 PM
To: EMNRD-OCD-District1spills <EMNRD-OCD-District1spills@state.nm.us>
Cc: Artesia Regulatory <Artesia_Regulatory@eogresources.com>; Chase Settle <Chase_Settle@eogresources.com>; Yvette Moore <Yvette_Moore@eogresources.com>; Ashley Bravo <Ashley_Bravo@eogresources.com>
Subject: [EXTERNAL] Crossroads AFX Federal 1 (nAPP2117330665) Characterization/Remediation Plan Extension Request

Good afternoon,

Please find the Characterization/Remediation Plan Extension Request below.

EOG Resources, Inc. respectfully requests an extension to December 17, 2021, for the Characterization/Remediation Plan for the below listed location. The historically impacted area was located immediately adjacent to the production tanks, so in order to perform delineation activities with machinery, the tanks had to be relocated. Due to the amount of time required for planning and performing the relocation of the tanks, and further delays due to the unseasonal amount

of precipitation received in the area, the first delineation activities with machinery are scheduled to occur on Wednesday, September 22, 2021. The environmental consultant performing the remediation at this location believes this should provide enough time to complete the Characterization of the site and develop the Remediation Plan, barring other unforeseen circumstances such as the need for a core rig to complete delineation past the depths that normal dirt moving machinery can reach.

Crossroads AFX Federal #1
30-041-20841
P-22-7S-35E
330 FSL & 990 FEL
Roosevelt County, NM
nAPP2117330665

Thank you,

Tina Huerta
Regulatory Specialist
Direct: 575.748.4168
Cell: 575.703.3121
Email: tina_huerta@eogresources.com

eog resources
Artesia Division

Chase Settle

From: Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>
Sent: Wednesday, December 22, 2021 10:58 AM
To: Tina Huerta
Cc: Artesia Regulatory; Katie Jamison; Chase Settle; Yvette Moore; Ashley Bravo; Bratcher, Mike, EMNRD; Hensley, Chad, EMNRD; Velez, Nelson, EMNRD
Subject: (Extension Denied) Crossroads AFX Federal 1 (nAPP2117330665)

RE: Incident **#NAPP2117330665**

Tina,

An extension for this release has already been granted. Your request for another extension is **denied**. **EOG** will have 30 days to submit a remediation/closure plan to the payment portal.

Robert Hamlet • Environmental Specialist - Advanced
Environmental Bureau
EMNRD - Oil Conservation Division
811 S. First Street | Artesia, NM 88210
575.909.0302 | robert.hamlet@state.nm.us
http://www.emnrd.state.nm.us/OCD/

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Tuesday, December 14, 2021 8:50 AM
To: Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>; blm_nm_cfo_spill@blm.gov
Cc: Artesia Regulatory <Artesia_Regulatory@eogresources.com>; Katie Jamison <Katie_Jamison@eogresources.com>; Chase Settle <Chase_Settle@eogresources.com>; Yvette Moore <Yvette_Moore@eogresources.com>; Ashley Bravo <Ashley_Bravo@eogresources.com>
Subject: [EXTERNAL] Crossroads AFX Federal 1 (nAPP2117330665) Characterization-Remediation Plan Extension Request

Good Morning,

EOG Resources, Inc. respectfully requests a 60 day extension for the Characterization/Remediation Plan for the below listed location.

Crossroads AFX Federal #1
nAPP2117330665

The environmental consultant has determined that a core rig will be required to complete full delineation of the impacted area. The core rig has been scheduled for the week of 1/10/2022 and the consultant believes that February 4, 2022, is an attainable timeframe to complete the Characterization/Remediation Plan.

Thank you,

Tina Huerta
Regulatory Specialist
Direct: 575.748.4168
Cell: 575.703.3121
Email: tina_huerta@eogresources.com

eog resources
Artesia Division

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 72497

CONDITIONS

Operator:	OGRID:
EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	7377
	Action Number: 72497
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
chensley	Your Characterization report has been received by the OCD. According to EOG the hold up to move forward with this site is a drilling rig to drill for depth to water that by this report will be ascertained in January. The OCD request that EOG submit a remediation plan and/or a closure report by 02/11/2022. The original start to the incident was 06/21/21. We are past 6 months to remediation this location.	2/3/2022