RANGER
ENVIRONMENTAL SERVICES, INC.

SITE CHARACTERIZATION AND PROPOSED REMEDAITON PLAN

STATE D SWD #1
UNIT N, SECTION 16, TOWNSHIP 20S, RANGE 24E
EDDY COUNTY, NEW MEXICO
32.56827, -104.59513
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

JUNE 17, 2021

Chad M. Copeland, P.G. (TX)
Project Geoscientist

William Kierdorf, REM
Project Manager

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1.0 SITE LOCATION AND BACKGROUND

The State D SWD #1 (Site) is located on State land, approximately 22 miles southwest of Artesia, within Eddy County, New Mexico. The facility is situated in Unit N, Section 16, T20S-R24E at GPS coordinates 32.56827, -104.59513. The Site formerly consisted of a disposal well, a tank battery with an earthen containment berm, pump houses and associated equipment.

On March 21, 2021, historical crude oil impacts were documented at the Site associated with the decommissioning of the tank battery. Visual impacts were observed upon removal of the oil tanks. As such, the release volume and date are unknown, and no liquids were available for recovery. The incident was reported to the New Mexico Oil Conservation Division (NMOCD) on April 20, 2021 (NMOCD Incident # nAPP2111048003).

EOG Resources, Inc. (EOG) has engaged Ranger Environmental Services, Inc. (Ranger) to assist in the remediation and reclamation efforts at the Site. The following proposed remediation work plan has been prepared to address the soil impacts at the Site.

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

2.0 SITE CHARACTERIZATION

2.1 Depth-to-Groundwater

To determine the depth-to-groundwater in the vicinity of the Site, data available from the U.S. Geological Survey (USGS) and the New Mexico Office of the State Engineer (NMOSE) was reviewed. Based upon the reviewed information, recent water well information within a half mile of the Site is limited. Based on the available information, depth-to-groundwater in the area of the Site is believed to be greater than 100 feet.

Copies of the reviewed depth-to-groundwater information is attached.

2.2 Wellhead Protection Area

Based upon the USGS and NMOSE information, no known water sources were identified within a half-mile of the Site.

Upon review of the National Wetland Inventory, the Site is within 300 feet of a mapped feature located to the north of the former facility pad. The feature is classified as a R4SBC, which is defined as a riverine, intermittent, streambed and seasonally flooded.

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

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

2.3 Distance to Nearest Significant Watercourse

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

2.4 Closure Criteria

Based upon the Site characterization details (within 300' of a wetland and in an unstable/karst area), and per NMAC 19.15.29.12, the Site will be remediated to Table 1 19.15.29.12 NMAC (groundwater ≤50 feet) criteria. Additionally, as the Site is no longer active, the remediation activities will be conducted to bring the area into compliance with the Restoration, Reclamation and Re-Vegetation criteria detailed in 19.15.29.13 NMAC. The proposed closure criteria are detailed below:

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

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

3.0 SITE REMEDIATION AND CONFIRMATION SAMPLING

3.1 March 19, 2021 – Initial Site Assessment and Sampling Results

On March 19, 2021, Ranger personnel and representatives for EOG mobilized to the Site to conduct soil delineation activities. As summarized above, historical crude oil impacts were

documented at the Site associated with the decommissioning of the tank battery. Visual crude oil impacts to soil were observed upon removal of two of the oil tanks.

To assess the historical soil impacts, test hole excavations (SP-1 and SP-2) were completed at both locations where the affected soils had been observed. During the test hole excavation process, Ranger personnel field screened the soils at the surface and at approximate one foot intervals thereafter using an organic vapor monitor (OVM) and a field chloride titration kit to assist in evaluating the soil conditions and/or levels of impacts in the area.

Test hole SP-1 was completed to a maximum depth of approximately 10 feet below ground surface (bgs). During the installation process, discolored soils and elevated OVM readings were encountered. During the installation of test hole SP-2, soil discoloration was not observed beyond an approximate depth of two feet bgs and the test hole was completed to a depth of approximately five feet bgs.

During the test hole installation process, soil samples were collected for laboratory analysis from the ground surface and at each underlying one-foot depth interval. Upon collection, the soil samples were submitted to Envirotech, Inc. in Farmington, New Mexico for analysis of total petroleum hydrocarbons (TPH) using EPA Method 8015; benzene, toluene, ethylbenzene and xylenes (BTEX) using EPA Method 8021; and, total chloride using EPA Method 300. The samples were collected and managed using standard QA/QC and chain-of-custody procedures.

Upon review of the laboratory analytical results, the soil samples collected from test hole SP-1 were documented to contain exceedances of the TPH closure criteria from the ground surface to the terminal test hole depth of 10 feet bgs. Exceedances of the BTEX closure criteria were also documented from approximately six feet to eight feet bgs. No exceedances of the chloride closure criteria were documented.

The soil samples collected from test hole SP-2 were documented to contain exceedances of the TPH closure criteria from the ground surface to approximately three feet bgs. No exceedances of the BTEX and chloride closure criteria were documented.

The soil sample analytical results are summarized in the attached soil analytical table. Copies of the laboratory analytical reports are also attached.

3.2 May 4, 2021 - Additional Site Assessment and Sampling Results

On May 4, 2021, Ranger personnel and representatives for EOG mobilized to the Site to conduct additional soil delineation activities. To further assess the vertical extent of the impacts documented in test hole SP-1, an additional test hole (SP-1A) was installed immediately offset (approximately three feet south) of former test hole SP-1. Test hole SP-1A was initially deepened to 10 feet bgs which was the terminal depth of test hole SP-1.

Upon reaching a depth of 10 feet bgs in location SP-1A, Ranger personnel began field screening the soils at approximate one foot intervals using an OVM to assist in evaluating the test hole soil conditions. Due to the limitations of the on-site sampling equipment, the test hole was limited to a maximum depth of 20 feet bgs. Soil samples were collected for laboratory analysis at depths of 13 feet bgs, 18 feet bgs (highest OVM reading), and at 20 feet bgs (the test hole total depth).

In order to attempt to delineate the horizontal extent of the soil impacts, four additional test holes were installed to the north (SP-N), south (SP-S), east (SP-E) and west (SP-W) of the SP-1/SP-1A test hole locations to a depth of approximately 10 feet. During the test hole excavation process, Ranger personnel field screened the soils at the surface and at approximate one foot intervals thereafter using an OVM and field chloride titration kit. Below is a summary of the subsurface conditions encountered at each of these test hole locations, and the locations of the soil samples collected for laboratory analysis:

- ***Test Hole SP-N:*** No hydrocarbon odor or discoloration was encountered in this test hole. Low OVM readings (2.2 to 17.4 ppm_v) were encountered from the surface to the total depth of 5 feet bgs. Soil samples were collected from this test hole at the surface, two feet bgs (highest OVM), and five feet bgs (total depth).

- ***Test Hole SP-S:*** No hydrocarbon odor, discoloration or significantly elevated OVM readings (max OVM = 1 ppm_v) were encountered in this test hole. Soil samples were collected from this test hole at the surface, five feet bgs (midpoint) and 10 feet bgs (total depth).

- ***Test Hole SP-E:*** No hydrocarbon odor or discoloration was encountered in this test hole. Low OVM readings (2.5 to 11 ppm_v) were encountered from a depth of approximately six feet bgs to the terminal depth of 10 feet bgs. Soil samples were collected from this test hole at the surface, six feet bgs (highest OVM), and 10 feet bgs (total depth).

- ***Test Hole SP-W:*** No hydrocarbon odor or discoloration was encountered in this test hole. Low OVM readings (0.1 to 3.1 ppm_v) were encountered from the surface to the total depth of 10 feet bgs. Soil samples were collected from this test hole at the surface (highest OVM), four feet bgs, and 10 feet bgs (total depth).

The soil samples collected for laboratory analysis were subsequently submitted to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico for analysis of TPH using EPA Method 8015 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. Below is a brief summary of the test hole soil laboratory analytical results:

- ***Test Hole SP-1A:*** All three soil samples collected from this test hole (at depths of 13, 18 and 20 feet bgs) were documented to contain TPH concentrations (ranging from 154 mg/Kg to 3,100 mg/Kg) that were in excess of the Site closure criteria.

- ***Test Hole SP-N:*** This test hole was documented to contain an elevated chloride concentration of 1,200 mg/Kg in the five foot bgs soil sample that was in excess of the Site closure criteria. No elevated BTEX or TPH concentrations were documented.

- ***Test Hole SP-S:*** This test hole was documented to contain a TPH concentration of 800 mg/Kg in the surface soil sample that was in excess of the Site closure criteria. The samples collected at depths of five and ten feet bgs were documented to have BTEX and TPH concentrations within the applicable criteria.

- ***Test Hole SP-E:*** All samples were documented to have BTEX, TPH and Chloride concentrations within the Site closure criteria.

- ***Test Hole SP-W:*** All samples were documented to have BTEX, TPH and Chloride concentrations within the Site closure criteria.

The soil sample analytical results are summarized in the attached soil analytical table. Copies of the laboratory analytical reports are also attached.

3.3 May 26, 2021 Soil Boring Assessment and Sampling Results

On May 26, 2021, Ranger personnel and representatives for EOG mobilized to the Site in order to attempt to delineate the vertical extent of the impacts documented in test holes SP-1/SP-1A. As summarized above, the SP-1A test hole could not be extended past 20 feet bgs due to the limitations of the on-site equipment (i.e. – backhoe), and the laboratory analytical results for the soil sample collected at the SP-1A test hole termination depth confirmed that exceedances of the Site closure criteria remained present at this depth. Therefore, an air rotary drilling rig was utilized to attempt to complete the vertical delineation of the soil impacts.

The drilling operations were performed by Talon, LPE. Prior to drilling and sampling, all equipment and down-hole tools were decontaminated. The soil borings were drilled and sampled using air rotary drilling equipment. Soil samples were continuously collected and monitored during the drilling process, and each soil sample was inspected and described by the on-site Ranger personnel. The soils were continuously monitored with an OVM. The lithologic descriptions and OVM readings are presented on the attached soil boring logs.

Soil boring SB-1 was installed immediately north of the former SP-1 test hole location. Upon reaching the 20 to 23 feet bgs depth interval, the driller encountered issues with air circulation and return of the cuttings. Attempts were then made to collect split spoon samples; however, the returns from this were minimal and the hole caved in to 18' bgs. Hydrocarbon odor was noted to an approximate depth of 20 feet bgs in SB-1, and only minimal OVM readings were encountered past this depth. As such, soil samples were collected from the soil cuttings returns from the depth intervals of 20 feet bgs and 23 feet bgs.

Based upon the drilling issues encountered in soil boring SB-1, and additional soil boring (SB-2) was installed approximately two feet south of the former test hole SP-1A location. Once again, loose material was encountered at a depth of approximately 22 feet to 23 feet bgs and the same drilling issues encountered at SB-1 were also encountered at this location. Soil samples were collected from the soil cuttings returns from the depth intervals of 23 feet bgs and 24 feet bgs. At that point, soil borings SB-1 and SB-2 were plugged and abandoned by the on-site driller.

The soil samples were collected using new nitrile gloves and were containerized in sterile, laboratory-supplied containers. The sample jars were placed into multiple new Ziploc® bags and were immediately stored in a sample shuttle full of ice. The samples were managed using standard QA/QC and chain-of-custody procedures. The soil samples collected for laboratory analysis were subsequently submitted to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico for analysis of TPH, BTEX, and total chloride using the aforementioned laboratory methods.

Upon review of the laboratory analytical results, the samples collected during the May 26, 2021 sampling activities were successful in delineating the vertical impacts at the Site. Both samples collected from soil boring SB-1 were documented to have BTEX, TPH, and Chloride concentrations within the proposed closure criteria. The samples collected from SB-2 were both documented to have BTEX and chloride concentrations within the applicable action levels. While sample collected at a depth of 23 feet bgs in SB-2 was noted to have a TPH concertation in exceedance of the 100 ppm TPH criteria, the sample collected at a depth of 24 feet bgs was noted to be within the applicable criteria.

3.4 June 7, 2021 - Site Assessment and Sampling Results

On June 7, 2021, Ranger personnel returned to the Site to complete the delineation of chloride impacts in the area of sample location SP-N as well as the TPH impacts in the area of sample location SP-S.

To assess and delineate the chloride impacts in the area of sample location SP-N, four additional test excavations were completed. To vertically delineate the chloride impacts, a test hole (SP-N.A) was completed in the immediate vicinity of the original SP-N location to a depth of approximately eight feet bgs. Two samples were subsequently collected from the test excavation at depths of approximately seven and eight feet bgs. In order to horizontally delineate the chloride impacts in the area, excavation test holes were completed to the north, east and west of the SP-N and SP-N.A locations. The test holes (SP-N.N, SP-N.E, and SP-N.W) were each completed to a depth of approximately five feet bgs. During the installation process, soil samples were collected form each test excavation from a depth of approximately two and five feet bgs.

The soil samples were collected using new nitrile gloves and were containerized in sterile, laboratory-supplied containers. The sample jars were placed into multiple new Ziploc® bags and were immediately stored in a sample shuttle full of ice. The samples were managed using standard QA/QC and chain-of-custody procedures. The soil samples collected for laboratory analysis were subsequently submitted to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico for analysis of TPH, BTEX, and total chloride using the aforementioned laboratory methods.

During the test hole excavation process, Ranger personnel field screened the soils at the surface and at approximate one intervals thereafter using an OVM and a field chloride titration kit.

In an attempt to delineate the surface impacts documented in the surface sample collected at the SP-S location, Ranger personnel collected additional soil samples from locations east, west, and south of the SP-S sample location. The samples were screened utilizing an OVM and field a field chloride titration kit.

Upon review of the soil sample laboratory analytical results, the samples collected in test excavation SP-N.A, SP-N.N, SP-N.E, and SP-N.W, were documented to have BTEX, TPH and Chloride concentrations within the applicable closure criteria and have successfully delineated impacts in the area. Upon review of the surface soil samples collected from locations east, west and south of the SP-S location, the samples collected south (SP-S.S/0') and west (SP-S.W/0') of the SP-S locations were documented to have BTEX, TPH and chloride concentrations within the site closure criteria. The soil sample collected from east of the SP-S location (SP-S.E/0') was documented to have BTEX and chloride concentrations within the Site closure criteria. However, the sample was documented to have a TPH concentration slightly in exceedance of the 100 ppm

TPH closure criteria. Based on the level of TPH in results in the sample, the impacts appear to be limited and will be addressed during the remediation of the Site impacts, detailed below.

4.0 PROPOSED REMEDIATION PLAN

4.1 Impacted Soil Excavation

To address the impacted soils at the Site soil removal operations are proposed. Based on the information gathered during the Site assessment and delineation process, excavation at the Site will be completed to varying depths from one foot bgs to an anticipated maximum depth of approximately 24 feet bgs. The proposed excavation, associated with the remediation at the Site, will be primarily rectangular in shape and is anticipated to have maximum dimensions of approximately 35 feet wide by 105 feet long. The proposed excavation activities will include the over-excavation of sample location SP-S.E in order to address the documented TPH concentrations impacts in the area. A Proposed Soil Excavation Map is included is attached. It should be noted that the proposed excavation map does not depict additional benching and shoring operations necessary for safety reasons as these activities will be completed as field conditions warrant.

Based on the proposed excavation boundaries and depths it is anticipated that approximately 1,500 cubic yards of material will be generated during the Site remediation process. The excavated material will be transported off-site for disposal at an approved disposal facility.

4.2 Confirmation Sampling

In order to assess the final extent of excavation and confirm that excavated area has been completed to appropriate boundaries, it is proposed to collected samples for laboratory analysis at a total of 26 areas throughout the excavation area. The samples will be collected as five-part composite samples from various areas along the base of the excavation side walls and excavation floor. Each sample will be comprised of five equal parts collected from the proposed sample area. Upon collection the composite parts will be placed into a new disposable mixing vessel, thoroughly mixed, and a sample for laboratory analysis will be collected from the mixture.

It should be noted that samples will be collected in the immediate vicinity of the former SP-S.E location as well as beyond the location to confirm any remaining impacted soils in the area are properly addressed. The proposed sample locations are depicted in the attached Proposed Confirmation Sample Location Map.

The samples will be collected under standard QA/QC procedures, immediately placed into laboratory supplied containers and placed into a sample shuttle containing ice. The samples will be transported to an approved laboratory for analysis of TPH using EPA Method 8015; BTEX using EPA Method 8021; and, total chloride using EPA Method 300.

4.3 Excavation Backfill and Re-Vegetation

Upon attainment of the Site closure criteria, the excavated areas will be backfilled with clean fill material to a depth of approximately one foot bgl. The remaining one foot will be backfilled with topsoil bringing the location back to grade. The location will then be re-vegetated with the Loamy Sites Seed Mixture in accordance with State Land Office guidelines.

4.4 Remediation Schedule

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

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

5.0 SITE CLOSURE

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

FORM C-141

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

State of New Mexico
Energy Minerals and Natural Resources 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	nAPP2111048003
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 32.56827 Longitude -104.59513
(NAD 83 in decimal degrees to 5 decimal places)

Site Name State D SWD #1	Site Type Battery
Date Release Discovered 03/21/2021	API# *(if applicable)* 30-015-21572

Unit Letter	Section	Township	Range	County
N	16	20S	24E	Eddy

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
Historical impacts discovered during the P&A of the battery. Visual impacts noticed under the oil tanks once they were removed, sampling results to confirmed the presence of impacted soil. Release volume and date are unknown.

State of New Mexico
Oil Conservation Division

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

Initial Response

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

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

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

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

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

Printed Name: Chase Settle
Title: Rep Safety & Environmental Sr
Signature: Chase Settle
Date: 04/19/2021
email: Chase_Settle@eogresources.com
Telephone: 575-748-1471

OCD Only

Received by: Ramona Marcus
Date: 5/9/2021

State of New Mexico
Oil Conservation Division

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Site Assessment/Characterization

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

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

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

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

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

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

Form C-141
Page 4

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

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

Signature: Chase Settle Date: 06/17/2021

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

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

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Remediation Plan

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

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

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

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

☐ Extents of contamination must be fully delineated.

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

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: 06/17/2021
email: Chase_Settle@eogresources.com
Telephone: 575-748-1471

OCD Only

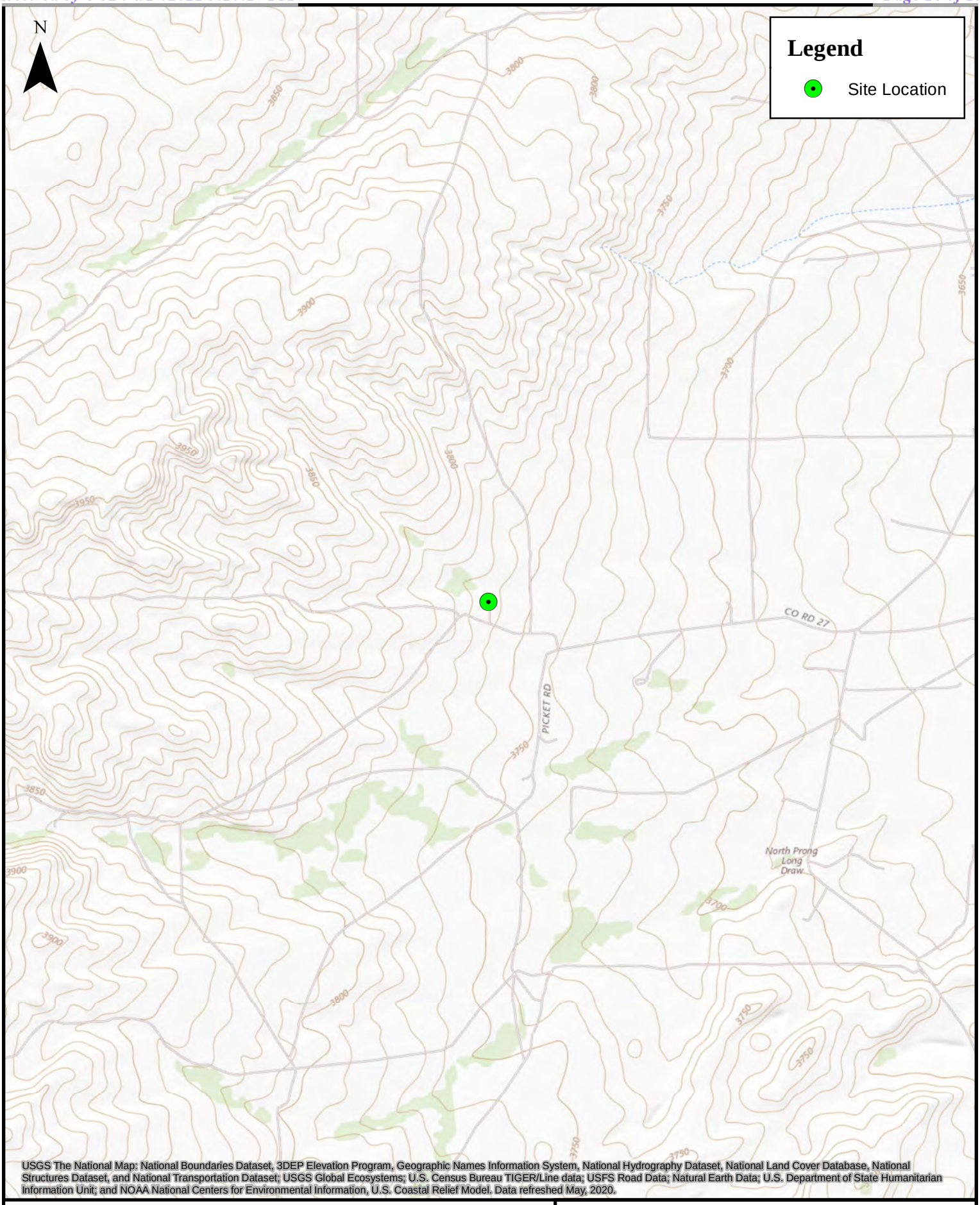
Received by: _____ Date: _____

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

Signature: _____ Date: _____

FIGURES

Topographic Map
Area Map
National Wetland Inventory Map
FEMA Floodplain Map
Karst Topography Map
Assessment Sample Location Map
Proposed Soil Excavation Map
Proposed Confirmation Sample Location Map



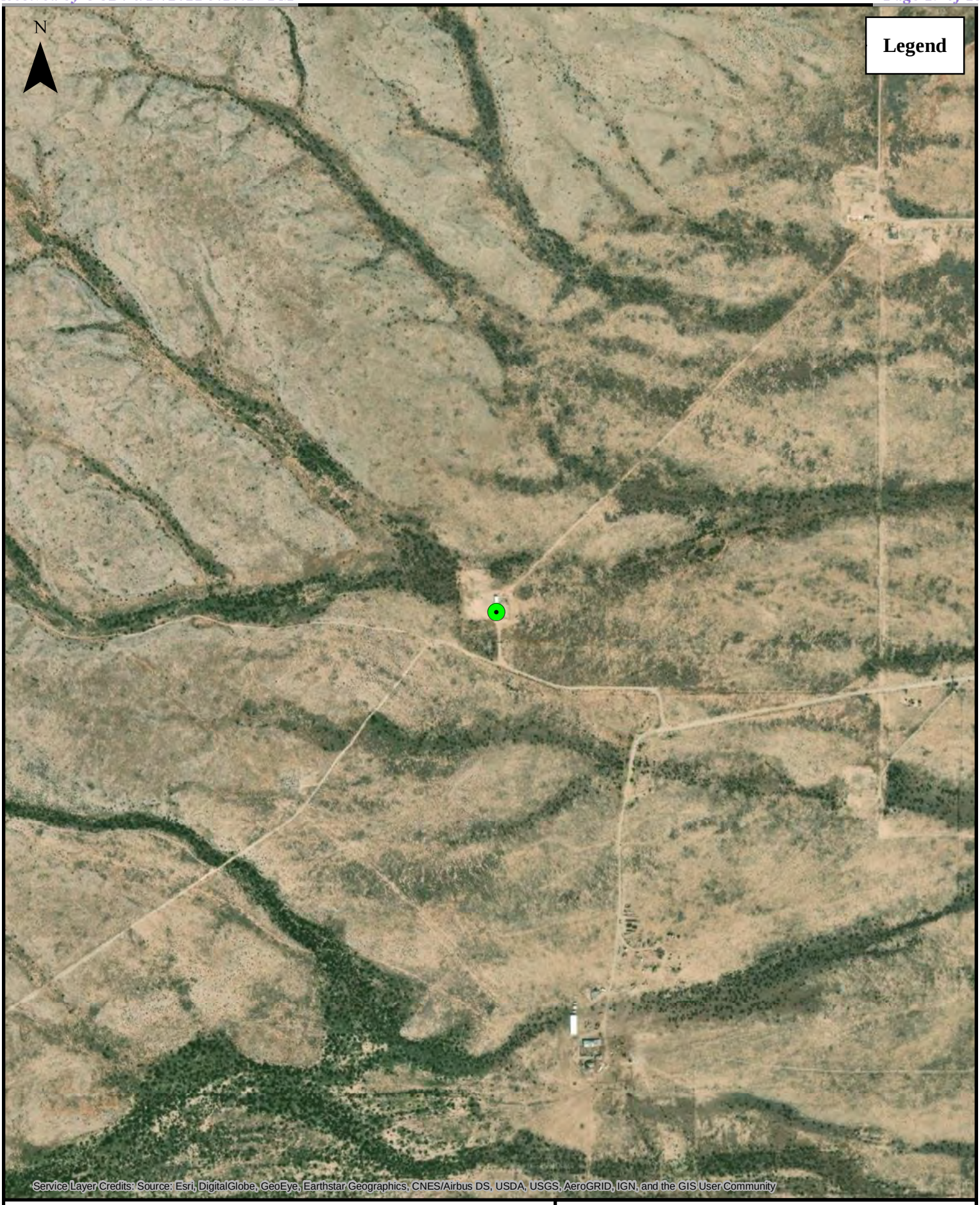
USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS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

RANGER ENVIRONMENTAL SERVICES, INC.

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

1:24,000

Topographic Map
State D SWD #1
EOG Resources, Inc.



RANGER ENVIRONMENTAL SERVICES, INC.

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

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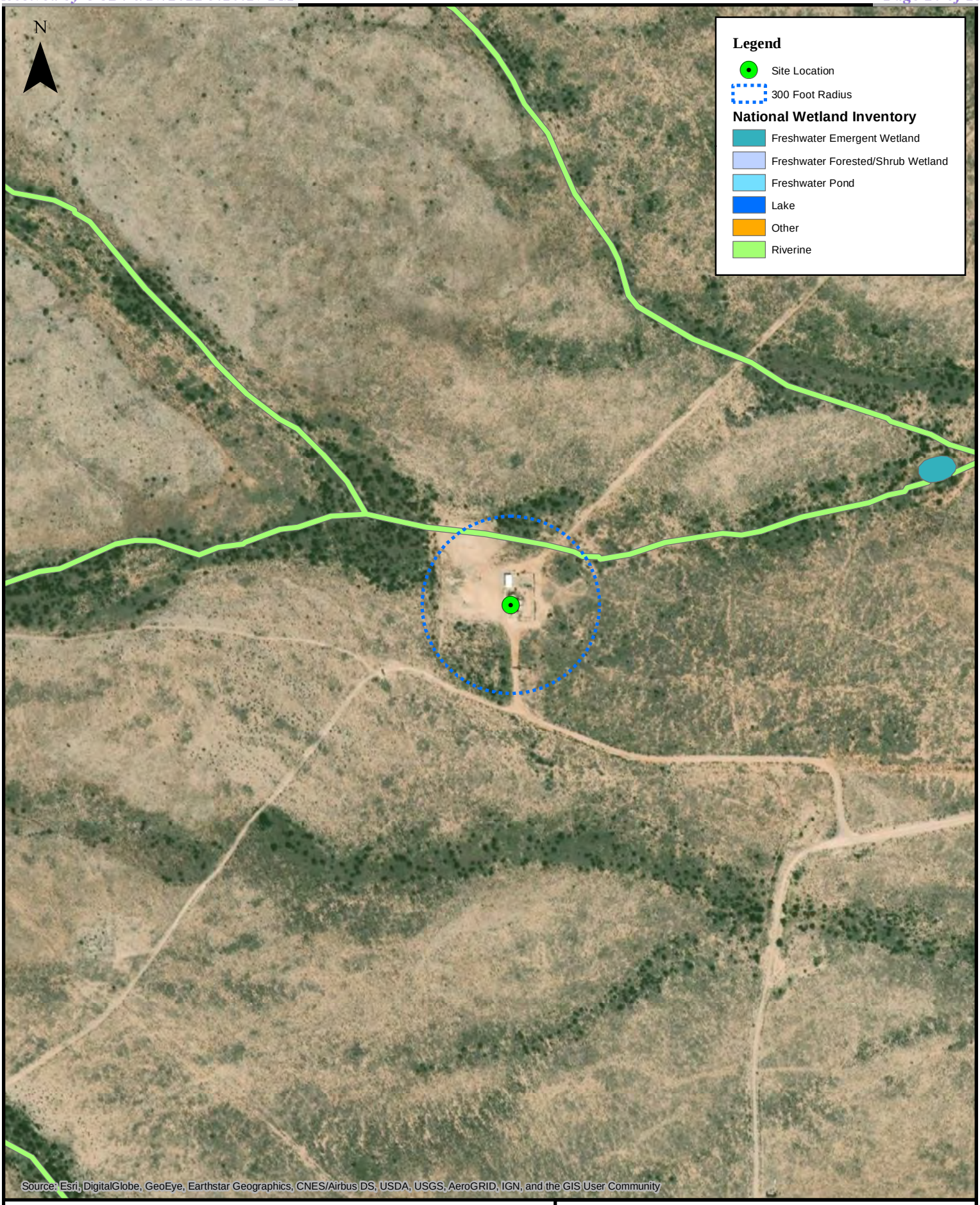
Area Map
State D SWD #1
EOG Resources, Inc.



RANGER ENVIRONMENTAL SERVICES, INC.

0 125 250 500 750 1,000 Feet

1:5,000

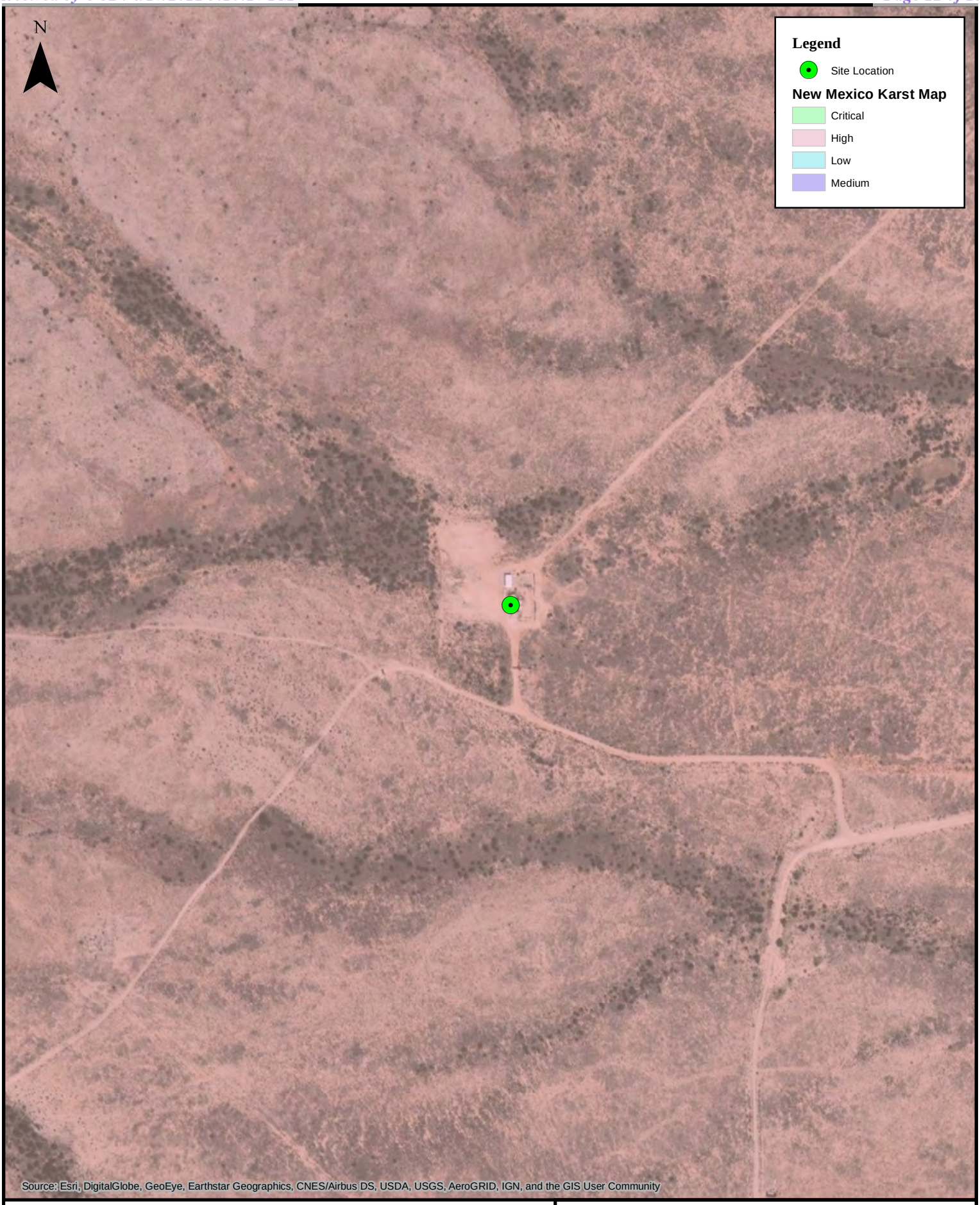
National Wetland Inventory Map
State D SWD #1
EOG Resources, Inc.

RANGER ENVIRONMENTAL SERVICES, INC.

0 125 250 500 750 1,000 Feet

1:5,000

FEMA Floodplain Map
State D SWD #1
EOG Resources, Inc.



RANGER ENVIRONMENTAL SERVICES, INC.

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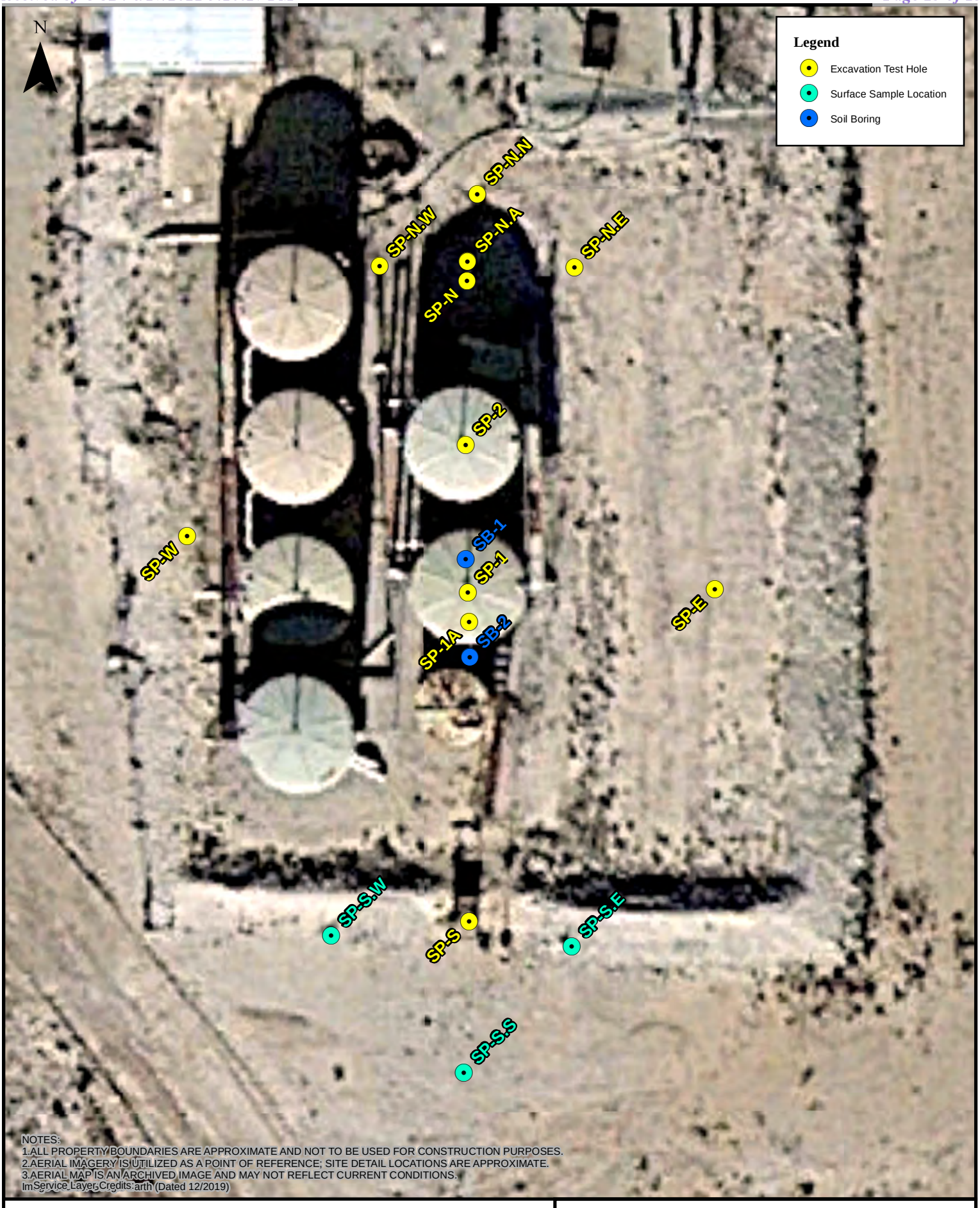
1:5,000

Karst Map
State D SWD #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 DETAIL LOCATIONS ARE APPROXIMATE.
3.AERIAL MAP IS AN ARCHIVED IMAGE AND MAY NOT REFLECT CURRENT CONDITIONS.
Image Service Layer Credits: Esri (Dated 12/2019)

RANGER ENVIRONMENTAL SERVICES, INC.

0 5 10 20 30 40 Feet

1:200

Assessment Sample Location Map
State D SWD #1
EOG Resources, Inc.

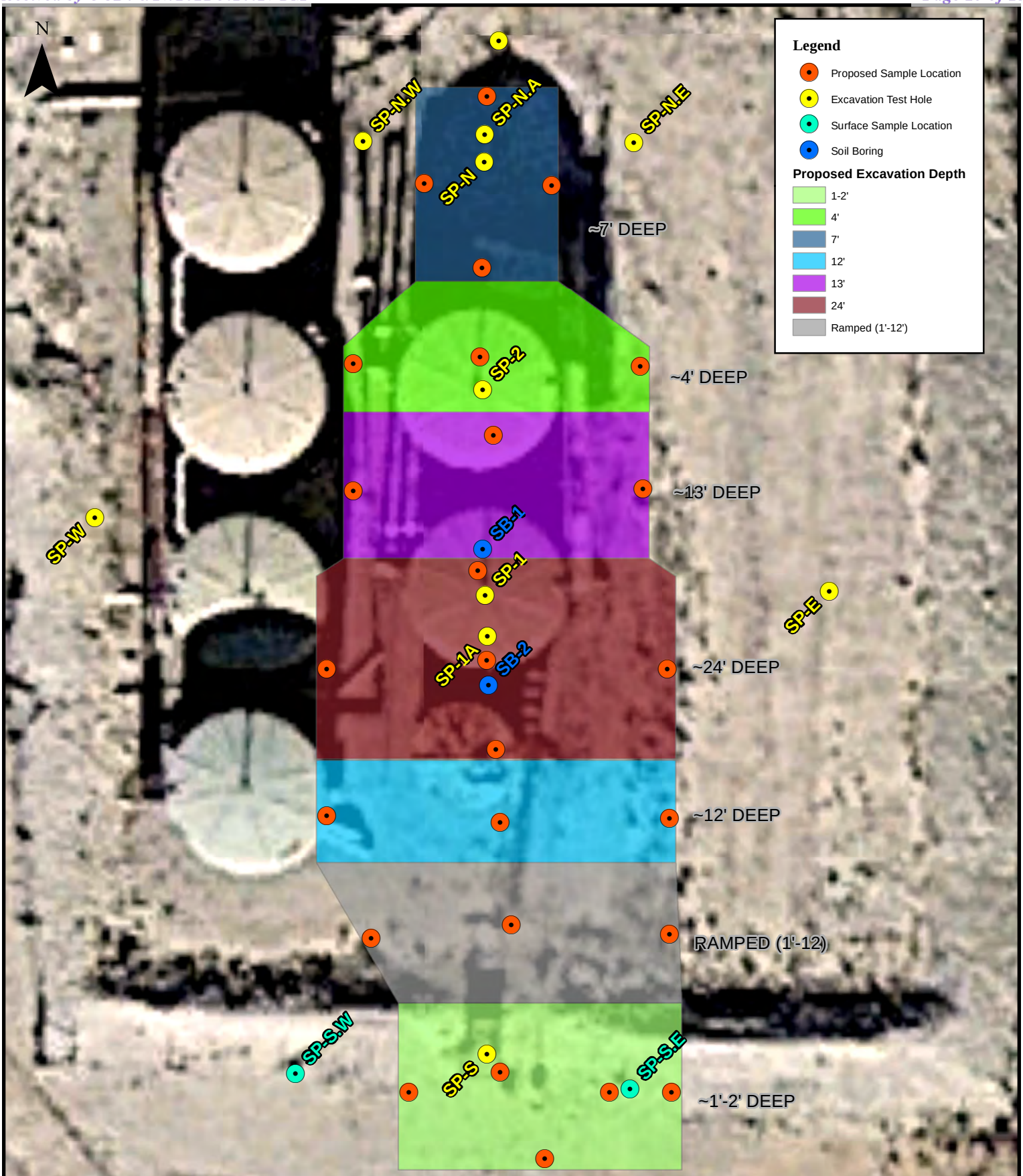
NOTES:
1.ALL PROPERTY BOUNDARIES ARE APPROXIMATE AND NOT TO BE USED FOR CONSTRUCTION PURPOSES.
2.AERIAL IMAGERY IS UTILIZED AS A POINT OF REFERENCE; SITE DETAIL LOCATIONS ARE APPROXIMATE.
3.AERIAL MAP IS AN ARCHIVED IMAGE AND MAY NOT REFLECT CURRENT CONDITIONS.
ImService Layer Credits: arth (Dated 12/2019)

RANGER ENVIRONMENTAL SERVICES, INC.

0 5 10 20 30 40 Feet

1:200

Proposed Soil Excavation Map
State D SWD #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 DETAIL LOCATIONS ARE APPROXIMATE.
3.AERIAL MAP IS AN ARCHIVED IMAGE AND MAY NOT REFLECT CURRENT CONDITIONS.
Image Service Layer Credits: arth (Dated 12/2019)

RANGER ENVIRONMENTAL SERVICES, INC.

0 3.5 7 14 21 28 Feet

1:150

Proposed Confirmation Sample Location Map
State D SWD #1
EOG Resources, Inc.

TABLES

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

SOIL BTEX (EPA 8260), TPH (EPA 8015) & CHLORIDE (EPA 300) ANALYTICAL DATA
STATE D SWD #1
nAPP2111048003
EDDY COUNTY, NEW MEXICO

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

SAMPLE ID	DATE	DEPTH (FT)	BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES	TOTAL BTEX	TPH GRO C6-C10	TPH DRO C10-C28	TPH MRO C28-C36	TPH (GRO+DRO)	TPH (GRO+DRO+ MRO)	CHLORIDE
Initial Site Assessment - March 19, 2021													
SP-1/0'	3/19/2021	0'	<0.025	<0.025	<0.025	<0.025	<0.1	<20	666	687	666	1,353	<20
SP-1/1'	3/19/2021	1'	<0.025	<0.025	<0.025	<0.025	<0.1	<20	393	748	393	1,141	<20
SP-1/2'	3/19/2021	2'	<0.025	1.04	5.56	9.29	15.89	209	5,580	1,180	5,789	6,969	<20
SP-1/3'	3/19/2021	3'	<0.025	1.06	4.99	16.4	22.45	293	2,340	341	2,633	2,974	<20
SP-1/4'	3/19/2021	4'	<0.025	0.828	5.09	25.8	31.718	337	2,400	213	2,737	2,950	<20
SP-1/5'	3/19/2021	5'	<0.025	1.05	4.39	33.3	38.74	475	1,880	176	2,355	2,531	<20
SP-1/6'	3/19/2021	6'	<0.025	2.31	10.7	86.5	99.51	900	2,090	127	2,990	3,117	<20
SP-1/7'	3/19/2021	7'	<0.025	3.43	16.7	160	180.13	1,360	2,500	87.6	3,860	3,948	<20
SP-1/8'	3/19/2021	8'	<0.025	3.18	17.2	164	184.38	1,150	2,980	208	4,130	4,338	<20
SP-1/9'	3/19/2021	9'	<0.025	0.795	3.75	39.1	43.645	688	1,210	193	1,898	2,091	27.7
SP-1/10'	3/19/2021	10'	<0.025	0.294	<0.025	20.2	20.494	413	2,670	544	3,083	3,627	36.2
SP-2/0'	3/19/2021	0'	<0.025	<0.025	<0.025	<0.025	<0.1	<20	227	205	432	637	37.1
SP-2/1'	3/19/2021	1'	<0.025	<0.025	<0.025	<0.025	<0.1	<20	138	178	138	316	<20
SP-2/2'	3/19/2021	2'	<0.025	<0.025	<0.025	<0.025	<0.1	<20	123	133	123	256	35.6
SP-2/3'	3/19/2021	3'	<0.025	<0.025	<0.025	<0.025	<0.1	<20	53.1	62.0	53.1	115.1	38.0
SP-2/4'	3/19/2021	4'	<0.025	<0.025	<0.025	<0.025	<0.1	<20	<25	<50	<45	<95	28.4
SP-2/5'	3/19/2021	5'	<0.025	<0.025	<0.025	<0.025	<0.1	<20	<25	<50	<45	<95	29.5
May 4, 2021													
SP-1A/13'	5/4/2021	13'	<0.025	<0.049	<0.049	<0.098	<0.221	<4.9	71	83	71	154	180
SP-1A/18'	5/4/2021	18'	<0.47	<0.94	<0.94	40	40	1,400	1,700	<240	3,100	3,100	130
SP-1A/20'	5/4/2021	20'	<0.48	<0.95	<0.95	45	45	1,200	840	<170	2,040	2,040	130
SP-S/0'	5/4/2021	0'	<0.024	<0.049	<0.049	<0.098	<0.196	<4.9	220	580	220	800	100
SP-S/5'	5/4/2021	5'	<0.023	<0.046	<0.046	<0.093	<0.208	<4.6	<8.8	<44	<13.4	<57.4	<60
SP-S/10'	5/4/2021	10'	<0.023	<0.047	<0.047	<0.093	<0.21	<4.7	<9.3	<47	<14	<61	<60
SP-E/0'	5/4/2021	0'	<0.023	<0.046	<0.046	<0.092	<0.207	<4.6	<9.7	<49	<14.3	<63.3	<60
SP-E/6'	5/4/2021	6'	<0.024	<0.049	<0.049	<0.098	<0.196	<4.9	<9.7	<48	<14.6	<62.6	170
SP-E/10'	5/4/2021	10'	<0.025	<0.050	<0.050	<0.10	<0.225	<5.0	<9.3	<46	<14.3	<60.3	75
SP-N/0'	5/4/2021	0'	<0.025	<0.050	<0.050	<0.099	<0.199	<5.0	<9.3	<46	<14.3	<60.3	69
SP-N/2'	5/4/2021	2'	<0.024	<0.049	<0.049	<0.097	<0.195	<4.9	<9.2	<46	<14.1	<60.1	260
SP-N/5'	5/4/2021	5'	<0.025	<0.049	<0.049	<0.098	<0.196	<4.9	<9.9	<49	<14.8	<63.8	1,200
SP-W/0'	5/4/2021	0'	<0.025	<0.050	<0.050	<0.099	<0.224	<5.0	<9.8	<49	<14.8	<63.8	<60
SP-W/4'	5/4/2021	4'	<0.024	<0.048	<0.048	<0.095	<0.215	<4.8	<8.5	<43	<13.3	<56.3	220
SP-W/10'	5/4/2021	10'	<0.023	<0.047	<0.047	<0.094	<0.211	<4.7	<8.4	<42	<13.1	<55.1	<60
May 26, 2021													
SB-1/20'	5/26/2021	20'	<0.024	<0.048	<0.048	<0.097	<0.217	<4.8	<9.8	<48	<14.6	<63	<60
SB-1/23'	5/26/2021	23'	0.024	0.049	0.049	0.098	<0.22	<4.9	21	<47	21	21	<60
SB-2/23'	5/26/2021	23'	<0.12	<0.24	<0.24	<0.48	<1.08	<24	180	89	180	269	77
SB-2/24'	5/26/2021	24'	<0.025	<0.049	<0.049	<0.099	<0.222	<4.9	37	<49	37	37	70

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

SOIL BTEX (EPA 8260), TPH (EPA 8015) & CHLORIDE (EPA 300) ANALYTICAL DATA
STATE D SWD #1
nAPP2111048003
EDDY COUNTY, NEW MEXICO

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

SAMPLE ID	DATE	DEPTH (FT)	BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES	TOTAL BTEX	TPH GRO C6-C10	TPH DRO C10-C28	TPH MRO C28-C36	TPH (GRO+DRO)	TPH (GRO+DRO+ MRO)	CHLORIDE
June 7, 2021													
SP-S.S/0'	6/7/2021	0'	<0.024	<0.048	<0.048	<0.096	<0.216	<4.8	<9.2	<46	<14	<60	<60
SP-S.E/0'	6/7/2021	0'	<0.025	<0.049	<0.049	<0.099	<0.222	<4.9	49	120	49	**169**	380
SP-S.W/0'	6/7/2021	0'	<0.024	<0.048	<0.048	<0.097	<0.217	<4.8	<9.6	<48	<14.4	<62.4	<60
SP-N.A/7'	6/7/2021	7'	<0.024	<0.047	<0.047	<0.095	<0.213	<4.7	<8.4	<42	<13.1	<55.1	370
SP-N.A/8'	6/7/2021	8'	<0.024	<0.049	<0.049	<0.098	<0.22	<4.9	<9.9	<49	<14.8	<63.8	280
SP-N.E/2'	6/7/2021	2'	<0.025	<0.049	<0.049	<0.099	<0.222	<4.9	<9.8	<49	<14.7	<63.7	<59
SP-N.E/5'	6/7/2021	5'	<0.024	<0.049	<0.049	<0.097	<0.219	<4.9	<9.5	<47	<14.4	<61.4	190
SP-N.N/2'	6/7/2021	2'	<0.025	<0.050	<0.050	<0.10	<0.225	<5.0	<9.1	<46	<14.1	<60.1	140
SP-N.N/5'	6/7/2021	5'	<0.024	<0.049	<0.049	<0.098	<0.22	<4.9	<8.7	<44	<13.6	<57.6	<60
SP-N.W/2'	6/7/2021	2'	<0.024	<0.047	<0.047	<0.095	<0.213	<4.7	<9.2	<46	<13.9	<59.9	<60
SP-N.W/5'	6/7/2021	5'	<0.025	<0.050	<0.050	<0.10	<0.225	<5.0	<9.5	<47	<14.5	<61.5	490
19.15.29.12 NMAC Table 1 Closure Criteria for Soils Impacted by a Release (GW <50')			**10**	**---**	**---**	**---**	**50**	**---**	**---**	**---**	**---**	**100**	**600**
19.15.29.13 NMAC Reclamation Criteria (0'-4' Soils Only)			**10[3]**				**50[3]**					**100[3]**	**600**

Notes:

1. Results exceeding the Table 1 Closure Criteria are presented in bold type and are highlighted yellow.
2. Results exceeding the NMAC Restoration, Reclamation and re-vegetation chloride concentration requirements are presented in bold red type.
3. Value derived from the State of New Mexico Energy, Minerals and Natural Resources Department document *Procedures for the Implementation of the Spill Rule* (19.15.29 NMAC) dated September 6, 2019.
4. NA - Not Analyzed

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

ATTACHMENT 1 – NMOSE AND USGS WATER WELL DATA

New Mexico Office of the State Engineer

Point of Diversion Summary

Well Tag	POD Number	Q64	Q16	Q4	Sec	Twp	Rng	X	Y
	RA 00189	3	1	4	20	20S	24E	536700	3602190*

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

Driller License: **Driller Company:**

Driller Name:

Drill Start Date: **Drill Finish Date:** **Plug Date:**

Log File Date: **PCW Rcv Date:** **Source:**

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

Casing Size: **Depth Well:** 220 feet **Depth Water:**

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

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

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

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
RA 00189		RA	CH	3	1	4	20	20S	24E	536700	3602190*	220		
RA 02775		RA	CH	1	4	3	21	20S	24E	537899	3601986*	140	31	109
RA 03084		RA	ED			1	03	20S	24E	539366	3607752*	330	268	62
RA 03085		RA	CH			1	01	20S	24E	542613	3607799*	465	300	165
RA 04502		RA	ED		2	2	25	20S	24E	543656	3601480*	300	268	32
RA 04742		RA	ED		3	3	13	20S	24E	542408	3603517*	300		
RA 04956		RA	ED		1	1	21	20S	24E	537605	3603101*	1013		
RA 05146		RA	ED		1	2	14	20S	24E	541600	3604734*	300	80	220
RA 05284		RA	ED		1	2	01	20S	24E	543220	3607973*	282	273	9
RA 05424		RA	ED	4	2	3	22	20S	24E	539669	3602194*	1000	400	600
RA 05478		RA	ED	3	2	3	08	20S	24E	536272	3605389*	550	500	50
RA 07771		RA	ED	4	1	4	22	20S	24E	540073	3602194*			
RA 10139		RA	ED	3	3	2	21	20S	24E	538285	3602597*	308		
RA 10140		RA	ED	2	1	1	35	20S	24E	540938	3599981*	295		

Average Depth to Water: **265 feet**
Minimum Depth: **31 feet**
Maximum Depth: **500 feet**

Record Count: 14

PLSS Search:

Township: 20S **Range:** 24E

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

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

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USGS Water Resources

Data Category: Groundwater | Geographic Area: United States | GO

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Groundwater levels for the Nation

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Search Results -- 1 sites found

site_no list =

- 323611104343701

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

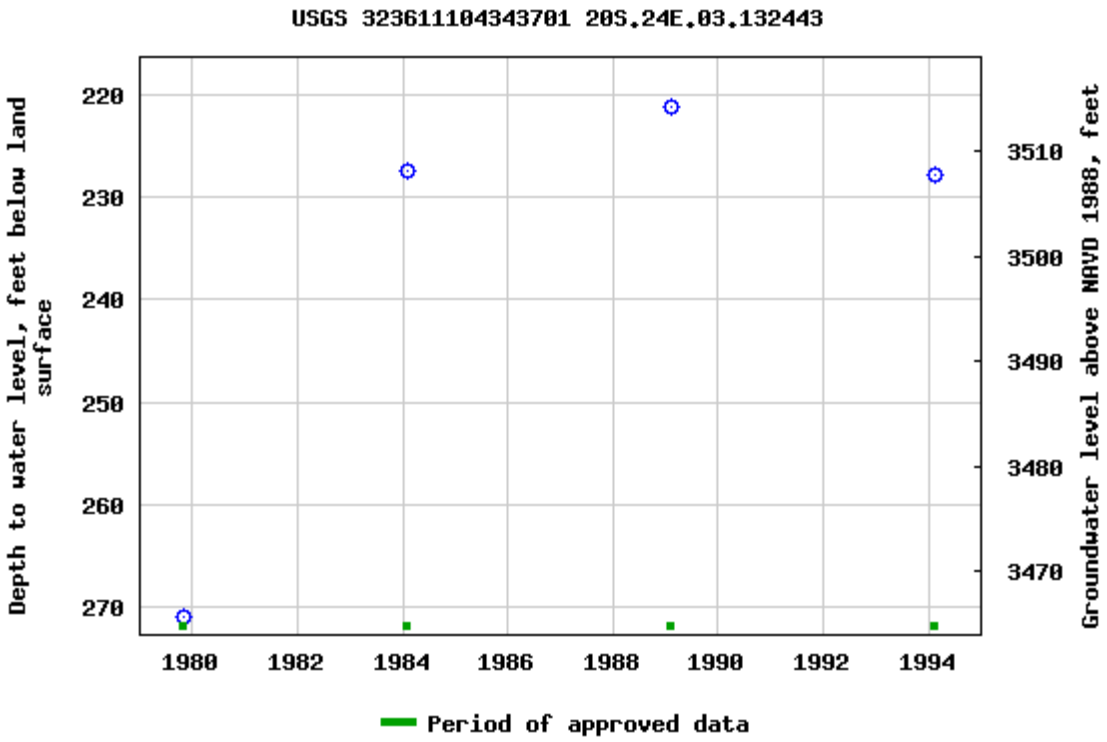
USGS 323611104343701 20S.24E.03.132443

Available data for this site | Groundwater: Field measurements | GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°36'11", Longitude 104°34'37" NAD27
Land-surface elevation 3,736 feet above NAVD88
The depth of the well is 465 feet below land surface.
This well is completed in the Roswell Basin aquifer system (S400RSWLBS) national aquifer.
This well is completed in the Artesia Group (313ARTS) local aquifer.

Output formats

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



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Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2021-05-19 13:56:47 EDT
0.82 0.64 nadww01

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site_no list =

- 323610104342801

Minimum number of levels = 1

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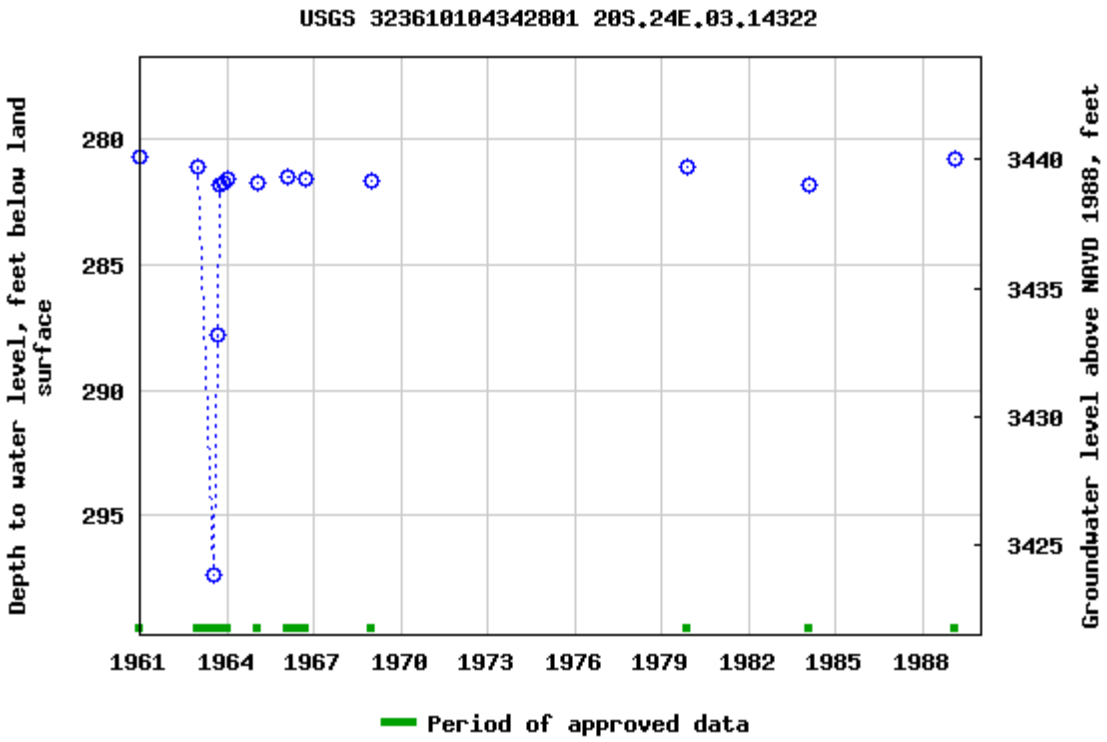
USGS 323610104342801 20S.24E.03.14322

Available data for this site | Groundwater: Field measurements | GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°36'10", Longitude 104°34'28" NAD27
Land-surface elevation 3,721 feet above NAVD88
The depth of the well is 310 feet below land surface.
This well is completed in the Roswell Basin aquifer system (S400RSWLBS) national aquifer.
This well is completed in the Artesia Group (313ARTS) local aquifer.

Output formats

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



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URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2021-05-19 13:56:56 EDT
0.72 0.65 nadww01

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site_no list =

- 323549104365101

Minimum number of levels = 1

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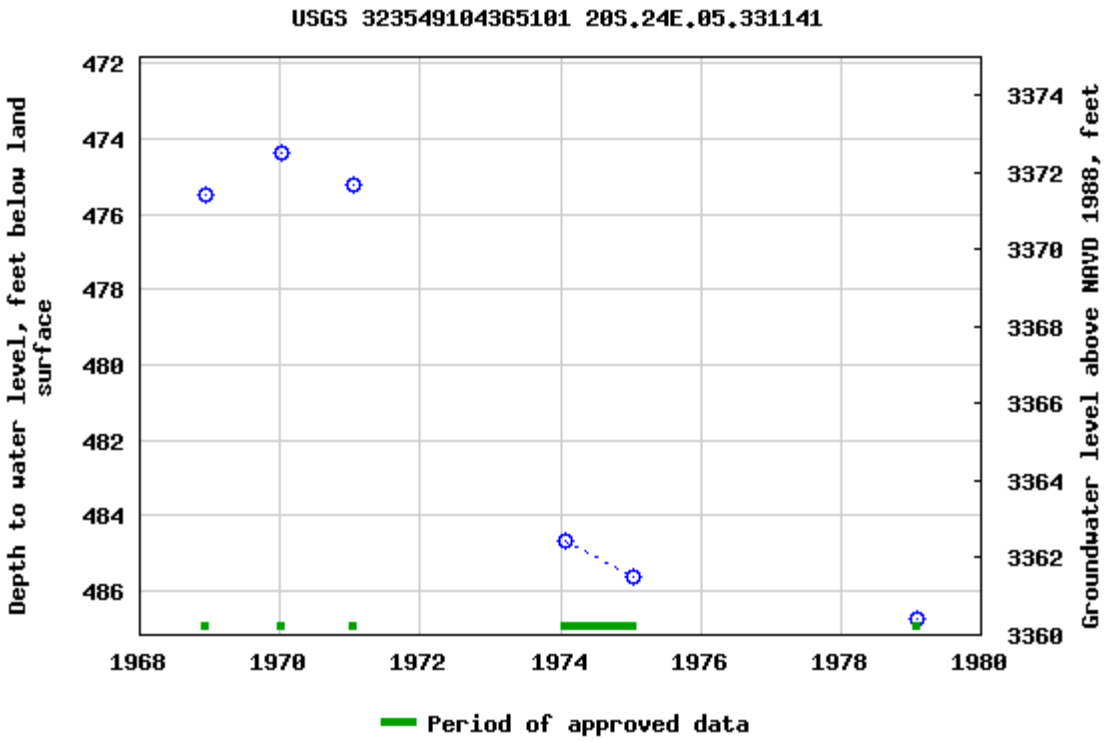
USGS 323549104365101 20S.24E.05.331141

Available data for this site | Groundwater: Field measurements | GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°35'49", Longitude 104°36'51" NAD27
Land-surface elevation 3,847 feet above NAVD88
The depth of the well is 500 feet below land surface.
This well is completed in the Roswell Basin aquifer system (S400RSWLBS) national aquifer.
This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

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



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U.S. Department of the Interior | U.S. Geological Survey

Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2021-05-19 13:56:00 EDT
0.74 0.68 nadww01

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: United States | GO

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

Groundwater levels for the Nation

* IMPORTANT: Next Generation Station Page

Search Results -- 1 sites found

site_no list =

- 323341104330401

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

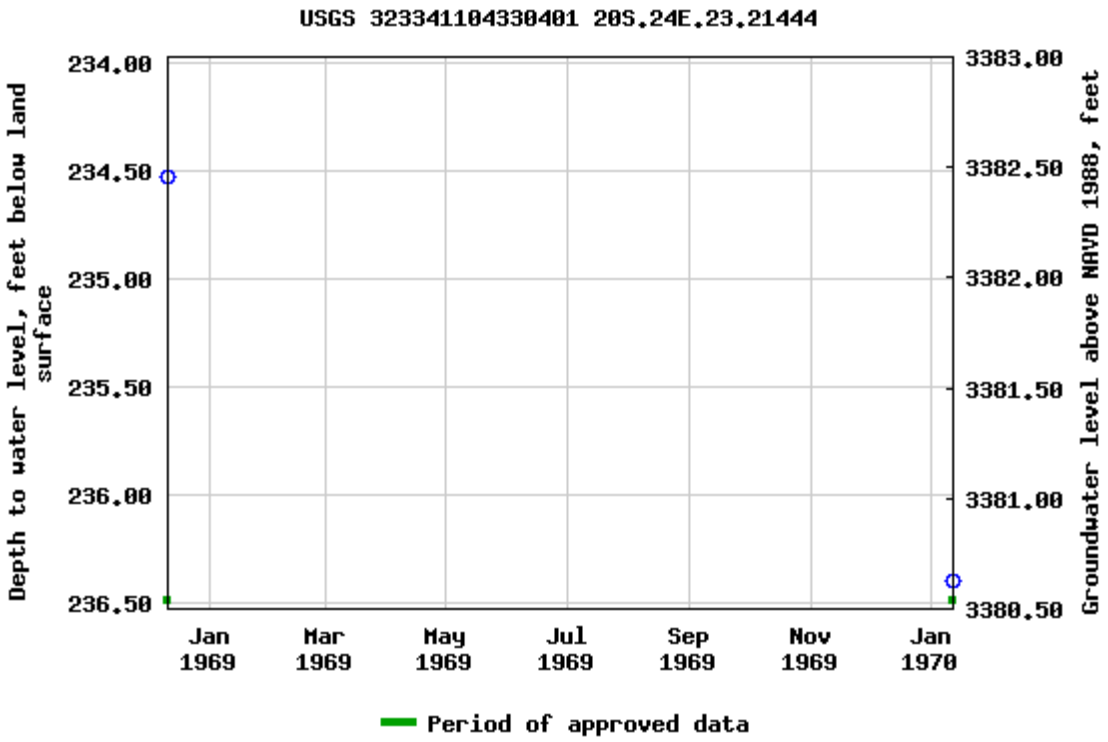
USGS 323341104330401 20S.24E.23.21444

Available data for this site | Groundwater: Field measurements | GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°33'41", Longitude 104°33'04" NAD27
Land-surface elevation 3,617 feet above NAVD88
The depth of the well is 272 feet below land surface.
This well is completed in the Roswell Basin aquifer system (S400RSWLBS) national aquifer.
This well is completed in the Rustler Formation (312RSLR) 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
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News

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U.S. Department of the Interior | U.S. Geological Survey

Title: Groundwater for USA: Water Levels
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Page Contact Information: USGS Water Data Support Team
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0.78 0.65 nadww01

New Mexico Office of the State Engineer
Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	RA 05424	4	2	3	22	20S	24E	539669	3602194*

Driller License: 460 **Driller Company:** JENKINS BROTHERS DRILLING

Driller Name:

Drill Start Date: 11/15/1970 **Drill Finish Date:** 11/20/1970 **Plug Date:**

Log File Date: 01/11/1972 **PCW Rcv Date:** **Source:** Shallow

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

Casing Size: **Depth Well:** 1000 feet **Depth Water:** 400 feet

Water Bearing Stratifications:	Top	Bottom	Description
	705	715	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	705	715

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

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

Released to Imaging: 9/21/2021 11:38:18 AM

New Mexico Office of the State Engineer

Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	RA 02775	1	4	3	21	20S	24E	537899	3601986*

Driller License: 93 **Driller Company:** ROBERSON, W.J.

Driller Name:

Drill Start Date: 08/23/1951 **Drill Finish Date:** 09/03/1951 **Plug Date:**

Log File Date: 09/03/1951 **PCW Rcv Date:** **Source:** Shallow

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

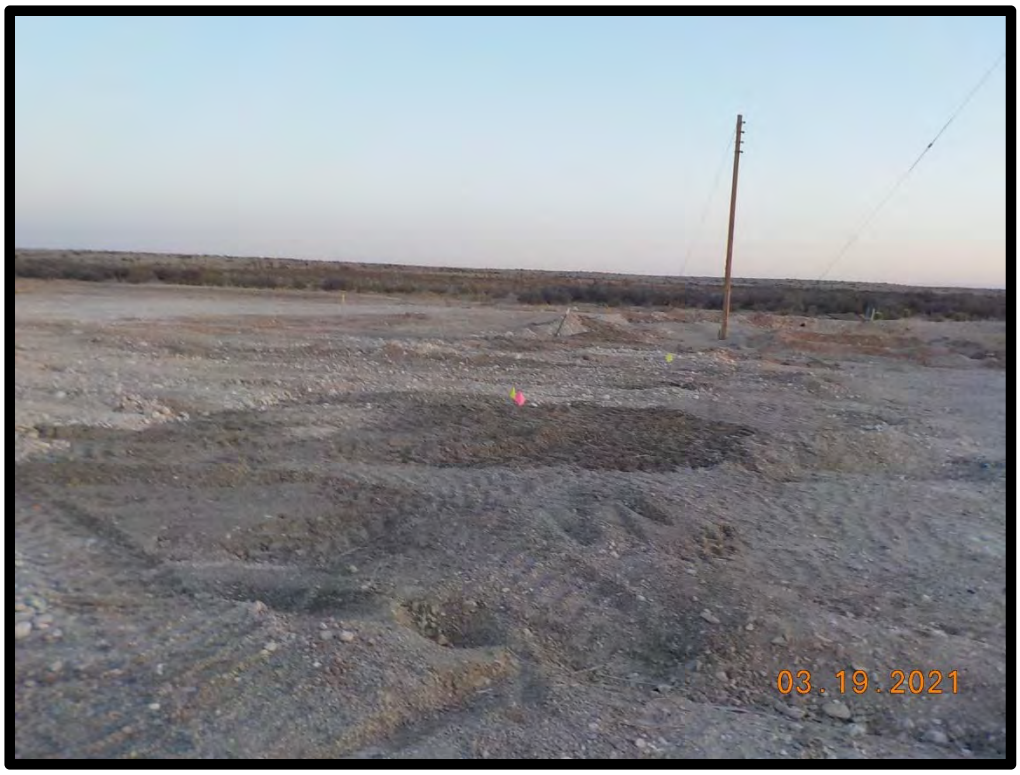
Casing Size: **Depth Well:** 140 feet **Depth Water:** 31 feet

Water Bearing Stratifications:	Top	Bottom	Description
	134	140	Sandstone/Gravel/Conglomerate

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

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

ATTACHMENT 2 – PHOTOGRAPHIC DOCUMENTATION



PHOTOGRAPH NO. 1 – A general view of the Site during the initial assessment activities on March 19, 2021. The view is towards the north-northwest.

PHOTOGRAPH NO. 2 – A photograph documenting the sample location SP-1 during the March 19, 2021 initial assessment activities. The view is towards the west.

PHOTOGRAPH NO. 3 – A view collected during the SP-1.A installation process on May 4, 2021. The view is towards the southwest.

PHOTOGRAPH NO. 4 – A view collected during the installation of test excavation SP-W on May 4, 2021. Sample location SP-1.A can be seen in the left side of the photograph. The view is towards the south.

PHOTOGRAPH NO. 5 – A view collected during the soil boring installation process on May 26, 2021. The view is towards the south-southwest.

PHOTOGRAPH NO. 6 – A view collected during the additional assessment activities on June 7, 2021. The view is towards the southwest.

ATTACHMENT 3 – LABORATORY ANALYTICAL REPORTS

Report to:

Will Kierdorf

5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
Envirotech-inc.com

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

EOG Resources Inc. - Carlsbad

Project Name:	State D SWD #1
Work Order:	E103071
Job Number:	19034-0001
Received:	3/20/2021

Revision: 0

Report Reviewed By:

Draft
Walter Hinchman
Laboratory Director
3/22/21

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.
Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.
Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 3/22/21

Will Kierdorf
104 South 4th Street
Artesia, NM 88210

Project Name: State D SWD #1
Workorder: E103071
Date Received: 3/20/2021 12:20:00PM

Will Kierdorf,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/20/2021 12:20:00PM, under the Project Name: State D SWD #1.

The analytical test results summarized in this report with the Project Name: State D SWD #1 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman
Laboratory Director
Office: 505-632-1881
Cell: 775-287-1762
whinchman@envirotech-inc.com

Raina Schwanz
Laboratory Administrator
Office: 505-632-1881
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Alexa Michaels
Sample Custody Officer
Office: 505-632-1881
labadmin@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

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Sample Summary

EOG Resources Inc. - Carlsbad	Project Name:	State D SWD #1	**Reported:**
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Will Kierdorf	03/22/21 15:30

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP-1/0'	E103071-01A	Soil	03/19/21	03/20/21	Glass Jar, 4 oz.
SP-1/1'	E103071-02A	Soil	03/19/21	03/20/21	Glass Jar, 4 oz.
SP-1/2'	E103071-03A	Soil	03/19/21	03/20/21	Glass Jar, 4 oz.
SP-1/3'	E103071-04A	Soil	03/19/21	03/20/21	Glass Jar, 4 oz.
SP-1/4'	E103071-05A	Soil	03/19/21	03/20/21	Glass Jar, 4 oz.
SP-1/5'	E103071-06A	Soil	03/19/21	03/20/21	Glass Jar, 4 oz.
SP-1/6'	E103071-07A	Soil	03/19/21	03/20/21	Glass Jar, 4 oz.
SP-1/7'	E103071-08A	Soil	03/19/21	03/20/21	Glass Jar, 4 oz.
SP-1/8'	E103071-09A	Soil	03/19/21	03/20/21	Glass Jar, 4 oz.
SP-1/9'	E103071-10A	Soil	03/19/21	03/20/21	Glass Jar, 4 oz.
SP-1/10'	E103071-11A	Soil	03/19/21	03/20/21	Glass Jar, 4 oz.
SP-2/1'	E103071-12A	Soil	03/19/21	03/20/21	Glass Jar, 4 oz.
SP-2/2'	E103071-13A	Soil	03/19/21	03/20/21	Glass Jar, 4 oz.
SP-2/3'	E103071-14A	Soil	03/19/21	03/20/21	Glass Jar, 4 oz.
SP-2/4'	E103071-15A	Soil	03/19/21	03/20/21	Glass Jar, 4 oz.
SP-2/5'	E103071-16A	Soil	03/19/21	03/20/21	Glass Jar, 4 oz.
SP-2/0'	E103071-17A	Soil	03/19/21	03/20/21	Glass Jar, 4 oz.

Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	State D SWD #1	
104 South 4th Street	Project Number:	19034-0001	**Reported:**
Artesia NM, 88210	Project Manager:	Will Kierdorf	3/22/2021 3:30:35PM

SP-1/0'

E103071-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2112035
Benzene	ND	0.0250	1	03/20/21	03/22/21	
Toluene	ND	0.0250	1	03/20/21	03/22/21	
Ethylbenzene	ND	0.0250	1	03/20/21	03/22/21	
p,m-Xylene	ND	0.0500	1	03/20/21	03/22/21	
o-Xylene	ND	0.0250	1	03/20/21	03/22/21	
Total Xylenes	ND	0.0250	1	03/20/21	03/22/21	
Surrogate: 4-Bromochlorobenzene-PID		*97.9 %*	*70-130*	*03/20/21*	*03/22/21*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2112035
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/20/21	03/22/21	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*115 %*	*70-130*	*03/20/21*	*03/22/21*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AC			Batch: 2113001
Diesel Range Organics (C10-C28)	**666**	125	5	03/22/21	03/22/21	
Oil Range Organics (C28-C35)	**687**	250	5	03/22/21	03/22/21	
Surrogate: n-Nonane		*137 %*	*50-200*	*03/22/21*	*03/22/21*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2113002
Chloride	ND	20.0	1	03/22/21	03/22/21	

Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	State D SWD #1	
104 South 4th Street	Project Number:	19034-0001	**Reported:**
Artesia NM, 88210	Project Manager:	Will Kierdorf	3/22/2021 3:30:35PM

SP-1/1'

E103071-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2112035
Benzene	ND	0.0250	1	03/20/21	03/22/21	
Toluene	ND	0.0250	1	03/20/21	03/22/21	
Ethylbenzene	ND	0.0250	1	03/20/21	03/22/21	
p,m-Xylene	ND	0.0500	1	03/20/21	03/22/21	
o-Xylene	ND	0.0250	1	03/20/21	03/22/21	
Total Xylenes	ND	0.0250	1	03/20/21	03/22/21	
Surrogate: 4-Bromochlorobenzene-PID		*98.5 %*	*70-130*	*03/20/21*	*03/22/21*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2112035
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/20/21	03/22/21	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*115 %*	*70-130*	*03/20/21*	*03/22/21*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AC			Batch: 2113001
Diesel Range Organics (C10-C28)	**393**	250	10	03/22/21	03/22/21	
Oil Range Organics (C28-C35)	**748**	500	10	03/22/21	03/22/21	
Surrogate: n-Nonane		*134 %*	*50-200*	*03/22/21*	*03/22/21*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2113002
Chloride	ND	20.0	1	03/22/21	03/22/21	

Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	State D SWD #1	
104 South 4th Street	Project Number:	19034-0001	**Reported:**
Artesia NM, 88210	Project Manager:	Will Kierdorf	3/22/2021 3:30:35PM

SP-1/2'

E103071-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2112035
Benzene	ND	0.250	10	03/20/21	03/22/21	
Toluene	**1.04**	0.250	10	03/20/21	03/22/21	
Ethylbenzene	**5.56**	0.250	10	03/20/21	03/22/21	
p,m-Xylene	**8.39**	0.500	10	03/20/21	03/22/21	
o-Xylene	**0.899**	0.250	10	03/20/21	03/22/21	
Total Xylenes	**9.29**	0.250	10	03/20/21	03/22/21	
Surrogate: 4-Bromochlorobenzene-PID		*96.8 %*	*70-130*	*03/20/21*	*03/22/21*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2112035
Gasoline Range Organics (C6-C10)	**209**	200	10	03/20/21	03/22/21	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*117 %*	*70-130*	*03/20/21*	*03/22/21*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AC			Batch: 2113001
Diesel Range Organics (C10-C28)	**5580**	50.0	2	03/22/21	03/22/21	
Oil Range Organics (C28-C35)	**1180**	100	2	03/22/21	03/22/21	
Surrogate: n-Nonane		*323 %*	*50-200*	*03/22/21*	*03/22/21*	*S5*
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2113002
Chloride	ND	20.0	1	03/22/21	03/22/21	

Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	State D SWD #1	
104 South 4th Street	Project Number:	19034-0001	**Reported:**
Artesia NM, 88210	Project Manager:	Will Kierdorf	3/22/2021 3:30:35PM

SP-1/3'

E103071-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2112035
Benzene	ND	0.250	10	03/20/21	03/22/21	
Toluene	**1.06**	0.250	10	03/20/21	03/22/21	
Ethylbenzene	**4.99**	0.250	10	03/20/21	03/22/21	
p,m-Xylene	**16.0**	0.500	10	03/20/21	03/22/21	
o-Xylene	**0.401**	0.250	10	03/20/21	03/22/21	
Total Xylenes	**16.4**	0.250	10	03/20/21	03/22/21	
Surrogate: 4-Bromochlorobenzene-PID		*96.6 %*	*70-130*	*03/20/21*	*03/22/21*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2112035
Gasoline Range Organics (C6-C10)	**293**	200	10	03/20/21	03/22/21	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*121 %*	*70-130*	*03/20/21*	*03/22/21*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AC			Batch: 2113001
Diesel Range Organics (C10-C28)	**2340**	25.0	1	03/22/21	03/22/21	
Oil Range Organics (C28-C35)	**341**	50.0	1	03/22/21	03/22/21	
Surrogate: n-Nonane		*202 %*	*50-200*	*03/22/21*	*03/22/21*	*S5*
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2113002
Chloride	ND	20.0	1	03/22/21	03/22/21	

Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	State D SWD #1	
104 South 4th Street	Project Number:	19034-0001	**Reported:**
Artesia NM, 88210	Project Manager:	Will Kierdorf	3/22/2021 3:30:35PM

SP-1/4'

E103071-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2112035
Benzene	ND	0.250	10	03/20/21	03/22/21	
Toluene	**0.828**	0.250	10	03/20/21	03/22/21	
Ethylbenzene	**5.09**	0.250	10	03/20/21	03/22/21	
p,m-Xylene	**24.5**	0.500	10	03/20/21	03/22/21	
o-Xylene	**1.29**	0.250	10	03/20/21	03/22/21	
Total Xylenes	**25.8**	0.250	10	03/20/21	03/22/21	
Surrogate: 4-Bromochlorobenzene-PID		*96.7 %*	*70-130*	*03/20/21*	*03/22/21*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2112035
Gasoline Range Organics (C6-C10)	**337**	200	10	03/20/21	03/22/21	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*122 %*	*70-130*	*03/20/21*	*03/22/21*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AC			Batch: 2113001
Diesel Range Organics (C10-C28)	**2400**	25.0	1	03/22/21	03/22/21	
Oil Range Organics (C28-C35)	**213**	50.0	1	03/22/21	03/22/21	
Surrogate: n-Nonane		*232 %*	*50-200*	*03/22/21*	*03/22/21*	*S5*
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2113002
Chloride	ND	20.0	1	03/22/21	03/22/21	

Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	State D SWD #1	
104 South 4th Street	Project Number:	19034-0001	**Reported:**
Artesia NM, 88210	Project Manager:	Will Kierdorf	3/22/2021 3:30:35PM

SP-1/5'

E103071-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2112035
Benzene	ND	0.250	10	03/20/21	03/22/21	
Toluene	**1.05**	0.250	10	03/20/21	03/22/21	
Ethylbenzene	**4.39**	0.250	10	03/20/21	03/22/21	
p,m-Xylene	**29.4**	0.500	10	03/20/21	03/22/21	
o-Xylene	**3.91**	0.250	10	03/20/21	03/22/21	
Total Xylenes	**33.3**	0.250	10	03/20/21	03/22/21	
Surrogate: 4-Bromochlorobenzene-PID		*101 %*	*70-130*	*03/20/21*	*03/22/21*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2112035
Gasoline Range Organics (C6-C10)	**475**	200	10	03/20/21	03/22/21	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*100 %*	*70-130*	*03/20/21*	*03/22/21*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AC			Batch: 2113001
Diesel Range Organics (C10-C28)	**1880**	25.0	1	03/22/21	03/22/21	
Oil Range Organics (C28-C35)	**176**	50.0	1	03/22/21	03/22/21	
Surrogate: n-Nonane		*142 %*	*50-200*	*03/22/21*	*03/22/21*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2113002
Chloride	ND	20.0	1	03/22/21	03/22/21	

Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	State D SWD #1	
104 South 4th Street	Project Number:	19034-0001	**Reported:**
Artesia NM, 88210	Project Manager:	Will Kierdorf	3/22/2021 3:30:35PM

SP-1/6'

E103071-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2112035
Benzene	ND	0.250	10	03/20/21	03/22/21	
Toluene	**2.31**	0.250	10	03/20/21	03/22/21	
Ethylbenzene	**10.7**	0.250	10	03/20/21	03/22/21	
p,m-Xylene	**78.9**	0.500	10	03/20/21	03/22/21	
o-Xylene	**7.63**	0.250	10	03/20/21	03/22/21	
Total Xylenes	**86.5**	0.250	10	03/20/21	03/22/21	
Surrogate: 4-Bromochlorobenzene-PID		*98.8 %*	*70-130*	*03/20/21*	*03/22/21*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2112035
Gasoline Range Organics (C6-C10)	**900**	200	10	03/20/21	03/22/21	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*103 %*	*70-130*	*03/20/21*	*03/22/21*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AC			Batch: 2113001
Diesel Range Organics (C10-C28)	**2090**	25.0	1	03/22/21	03/22/21	
Oil Range Organics (C28-C35)	**127**	50.0	1	03/22/21	03/22/21	
Surrogate: n-Nonane		*312 %*	*50-200*	*03/22/21*	*03/22/21*	*S5*
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2113002
Chloride	ND	20.0	1	03/22/21	03/22/21	

Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	State D SWD #1	
104 South 4th Street	Project Number:	19034-0001	**Reported:**
Artesia NM, 88210	Project Manager:	Will Kierdorf	3/22/2021 3:30:35PM

SP-1/7'

E103071-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2112035
Benzene	ND	0.250	10	03/20/21	03/22/21	
Toluene	**3.43**	0.250	10	03/20/21	03/22/21	
Ethylbenzene	**16.7**	0.250	10	03/20/21	03/22/21	
p,m-Xylene	**142**	0.500	10	03/20/21	03/22/21	
o-Xylene	**18.6**	0.250	10	03/20/21	03/22/21	
Total Xylenes	**160**	0.250	10	03/20/21	03/22/21	
Surrogate: 4-Bromochlorobenzene-PID		*99.1 %*	*70-130*	*03/20/21*	*03/22/21*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2112035
Gasoline Range Organics (C6-C10)	**1360**	200	10	03/20/21	03/22/21	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*109 %*	*70-130*	*03/20/21*	*03/22/21*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AC			Batch: 2113001
Diesel Range Organics (C10-C28)	**2500**	25.0	1	03/22/21	03/22/21	
Oil Range Organics (C28-C35)	**87.6**	50.0	1	03/22/21	03/22/21	
Surrogate: n-Nonane		*502 %*	*50-200*	*03/22/21*	*03/22/21*	*S5*
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2113002
Chloride	ND	20.0	1	03/22/21	03/22/21	

Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	State D SWD #1	
104 South 4th Street	Project Number:	19034-0001	**Reported:**
Artesia NM, 88210	Project Manager:	Will Kierdorf	3/22/2021 3:30:35PM

SP-1/8'

E103071-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2112035
Benzene	ND	0.250	10	03/20/21	03/22/21	
Toluene	**3.18**	0.250	10	03/20/21	03/22/21	
Ethylbenzene	**17.2**	0.250	10	03/20/21	03/22/21	
p,m-Xylene	**146**	0.500	10	03/20/21	03/22/21	
o-Xylene	**18.6**	0.250	10	03/20/21	03/22/21	
Total Xylenes	**164**	0.250	10	03/20/21	03/22/21	
Surrogate: 4-Bromochlorobenzene-PID		*98.0 %*	*70-130*	*03/20/21*	*03/22/21*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2112035
Gasoline Range Organics (C6-C10)	**1150**	200	10	03/20/21	03/22/21	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*101 %*	*70-130*	*03/20/21*	*03/22/21*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AC			Batch: 2113001
Diesel Range Organics (C10-C28)	**2980**	50.0	2	03/22/21	03/22/21	
Oil Range Organics (C28-C35)	**208**	100	2	03/22/21	03/22/21	
Surrogate: n-Nonane		*457 %*	*50-200*	*03/22/21*	*03/22/21*	*S5*
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2113002
Chloride	ND	20.0	1	03/22/21	03/22/21	

Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	State D SWD #1	
104 South 4th Street	Project Number:	19034-0001	**Reported:**
Artesia NM, 88210	Project Manager:	Will Kierdorf	3/22/2021 3:30:35PM

SP-1/9'

E103071-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2112035
Benzene	ND	0.250	10	03/20/21	03/22/21	
Toluene	**0.795**	0.250	10	03/20/21	03/22/21	
Ethylbenzene	**3.75**	0.250	10	03/20/21	03/22/21	
p,m-Xylene	**33.3**	0.500	10	03/20/21	03/22/21	
o-Xylene	**5.76**	0.250	10	03/20/21	03/22/21	
Total Xylenes	**39.1**	0.250	10	03/20/21	03/22/21	
Surrogate: 4-Bromochlorobenzene-PID		*103 %*	*70-130*	*03/20/21*	*03/22/21*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2112035
Gasoline Range Organics (C6-C10)	**688**	200	10	03/20/21	03/22/21	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*97.4 %*	*70-130*	*03/20/21*	*03/22/21*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AC			Batch: 2113001
Diesel Range Organics (C10-C28)	**1210**	25.0	1	03/22/21	03/22/21	
Oil Range Organics (C28-C35)	**193**	50.0	1	03/22/21	03/22/21	
Surrogate: n-Nonane		*233 %*	*50-200*	*03/22/21*	*03/22/21*	*S5*
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2113002
Chloride	**27.7**	20.0	1	03/22/21	03/22/21	

Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	State D SWD #1	
104 South 4th Street	Project Number:	19034-0001	**Reported:**
Artesia NM, 88210	Project Manager:	Will Kierdorf	3/22/2021 3:30:35PM

SP-1/10'

E103071-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2112035
Benzene	ND	0.250	10	03/20/21	03/22/21	
Toluene	**0.294**	0.250	10	03/20/21	03/22/21	
Ethylbenzene	ND	0.250	10	03/20/21	03/22/21	
p,m-Xylene	**17.3**	0.500	10	03/20/21	03/22/21	
o-Xylene	**2.98**	0.250	10	03/20/21	03/22/21	
Total Xylenes	**20.2**	0.250	10	03/20/21	03/22/21	
Surrogate: 4-Bromochlorobenzene-PID		*102 %*	*70-130*	*03/20/21*	*03/22/21*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2112035
Gasoline Range Organics (C6-C10)	**413**	200	10	03/20/21	03/22/21	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.9 %*	*70-130*	*03/20/21*	*03/22/21*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AC			Batch: 2113001
Diesel Range Organics (C10-C28)	**2670**	25.0	1	03/22/21	03/22/21	
Oil Range Organics (C28-C35)	**544**	50.0	1	03/22/21	03/22/21	
Surrogate: n-Nonane		*238 %*	*50-200*	*03/22/21*	*03/22/21*	*S5*
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2113002
Chloride	**36.2**	20.0	1	03/22/21	03/22/21	

Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	State D SWD #1	
104 South 4th Street	Project Number:	19034-0001	**Reported:**
Artesia NM, 88210	Project Manager:	Will Kierdorf	3/22/2021 3:30:35PM

SP-2/1'

E103071-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2112035
Benzene	ND	0.0250	1	03/20/21	03/22/21	
Toluene	ND	0.0250	1	03/20/21	03/22/21	
Ethylbenzene	ND	0.0250	1	03/20/21	03/22/21	
p,m-Xylene	ND	0.0500	1	03/20/21	03/22/21	
o-Xylene	ND	0.0250	1	03/20/21	03/22/21	
Total Xylenes	ND	0.0250	1	03/20/21	03/22/21	
Surrogate: 4-Bromochlorobenzene-PID		*99.5 %*	*70-130*	*03/20/21*	*03/22/21*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2112035
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/20/21	03/22/21	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*93.9 %*	*70-130*	*03/20/21*	*03/22/21*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AC			Batch: 2113001
Diesel Range Organics (C10-C28)	**138**	25.0	1	03/22/21	03/22/21	
Oil Range Organics (C28-C35)	**178**	50.0	1	03/22/21	03/22/21	
Surrogate: n-Nonane		*116 %*	*50-200*	*03/22/21*	*03/22/21*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2113002
Chloride	ND	20.0	1	03/22/21	03/22/21	

Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	State D SWD #1	
104 South 4th Street	Project Number:	19034-0001	**Reported:**
Artesia NM, 88210	Project Manager:	Will Kierdorf	3/22/2021 3:30:35PM

SP-2/2'

E103071-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2112035
Benzene	ND	0.250	10	03/20/21	03/22/21	
Toluene	ND	0.250	10	03/20/21	03/22/21	
Ethylbenzene	ND	0.250	10	03/20/21	03/22/21	
p,m-Xylene	ND	0.500	10	03/20/21	03/22/21	
o-Xylene	ND	0.250	10	03/20/21	03/22/21	
Total Xylenes	ND	0.250	10	03/20/21	03/22/21	
Surrogate: 4-Bromochlorobenzene-PID		*97.9 %*	*70-130*	*03/20/21*	*03/22/21*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2112035
Gasoline Range Organics (C6-C10)	ND	200	10	03/20/21	03/22/21	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*99.1 %*	*70-130*	*03/20/21*	*03/22/21*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AC			Batch: 2113001
Diesel Range Organics (C10-C28)	**123**	25.0	1	03/22/21	03/22/21	
Oil Range Organics (C28-C35)	**133**	50.0	1	03/22/21	03/22/21	
Surrogate: n-Nonane		*113 %*	*50-200*	*03/22/21*	*03/22/21*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2113002
Chloride	**35.6**	20.0	1	03/22/21	03/22/21	

Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	State D SWD #1	
104 South 4th Street	Project Number:	19034-0001	**Reported:**
Artesia NM, 88210	Project Manager:	Will Kierdorf	3/22/2021 3:30:35PM

SP-2/3'

E103071-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2112035
Benzene	ND	0.250	10	03/20/21	03/22/21	
Toluene	ND	0.250	10	03/20/21	03/22/21	
Ethylbenzene	ND	0.250	10	03/20/21	03/22/21	
p,m-Xylene	ND	0.500	10	03/20/21	03/22/21	
o-Xylene	ND	0.250	10	03/20/21	03/22/21	
Total Xylenes	ND	0.250	10	03/20/21	03/22/21	
Surrogate: 4-Bromochlorobenzene-PID		*100 %*	*70-130*	*03/20/21*	*03/22/21*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2112035
Gasoline Range Organics (C6-C10)	ND	200	10	03/20/21	03/22/21	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.8 %*	*70-130*	*03/20/21*	*03/22/21*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AC			Batch: 2113001
Diesel Range Organics (C10-C28)	**53.1**	25.0	1	03/22/21	03/22/21	
Oil Range Organics (C28-C35)	**62.0**	50.0	1	03/22/21	03/22/21	
Surrogate: n-Nonane		*122 %*	*50-200*	*03/22/21*	*03/22/21*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2113002
Chloride	**38.0**	20.0	1	03/22/21	03/22/21	

Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	State D SWD #1	
104 South 4th Street	Project Number:	19034-0001	**Reported:**
Artesia NM, 88210	Project Manager:	Will Kierdorf	3/22/2021 3:30:35PM

SP-2/4'

E103071-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2112035
Benzene	ND	0.250	10	03/20/21	03/22/21	
Toluene	ND	0.250	10	03/20/21	03/22/21	
Ethylbenzene	ND	0.250	10	03/20/21	03/22/21	
p,m-Xylene	ND	0.500	10	03/20/21	03/22/21	
o-Xylene	ND	0.250	10	03/20/21	03/22/21	
Total Xylenes	ND	0.250	10	03/20/21	03/22/21	
Surrogate: 4-Bromochlorobenzene-PID		*98.5 %*	*70-130*	*03/20/21*	*03/22/21*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2112035
Gasoline Range Organics (C6-C10)	ND	200	10	03/20/21	03/22/21	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*97.2 %*	*70-130*	*03/20/21*	*03/22/21*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AC			Batch: 2113001
Diesel Range Organics (C10-C28)	ND	25.0	1	03/22/21	03/22/21	
Oil Range Organics (C28-C35)	ND	50.0	1	03/22/21	03/22/21	
Surrogate: n-Nonane		*120 %*	*50-200*	*03/22/21*	*03/22/21*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2113002
Chloride	**28.4**	20.0	1	03/22/21	03/22/21	

Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	State D SWD #1	
104 South 4th Street	Project Number:	19034-0001	**Reported:**
Artesia NM, 88210	Project Manager:	Will Kierdorf	3/22/2021 3:30:35PM

SP-2/5'

E103071-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2112035
Benzene	ND	0.0250	1	03/20/21	03/22/21	
Toluene	ND	0.0250	1	03/20/21	03/22/21	
Ethylbenzene	ND	0.0250	1	03/20/21	03/22/21	
p,m-Xylene	ND	0.0500	1	03/20/21	03/22/21	
o-Xylene	ND	0.0250	1	03/20/21	03/22/21	
Total Xylenes	ND	0.0250	1	03/20/21	03/22/21	
Surrogate: 4-Bromochlorobenzene-PID		*98.9 %*	*70-130*	*03/20/21*	*03/22/21*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2112035
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/20/21	03/22/21	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*113 %*	*70-130*	*03/20/21*	*03/22/21*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AC			Batch: 2113001
Diesel Range Organics (C10-C28)	ND	25.0	1	03/22/21	03/22/21	
Oil Range Organics (C28-C35)	ND	50.0	1	03/22/21	03/22/21	
Surrogate: n-Nonane		*119 %*	*50-200*	*03/22/21*	*03/22/21*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2113002
Chloride	**29.5**	20.0	1	03/22/21	03/22/21	

Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	State D SWD #1	
104 South 4th Street	Project Number:	19034-0001	**Reported:**
Artesia NM, 88210	Project Manager:	Will Kierdorf	3/22/2021 3:30:35PM

SP-2/0'

E103071-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2112035
Benzene	ND	0.0250	1	03/20/21	03/22/21	
Toluene	ND	0.0250	1	03/20/21	03/22/21	
Ethylbenzene	ND	0.0250	1	03/20/21	03/22/21	
p,m-Xylene	ND	0.0500	1	03/20/21	03/22/21	
o-Xylene	ND	0.0250	1	03/20/21	03/22/21	
Total Xylenes	ND	0.0250	1	03/20/21	03/22/21	
Surrogate: 4-Bromochlorobenzene-PID		*99.4 %*	*70-130*	*03/20/21*	*03/22/21*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2112035
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/20/21	03/22/21	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*115 %*	*70-130*	*03/20/21*	*03/22/21*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AC			Batch: 2113001
Diesel Range Organics (C10-C28)	**227**	50.0	2	03/22/21	03/22/21	
Oil Range Organics (C28-C35)	**205**	100	2	03/22/21	03/22/21	
Surrogate: n-Nonane		*136 %*	*50-200*	*03/22/21*	*03/22/21*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2113002
Chloride	**37.1**	20.0	1	03/22/21	03/22/21	

QC Summary Data

EOG Resources Inc. - Carlsbad	Project Name:	State D SWD #1	**Reported:**
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Will Kierdorf	3/22/2021 3:30:35PM

Volatile Organics by EPA 8021B

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2112035-BLK1)									Prepared: 03/20/21 Analyzed: 03/22/21
Benzene	ND	0.0250							
Toluene	ND	0.0250							
Ethylbenzene	ND	0.0250							
p,m-Xylene	ND	0.0500							
o-Xylene	ND	0.0250							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	*7.65*		*8.00*		*95.6*	*70-130*			
LCS (2112035-BS1)									Prepared: 03/20/21 Analyzed: 03/22/21
Benzene	5.20	0.0250	5.00		104	70-130			
Toluene	5.28	0.0250	5.00		105	70-130			
Ethylbenzene	5.14	0.0250	5.00		103	70-130			
p,m-Xylene	10.4	0.0500	10.0		104	70-130			
o-Xylene	5.22	0.0250	5.00		104	70-130			
Total Xylenes	15.6	0.0250	15.0		104	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.77*		*8.00*		*97.1*	*70-130*			

QC Summary Data

EOG Resources Inc. - Carlsbad	Project Name:	State D SWD #1	**Reported:**
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Will Kierdorf	3/22/2021 3:30:35PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2112035-BLK1)									Prepared: 03/20/21 Analyzed: 03/22/21
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.01*		*8.00*		*100*	*70-130*			
LCS (2112035-BS2)									Prepared: 03/20/21 Analyzed: 03/22/21
Gasoline Range Organics (C6-C10)	51.9	20.0	50.0		104	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.17*		*8.00*		*102*	*70-130*			

QC Summary Data

EOG Resources Inc. - Carlsbad	Project Name:	State D SWD #1	**Reported:**
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Will Kierdorf	3/22/2021 3:30:35PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: AC

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2113001-BLK1)									Prepared: 03/22/21 Analyzed: 03/22/21
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C35)	ND	50.0							
Surrogate: n-Nonane	*67.5*		*50.0*		*135*	*50-200*			
LCS (2113001-BS1)									Prepared: 03/22/21 Analyzed: 03/22/21
Diesel Range Organics (C10-C28)	473	25.0	500		94.6	38-132			
Surrogate: n-Nonane	*57.6*		*50.0*		*115*	*50-200*			
Matrix Spike (2113001-MS1)				**Source: E103071-13**					Prepared: 03/22/21 Analyzed: 03/22/21
Diesel Range Organics (C10-C28)	570	25.0	500	123	89.2	38-132			
Surrogate: n-Nonane	*52.9*		*50.0*		*106*	*50-200*			
Matrix Spike Dup (2113001-MSD1)				**Source: E103071-13**					Prepared: 03/22/21 Analyzed: 03/22/21
Diesel Range Organics (C10-C28)	620	25.0	500	123	99.3	38-132	8.46	20	
Surrogate: n-Nonane	*60.9*		*50.0*		*122*	*50-200*			

QC Summary Report Comment:
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Definitions and Notes

EOG Resources Inc. - Carlsbad	Project Name:	State D SWD #1	
104 South 4th Street	Project Number:	19034-0001	**Reported:**
Artesia NM, 88210	Project Manager:	Will Kierdorf	03/22/21 15:30

S5	Surrogate spike recovery exceeded acceptance limits due to interfering target and/or non-target analytes.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.

Released to Imaging: 9/21/2021 11:38:18 AM
Received by OCD: 6/17/2021 3:10:17 PM

Project Information | Chain of Custody | Page 1 of 2

Client: EOG RESOURCES - ARTESIA	
Project: STATE O SWD #1	
Project Manager: W. KIERDORF	
Address: PO BOX 20179	
City, State, Zip AUSTIN TX 78720	
Phone: 512-289-3272	
Email: WILL & BOB	
Report due by:	

Bill To

Attention: BOB ASHER - EOG ARTESIA	
Address:	
City, State, Zip	
Phone:	
Email:	

Lab Use Only

Lab WO#	Job Number
E 103071	19034-0001

TAT

1D	2D	3D	Standard
X			

EPA Program

CWA	SDWA	RCRA

State

NM	CO	UT	AZ	TX	
X					

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0			BGDOC NM	BGDOC TX			Remarks
0747	3/19/21	SOIL	1	SP-1/0'	1	X	X	X			X							
0750			1	SP-1/1'	2													
0752			1	SP-1/2'	3													
0755			1	SP-1/3'	4													
0758			1	SP-1/4'	5													
0803			1	SP-1/5'	6													
0840			1	SP-1/6'	7													
0843			1	SP-1/7'	8													
0847			1	SP-1/8'	9													
0853			1	SP-1/9'	10													

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: W. KIERDORF

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	3/19/21	1037		3.19.21	1037
	3.19.21	1630		3/20/21	12:20

Lab Use Only

Received on ice: (Y) / N

T1 T2 T3

AVG Temp °C 4

Sample Matrix: **S** - Soil, **Sd** - Solid, **Sg** - Sludge, **A** - Aqueous, **O** - Other

Container Type: **g** - glass, **p** - poly/plastic, **ag** - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

envirotech

Released to Imaging: 9/21/2021 11:38:18 AM
Received by OCD: 6/17/2021 3:40:17 PM

Client:
Project:
Project Manager:
Address: SEE PAGE 1
City, State, Zip
Phone:
Email:
Report due by:

Bill To
Attention:
Address: SEE PAGE 1
City, State, Zip
Phone:
Email:

Lab Use Only
Lab WO# E103071
Job Number 19034-0001

TAT: 1D X | 2D | 3D | Standard

EPA Program: CWA | SDWA | RCRA

State: NM X | CO | UT | AZ | TX

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	Remarks
0900	3/19/21	SOIL	1	SP-1/10'	11	X	X	X			X			
0809			1	SP-2/1'	12									
0811			1	SP-2/2'	13									
0813			1	SP-2/3'	14									
0816			1	SP-2/4'	15									
0820			1	SP-2/5'	16									
0805			1	SP-2/6'	17									

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: W. KEERO ORF

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	3/19/21	1037		3-19-21	1037
	3.19.21	1630		3/20/21	12:20

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Lab Use Only
Received on ice: (Y) N
T1 T2 T3
AVG Temp °C 4

Sample Matrix: **S** - Soil, **Sd** - Solid, **Sg** - Sludge, **A** - Aqueous, **O** - Other _____
Container Type: **g** - glass, **p** - poly/plastic, **ag** - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

envirotech

Envirotech Analytical Laboratory

Printed: 3/20/2021 12:44:44PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	EOG Resources Inc. - Carlsbad	Date Received:	03/20/21 12:20	Work Order ID:	E103071
Phone:	(512) 289-3272	Date Logged In:	03/19/21 12:01	Logged In By:	Alexa Michaels
Email:	will@rangerenv.com	Due Date:	03/22/21 17:00 (0 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC?	Yes	
2. Does the number of samples per sampling site location match the COC	Yes	
3. Were samples dropped off by client or carrier?	Yes	Carrier: Fed Ex
4. Was the COC complete, i.e., signatures, dates/times, requested analyses?	Yes	
5. Were all samples received within holding time? Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes

Sample Cooler

7. Was a sample cooler received?	Yes
8. If yes, was cooler received in good condition?	Yes
9. Was the sample(s) received intact, i.e., not broken?	Yes
10. Were custody/security seals present?	No
11. If yes, were custody/security seals intact?	NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes
13. If no visible ice, record the temperature. Actual sample temperature: 4°C	

Sample Container

14. Are aqueous VOC samples present?	No
15. Are VOC samples collected in VOA Vials?	NA
16. Is the head space less than 6-8 mm (pea sized or less)?	NA
17. Was a trip blank (TB) included for VOC analyses?	NA
18. Are non-VOC samples collected in the correct containers?	Yes
19. Is the appropriate volume/weight or number of sample containers collected?	Yes

Field Label

20. Were field sample labels filled out with the minimum information:	
Sample ID?	Yes
Date/Time Collected?	Yes
Collectors name?	Yes

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No
22. Are sample(s) correctly preserved?	NA
24. Is lab filteration required and/or requested for dissolved metals?	No

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

Signature of client authorizing changes to the COC or sample disposition.

Date

envirotech Inc.

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

May 12, 2021

Will Kierdorf

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

RE: Soil Samples OrderNo.: 2105148

Dear Will Kierdorf:

Hall Environmental Analysis Laboratory received 15 sample(s) on 5/5/2021 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued May 11, 2021.

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. 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. All samples are reported as received unless otherwise indicated.

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

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2105148**
Date Reported: **5/12/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SP-1A/13'
Project: Soil Samples
Collection Date: 5/4/2021 7:37:00 AM
Lab ID: 2105148-001 **Matrix:** SOIL **Received Date:** 5/5/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	180	60		mg/Kg	20	5/6/2021 4:54:15 PM	59851
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	71	9.5		mg/Kg	1	5/5/2021 7:09:44 PM	59826
Motor Oil Range Organics (MRO)	83	48		mg/Kg	1	5/5/2021 7:09:44 PM	59826
Surr: DNOP	92.8	70-130		%Rec	1	5/5/2021 7:09:44 PM	59826
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/7/2021 9:18:57 AM	59822
Surr: BFB	111	70-130		%Rec	1	5/7/2021 9:18:57 AM	59822
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	5/7/2021 9:18:57 AM	59822
Toluene	ND	0.049		mg/Kg	1	5/7/2021 9:18:57 AM	59822
Ethylbenzene	ND	0.049		mg/Kg	1	5/7/2021 9:18:57 AM	59822
Xylenes, Total	ND	0.098		mg/Kg	1	5/7/2021 9:18:57 AM	59822
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	5/7/2021 9:18:57 AM	59822

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 **2105148**
Date Reported: **5/12/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SP-1A/18'
Project: Soil Samples
Collection Date: 5/4/2021 7:49:00 AM
Lab ID: 2105148-002 **Matrix:** SOIL **Received Date:** 5/5/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**VP**
Chloride	130	60		mg/Kg	20	5/6/2021 5:06:40 PM	59851
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**SB**
Diesel Range Organics (DRO)	1700	49		mg/Kg	5	5/6/2021 9:31:26 AM	59826
Motor Oil Range Organics (MRO)	ND	240	D	mg/Kg	5	5/6/2021 9:31:26 AM	59826
Surr: DNOP	103	70-130		%Rec	5	5/6/2021 9:31:26 AM	59826
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	1400	94		mg/Kg	20	5/7/2021 1:49:58 AM	59822
Surr: BFB	585	70-130	S	%Rec	20	5/7/2021 1:49:58 AM	59822
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.47		mg/Kg	20	5/7/2021 1:49:58 AM	59822
Toluene	ND	0.94		mg/Kg	20	5/7/2021 1:49:58 AM	59822
Ethylbenzene	ND	0.94		mg/Kg	20	5/7/2021 1:49:58 AM	59822
Xylenes, Total	40	1.9		mg/Kg	20	5/7/2021 1:49:58 AM	59822
Surr: 4-Bromofluorobenzene	123	70-130		%Rec	20	5/7/2021 1:49:58 AM	59822

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 **2105148**
Date Reported: **5/12/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SP-1A/20'
Project: Soil Samples
Collection Date: 5/4/2021 7:58:00 AM
Lab ID: 2105148-003 **Matrix:** SOIL **Received Date:** 5/5/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	130	60		mg/Kg	20	5/6/2021 5:19:04 PM	59851
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	840	34		mg/Kg	4	5/6/2021 12:43:59 PM	59826
Motor Oil Range Organics (MRO)	ND	170	D	mg/Kg	4	5/6/2021 12:43:59 PM	59826
Surr: DNOP	117	70-130		%Rec	4	5/6/2021 12:43:59 PM	59826
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	1200	95		mg/Kg	20	5/7/2021 2:13:21 AM	59822
Surr: BFB	464	70-130	S	%Rec	20	5/7/2021 2:13:21 AM	59822
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.48		mg/Kg	20	5/7/2021 2:13:21 AM	59822
Toluene	ND	0.95		mg/Kg	20	5/7/2021 2:13:21 AM	59822
Ethylbenzene	ND	0.95		mg/Kg	20	5/7/2021 2:13:21 AM	59822
Xylenes, Total	45	1.9		mg/Kg	20	5/7/2021 2:13:21 AM	59822
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	20	5/7/2021 2:13:21 AM	59822

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 **2105148**
Date Reported: **5/12/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SP-S/0'
Project: Soil Samples
Collection Date: 5/4/2021 8:09:00 AM
Lab ID: 2105148-004 **Matrix:** SOIL **Received Date:** 5/5/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	100	60		mg/Kg	20	5/6/2021 5:56:17 PM	59851
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	220	45		mg/Kg	5	5/6/2021 12:49:20 PM	59826
Motor Oil Range Organics (MRO)	580	220		mg/Kg	5	5/6/2021 12:49:20 PM	59826
Surr: DNOP	100	70-130		%Rec	5	5/6/2021 12:49:20 PM	59826
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/7/2021 2:36:45 AM	59822
Surr: BFB	90.7	70-130		%Rec	1	5/7/2021 2:36:45 AM	59822
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	5/7/2021 2:36:45 AM	59822
Toluene	ND	0.049		mg/Kg	1	5/7/2021 2:36:45 AM	59822
Ethylbenzene	ND	0.049		mg/Kg	1	5/7/2021 2:36:45 AM	59822
Xylenes, Total	ND	0.098		mg/Kg	1	5/7/2021 2:36:45 AM	59822
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	5/7/2021 2:36:45 AM	59822

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 **2105148**
Date Reported: **5/12/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SP-S/5'
Project: Soil Samples
Collection Date: 5/4/2021 8:19:00 AM
Lab ID: 2105148-005 **Matrix:** SOIL **Received Date:** 5/5/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	60		mg/Kg	20	5/6/2021 6:08:42 PM	59851
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	8.8		mg/Kg	1	5/5/2021 7:29:35 PM	59826
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	5/5/2021 7:29:35 PM	59826
Surr: DNOP	88.0	70-130		%Rec	1	5/5/2021 7:29:35 PM	59826
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	5/7/2021 3:00:14 AM	59822
Surr: BFB	90.9	70-130		%Rec	1	5/7/2021 3:00:14 AM	59822
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	5/7/2021 3:00:14 AM	59822
Toluene	ND	0.046		mg/Kg	1	5/7/2021 3:00:14 AM	59822
Ethylbenzene	ND	0.046		mg/Kg	1	5/7/2021 3:00:14 AM	59822
Xylenes, Total	ND	0.093		mg/Kg	1	5/7/2021 3:00:14 AM	59822
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	5/7/2021 3:00:14 AM	59822

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 **2105148**
Date Reported: **5/12/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SP-S/10'
Project: Soil Samples
Collection Date: 5/4/2021 8:33:00 AM
Lab ID: 2105148-006 **Matrix:** SOIL **Received Date:** 5/5/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	60		mg/Kg	20	5/6/2021 6:21:06 PM	59851
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	5/5/2021 6:09:31 PM	59826
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/5/2021 6:09:31 PM	59826
Surr: DNOP	94.7	70-130		%Rec	1	5/5/2021 6:09:31 PM	59826
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/7/2021 3:23:50 AM	59822
Surr: BFB	91.9	70-130		%Rec	1	5/7/2021 3:23:50 AM	59822
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	5/7/2021 3:23:50 AM	59822
Toluene	ND	0.047		mg/Kg	1	5/7/2021 3:23:50 AM	59822
Ethylbenzene	ND	0.047		mg/Kg	1	5/7/2021 3:23:50 AM	59822
Xylenes, Total	ND	0.093		mg/Kg	1	5/7/2021 3:23:50 AM	59822
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	5/7/2021 3:23:50 AM	59822

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 **2105148**
Date Reported: **5/12/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SP-E/0'
Project: Soil Samples
Collection Date: 5/4/2021 8:36:00 AM
Lab ID: 2105148-007 **Matrix:** SOIL **Received Date:** 5/5/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	60		mg/Kg	20	5/6/2021 6:33:31 PM	59851
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	5/5/2021 6:19:39 PM	59826
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/5/2021 6:19:39 PM	59826
Surr: DNOP	93.9	70-130		%Rec	1	5/5/2021 6:19:39 PM	59826
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	5/7/2021 3:47:35 AM	59822
Surr: BFB	90.3	70-130		%Rec	1	5/7/2021 3:47:35 AM	59822
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	5/7/2021 3:47:35 AM	59822
Toluene	ND	0.046		mg/Kg	1	5/7/2021 3:47:35 AM	59822
Ethylbenzene	ND	0.046		mg/Kg	1	5/7/2021 3:47:35 AM	59822
Xylenes, Total	ND	0.092		mg/Kg	1	5/7/2021 3:47:35 AM	59822
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	5/7/2021 3:47:35 AM	59822

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 **2105148**
Date Reported: **5/12/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SP-E/6'
Project: Soil Samples
Collection Date: 5/4/2021 8:42:00 AM
Lab ID: 2105148-008 **Matrix:** SOIL **Received Date:** 5/5/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	170	60		mg/Kg	20	5/6/2021 6:45:55 PM	59851
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	5/5/2021 6:29:41 PM	59826
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/5/2021 6:29:41 PM	59826
Surr: DNOP	95.5	70-130		%Rec	1	5/5/2021 6:29:41 PM	59826
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/7/2021 4:11:14 AM	59822
Surr: BFB	91.4	70-130		%Rec	1	5/7/2021 4:11:14 AM	59822
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	5/7/2021 4:11:14 AM	59822
Toluene	ND	0.049		mg/Kg	1	5/7/2021 4:11:14 AM	59822
Ethylbenzene	ND	0.049		mg/Kg	1	5/7/2021 4:11:14 AM	59822
Xylenes, Total	ND	0.098		mg/Kg	1	5/7/2021 4:11:14 AM	59822
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	5/7/2021 4:11:14 AM	59822

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 **2105148**
Date Reported: **5/12/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SP-E/10'
Project: Soil Samples
Collection Date: 5/4/2021 9:01:00 AM
Lab ID: 2105148-009 **Matrix:** SOIL **Received Date:** 5/5/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	75	59		mg/Kg	20	5/6/2021 6:58:20 PM	59851
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	5/5/2021 6:39:48 PM	59826
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/5/2021 6:39:48 PM	59826
Surr: DNOP	87.9	70-130		%Rec	1	5/5/2021 6:39:48 PM	59826
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/7/2021 4:34:47 AM	59822
Surr: BFB	92.4	70-130		%Rec	1	5/7/2021 4:34:47 AM	59822
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	5/7/2021 4:34:47 AM	59822
Toluene	ND	0.050		mg/Kg	1	5/7/2021 4:34:47 AM	59822
Ethylbenzene	ND	0.050		mg/Kg	1	5/7/2021 4:34:47 AM	59822
Xylenes, Total	ND	0.10		mg/Kg	1	5/7/2021 4:34:47 AM	59822
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	5/7/2021 4:34:47 AM	59822

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 **2105148**
Date Reported: **5/12/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SP-N/0'
Project: Soil Samples
Collection Date: 5/4/2021 9:31:00 AM
Lab ID: 2105148-010 **Matrix:** SOIL **Received Date:** 5/5/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	69	60		mg/Kg	20	5/6/2021 7:10:45 PM	59851
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	5/5/2021 6:49:46 PM	59826
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/5/2021 6:49:46 PM	59826
Surr: DNOP	88.9	70-130		%Rec	1	5/5/2021 6:49:46 PM	59826
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/7/2021 4:58:18 AM	59822
Surr: BFB	92.4	70-130		%Rec	1	5/7/2021 4:58:18 AM	59822
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	5/7/2021 4:58:18 AM	59822
Toluene	ND	0.050		mg/Kg	1	5/7/2021 4:58:18 AM	59822
Ethylbenzene	ND	0.050		mg/Kg	1	5/7/2021 4:58:18 AM	59822
Xylenes, Total	ND	0.099		mg/Kg	1	5/7/2021 4:58:18 AM	59822
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	5/7/2021 4:58:18 AM	59822

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 **2105148**
Date Reported: **5/12/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SP-N/2'
Project: Soil Samples
Collection Date: 5/4/2021 9:35:00 AM
Lab ID: 2105148-011 **Matrix:** SOIL **Received Date:** 5/5/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	260	60		mg/Kg	20	5/6/2021 7:23:10 PM	59851
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	5/5/2021 6:59:49 PM	59826
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/5/2021 6:59:49 PM	59826
Surr: DNOP	90.2	70-130		%Rec	1	5/5/2021 6:59:49 PM	59826
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/7/2021 9:42:35 AM	59822
Surr: BFB	91.4	70-130		%Rec	1	5/7/2021 9:42:35 AM	59822
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	5/7/2021 9:42:35 AM	59822
Toluene	ND	0.049		mg/Kg	1	5/7/2021 9:42:35 AM	59822
Ethylbenzene	ND	0.049		mg/Kg	1	5/7/2021 9:42:35 AM	59822
Xylenes, Total	ND	0.097		mg/Kg	1	5/7/2021 9:42:35 AM	59822
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	5/7/2021 9:42:35 AM	59822

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 **2105148**
Date Reported: **5/12/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SP-N/5'
Project: Soil Samples
Collection Date: 5/4/2021 9:40:00 AM
Lab ID: 2105148-012 **Matrix:** SOIL **Received Date:** 5/5/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	1200	60		mg/Kg	20	5/6/2021 7:35:34 PM	59851
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/6/2021 11:52:12 PM	59828
Surr: BFB	93.6	70-130		%Rec	1	5/6/2021 11:52:12 PM	59828
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/7/2021 12:47:39 PM	59866
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/7/2021 12:47:39 PM	59866
Surr: DNOP	97.6	70-130		%Rec	1	5/7/2021 12:47:39 PM	59866
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **BRM**	
Benzene	ND	0.025		mg/Kg	1	5/6/2021 11:52:12 PM	59828
Toluene	ND	0.049		mg/Kg	1	5/6/2021 11:52:12 PM	59828
Ethylbenzene	ND	0.049		mg/Kg	1	5/6/2021 11:52:12 PM	59828
Xylenes, Total	ND	0.098		mg/Kg	1	5/6/2021 11:52:12 PM	59828
Surr: 1,2-Dichloroethane-d4	107	70-130		%Rec	1	5/6/2021 11:52:12 PM	59828
Surr: 4-Bromofluorobenzene	99.9	70-130		%Rec	1	5/6/2021 11:52:12 PM	59828
Surr: Dibromofluoromethane	108	70-130		%Rec	1	5/6/2021 11:52:12 PM	59828
Surr: Toluene-d8	101	70-130		%Rec	1	5/6/2021 11:52:12 PM	59828

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 **2105148**
Date Reported: **5/12/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SP-W/0'
Project: Soil Samples
Collection Date: 5/4/2021 9:48:00 AM
Lab ID: 2105148-013 **Matrix:** SOIL **Received Date:** 5/5/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	60		mg/Kg	20	5/6/2021 7:47:58 PM	59851
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/7/2021 12:19:08 AM	59828
Surr: BFB	93.9	70-130		%Rec	1	5/7/2021 12:19:08 AM	59828
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	5/7/2021 12:57:31 PM	59866
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/7/2021 12:57:31 PM	59866
Surr: DNOP	81.5	70-130		%Rec	1	5/7/2021 12:57:31 PM	59866
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **BRM**	
Benzene	ND	0.025		mg/Kg	1	5/7/2021 12:19:08 AM	59828
Toluene	ND	0.050		mg/Kg	1	5/7/2021 12:19:08 AM	59828
Ethylbenzene	ND	0.050		mg/Kg	1	5/7/2021 12:19:08 AM	59828
Xylenes, Total	ND	0.099		mg/Kg	1	5/7/2021 12:19:08 AM	59828
Surr: 1,2-Dichloroethane-d4	104	70-130		%Rec	1	5/7/2021 12:19:08 AM	59828
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	5/7/2021 12:19:08 AM	59828
Surr: Dibromofluoromethane	105	70-130		%Rec	1	5/7/2021 12:19:08 AM	59828
Surr: Toluene-d8	98.4	70-130		%Rec	1	5/7/2021 12:19:08 AM	59828

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 **2105148**
Date Reported: **5/12/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SP-W/4'
Project: Soil Samples
Collection Date: 5/4/2021 9:53:00 AM
Lab ID: 2105148-014 **Matrix:** SOIL **Received Date:** 5/5/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	220	60		mg/Kg	20	5/6/2021 8:25:12 PM	59851
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/7/2021 12:46:01 AM	59828
Surr: BFB	88.3	70-130		%Rec	1	5/7/2021 12:46:01 AM	59828
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	8.5		mg/Kg	1	5/7/2021 1:07:20 PM	59866
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	5/7/2021 1:07:20 PM	59866
Surr: DNOP	87.1	70-130		%Rec	1	5/7/2021 1:07:20 PM	59866
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **BRM**	
Benzene	ND	0.024		mg/Kg	1	5/7/2021 12:46:01 AM	59828
Toluene	ND	0.048		mg/Kg	1	5/7/2021 12:46:01 AM	59828
Ethylbenzene	ND	0.048		mg/Kg	1	5/7/2021 12:46:01 AM	59828
Xylenes, Total	ND	0.095		mg/Kg	1	5/7/2021 12:46:01 AM	59828
Surr: 1,2-Dichloroethane-d4	109	70-130		%Rec	1	5/7/2021 12:46:01 AM	59828
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	5/7/2021 12:46:01 AM	59828
Surr: Dibromofluoromethane	107	70-130		%Rec	1	5/7/2021 12:46:01 AM	59828
Surr: Toluene-d8	99.8	70-130		%Rec	1	5/7/2021 12:46:01 AM	59828

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 **2105148**
Date Reported: **5/12/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SP-W/10'
Project: Soil Samples
Collection Date: 5/4/2021 10:15:00 AM
Lab ID: 2105148-015 **Matrix:** SOIL **Received Date:** 5/5/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	60		mg/Kg	20	5/6/2021 9:02:25 PM	59851
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/7/2021 1:12:54 AM	59828
Surr: BFB	91.8	70-130		%Rec	1	5/7/2021 1:12:54 AM	59828
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	8.4		mg/Kg	1	5/7/2021 1:17:09 PM	59866
Motor Oil Range Organics (MRO)	ND	42		mg/Kg	1	5/7/2021 1:17:09 PM	59866
Surr: DNOP	98.8	70-130		%Rec	1	5/7/2021 1:17:09 PM	59866
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **BRM**	
Benzene	ND	0.023		mg/Kg	1	5/7/2021 1:12:54 AM	59828
Toluene	ND	0.047		mg/Kg	1	5/7/2021 1:12:54 AM	59828
Ethylbenzene	ND	0.047		mg/Kg	1	5/7/2021 1:12:54 AM	59828
Xylenes, Total	ND	0.094		mg/Kg	1	5/7/2021 1:12:54 AM	59828
Surr: 1,2-Dichloroethane-d4	108	70-130		%Rec	1	5/7/2021 1:12:54 AM	59828
Surr: 4-Bromofluorobenzene	99.0	70-130		%Rec	1	5/7/2021 1:12:54 AM	59828
Surr: Dibromofluoromethane	104	70-130		%Rec	1	5/7/2021 1:12:54 AM	59828
Surr: Toluene-d8	102	70-130		%Rec	1	5/7/2021 1:12:54 AM	59828

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#: **2105148**

12-May-21

Client: EOG

Project: Soil Samples

Sample ID: **MB-59851**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **59851**	RunNo: **77183**							
Prep Date: **5/6/2021**	Analysis Date: **5/6/2021**	SeqNo: **2738022**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-59851**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **59851**	RunNo: **77183**							
Prep Date: **5/6/2021**	Analysis Date: **5/6/2021**	SeqNo: **2738023**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.2	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#: **2105148**

12-May-21

Client: EOG

Project: Soil Samples

Sample ID: **MB-59826**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **59826**	RunNo: **77152**
Prep Date: **5/5/2021**	Analysis Date: **5/5/2021**	SeqNo: **2736833** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.2		10.00		92.3	70	130			

Sample ID: **LCS-59826**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **59826**	RunNo: **77152**
Prep Date: **5/5/2021**	Analysis Date: **5/5/2021**	SeqNo: **2736835** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.5	68.9	141			
Surr: DNOP	4.6		5.000		91.8	70	130			

Sample ID: **MB-59852**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **59852**	RunNo: **77219**
Prep Date: **5/6/2021**	Analysis Date: **5/7/2021**	SeqNo: **2738424** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		111	70	130			

Sample ID: **LCS-59852**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **59852**	RunNo: **77221**
Prep Date: **5/6/2021**	Analysis Date: **5/7/2021**	SeqNo: **2738444** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	6.4		5.000		127	70	130			

Sample ID: **MB-59866**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **59866**	RunNo: **77221**
Prep Date: **5/6/2021**	Analysis Date: **5/7/2021**	SeqNo: **2738625** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	7.3		10.00		73.0	70	130			

Sample ID: **LCS-59866**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **59866**	RunNo: **77219**
Prep Date: **5/6/2021**	Analysis Date: **5/7/2021**	SeqNo: **2738705** Units: **mg/Kg**

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

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#: **2105148**

12-May-21

Client: EOG

Project: Soil Samples

Sample ID: **LCS-59866**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **59866**	RunNo: **77219**
Prep Date: **5/6/2021**	Analysis Date: **5/7/2021**	SeqNo: **2738705** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	94.5	68.9	141			
Surr: DNOP	3.9		5.000		77.8	70	130			

Sample ID: **MB-59890**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **59890**	RunNo: **77247**
Prep Date: **5/8/2021**	Analysis Date: **5/8/2021**	SeqNo: **2740470** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.1		10.00		90.8	70	130			

Sample ID: **LCS-59890**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **59890**	RunNo: **77247**
Prep Date: **5/8/2021**	Analysis Date: **5/8/2021**	SeqNo: **2740471** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		5.000		88.1	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#: **2105148**

12-May-21

Client: EOG

Project: Soil Samples

Sample ID: **MB-59822**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **59822**	RunNo: **77197**
Prep Date: **5/5/2021**	Analysis Date: **5/6/2021**	SeqNo: **2737863** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	920		1000		92.0	70	130			

Sample ID: **LCS-59822**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **59822**	RunNo: **77197**
Prep Date: **5/5/2021**	Analysis Date: **5/6/2021**	SeqNo: **2737864** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	95.0	78.6	131			
Surr: BFB	1000		1000		102	70	130			

Sample ID: **mb-59845**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **59845**	RunNo: **77243**
Prep Date: **5/6/2021**	Analysis Date: **5/8/2021**	SeqNo: **2739198** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	940		1000		93.6	70	130			

Sample ID: **lcs-59845**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **59845**	RunNo: **77243**
Prep Date: **5/6/2021**	Analysis Date: **5/7/2021**	SeqNo: **2739199** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		104	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#: **2105148**

12-May-21

Client: EOG

Project: Soil Samples

Sample ID: **MB-59822**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **59822**	RunNo: **77197**
Prep Date: **5/5/2021**	Analysis Date: **5/6/2021**	SeqNo: **2737911** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		102	70	130			

Sample ID: **LCS-59822**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **59822**	RunNo: **77197**
Prep Date: **5/5/2021**	Analysis Date: **5/6/2021**	SeqNo: **2737912** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	96.3	80	120			
Toluene	0.98	0.050	1.000	0	97.6	80	120			
Ethylbenzene	0.98	0.050	1.000	0	97.6	80	120			
Xylenes, Total	2.9	0.10	3.000	0	97.9	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	70	130			

Sample ID: **mb-59845**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **59845**	RunNo: **77243**
Prep Date: **5/6/2021**	Analysis Date: **5/8/2021**	SeqNo: **2739254** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		103	70	130			

Sample ID: **LCS-59845**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **59845**	RunNo: **77243**
Prep Date: **5/6/2021**	Analysis Date: **5/7/2021**	SeqNo: **2739255** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		103	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
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#: **2105148**
12-May-21

Client: EOG
Project: Soil Samples

Sample ID: **lcs-59828**	SampType: **LCS**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **LCSS**	Batch ID: **59828**	RunNo: **77212**
Prep Date: **5/5/2021**	Analysis Date: **5/6/2021**	SeqNo: **2737981** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	104	70	130			
Toluene	1.0	0.050	1.000	0	99.8	70	130			
Surr: 1,2-Dichloroethane-d4	0.53		0.5000		107	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		97.4	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		102	70	130			
Surr: Toluene-d8	0.48		0.5000		96.6	70	130			

Sample ID: **MB-59828**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS**	Batch ID: **59828**	RunNo: **77212**
Prep Date: **5/5/2021**	Analysis Date: **5/6/2021**	SeqNo: **2737982** 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: 1,2-Dichloroethane-d4	0.54		0.5000		108	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		103	70	130			
Surr: Dibromofluoromethane	0.53		0.5000		107	70	130			
Surr: Toluene-d8	0.51		0.5000		101	70	130			

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#: **2105148**

12-May-21

Client: EOG

Project: Soil Samples

Sample ID: **lcs-59828**	SampType: **LCS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **LCSS**	Batch ID: **59828**	RunNo: **77212**
Prep Date: **5/5/2021**	Analysis Date: **5/6/2021**	SeqNo: **2737970** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	99.8	70	130			
Surr: BFB	470		500.0		93.5	70	130			

Sample ID: **MB-59828**	SampType: **MBLK**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **PBS**	Batch ID: **59828**	RunNo: **77212**
Prep Date: **5/5/2021**	Analysis Date: **5/6/2021**	SeqNo: **2737971** 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	460		500.0		91.7	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: 2105148 | RcptNo: 1

Received By: Juan Rojas 5/5/2021 7:25:00 AM

Completed By: Sean Livingston 5/5/2021 8:35:43 AM

Reviewed By: JR 5/5/21

Chain of Custody

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

Log In

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

JO 5/5/21

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	3.3	Good				

Released to Imaging: 9/21/2021 11:38:18 AM
Received by OCD: 6/17/2021 3:10:17 PM

Chain-of-Custody Record

Client: EOG-Artesia / Ranger Env.

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

Ranger: PO Box 201179, Austin TX 78720

Phone #: 521-335-1785

email or Fax#: Will@RangerEnv.com

QA/QC Package:

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

Accreditation: ☐ Az Compliance

■ **NELAC** ☐ Other_____

■ **EDD** (Type) Excel

Turn-Around Time: 5 Day

☒ Standard ☐ **Rush**_____

Project Name:

Project #: 5375

Project Manager: W. Kierdorf

Sampler: W. KIERDORF

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 3.3-0=3.3

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. 2105148	BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride (EPA 300)
5/4/21	0737	SOIL	SP-1A/13'	1 x 4oz JAR	ICE	001	X	X	X
	0749		SP-1A/18'			002			
	0758		SP-1A/20'			003			
	0809		SP-S/0'			004			
	0819		SP-S/5'			005			
	0833		SPS/10'			006			
	0836		SP-E/0'			007			
	0842		SP-E/6'			008			
	0901		SP-E/10'			009			
	0931		SP-N/0'			010			
	0935		SP-N/2'			011			
	0940		SP-N/5'			012			

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
5/4/21	1300		ACummings		5/4/21	1300
5/4/21	1900	ACummings		Courier	5/5/21	7:25

Remarks: Bill to EOG Artesia - ATTN CHASE SETTLE

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

Released to Imaging: 9/21/2021 11:38:18 AM
Received by OCD: 6/17/2021 3:10:17 PM

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:

Project #: 5375

Project Manager: W. Kierdorf

Sampler: W. KIERDORF
On Ice: ☑ Yes ☐ No
# of Coolers: 1
Cooler Temp(including CF): 3.3+0=3.3

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. 2105148	BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride (EPA 300)
5/4/21	0948	Soil	SP-W/0'	1 x 4oz Jar	Ice	013	X	X	X
"	0953	"	SP-W/4'	"	"	014	X	X	X
"	1015	"	SP-W/10'	"	"	015	X	X	X

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
5/4/21	1300				5/4/21	1300
5/4/21	1900			courier	5/5/21	7:25

Remarks: Bill to EOG Artesia

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

June 04, 2021

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

RE: State D SWD 1 OrderNo.: 2105C05

Dear Chase Settle:

Hall Environmental Analysis Laboratory received 4 sample(s) on 5/28/2021 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 **2105C05**
Date Reported: **6/4/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SB-1/20'
Project: State D SWD 1
Collection Date: 5/26/2021 8:20:00 AM
Lab ID: 2105C05-001 **Matrix:** SOIL **Received Date:** 5/28/2021 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	6/3/2021 12:51:48 PM	60416
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	6/2/2021 12:39:54 AM	60349
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/2/2021 12:39:54 AM	60349
Surr: DNOP	118	70-130		%Rec	1	6/2/2021 12:39:54 AM	60349
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/2/2021 4:28:12 AM	60345
Surr: BFB	102	70-130		%Rec	1	6/2/2021 4:28:12 AM	60345
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	6/2/2021 4:28:12 AM	60345
Toluene	ND	0.048		mg/Kg	1	6/2/2021 4:28:12 AM	60345
Ethylbenzene	ND	0.048		mg/Kg	1	6/2/2021 4:28:12 AM	60345
Xylenes, Total	ND	0.097		mg/Kg	1	6/2/2021 4:28:12 AM	60345
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	6/2/2021 4:28:12 AM	60345

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 **2105C05**
Date Reported: **6/4/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SB-1/23'
Project: State D SWD 1
Collection Date: 5/26/2021 8:36:00 AM
Lab ID: 2105C05-002 **Matrix:** SOIL **Received Date:** 5/28/2021 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	6/3/2021 1:04:13 PM	60416
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	21	9.3		mg/Kg	1	6/2/2021 12:49:48 AM	60349
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/2/2021 12:49:48 AM	60349
Surr: DNOP	112	70-130		%Rec	1	6/2/2021 12:49:48 AM	60349
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/2/2021 4:51:58 AM	60345
Surr: BFB	103	70-130		%Rec	1	6/2/2021 4:51:58 AM	60345
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	6/2/2021 4:51:58 AM	60345
Toluene	ND	0.049		mg/Kg	1	6/2/2021 4:51:58 AM	60345
Ethylbenzene	ND	0.049		mg/Kg	1	6/2/2021 4:51:58 AM	60345
Xylenes, Total	ND	0.098		mg/Kg	1	6/2/2021 4:51:58 AM	60345
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	6/2/2021 4:51:58 AM	60345

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 **2105C05**
Date Reported: **6/4/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SB-2/23'
Project: State D SWD 1
Collection Date: 5/26/2021 9:43:00 AM
Lab ID: 2105C05-003 **Matrix:** SOIL **Received Date:** 5/28/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	77	60		mg/Kg	20	6/3/2021 1:41:28 PM	60416
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	180	9.8		mg/Kg	1	6/2/2021 12:59:43 AM	60349
Motor Oil Range Organics (MRO)	89	49		mg/Kg	1	6/2/2021 12:59:43 AM	60349
Surr: DNOP	118	70-130		%Rec	1	6/2/2021 12:59:43 AM	60349
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	24		mg/Kg	5	6/2/2021 5:22:48 PM	60345
Surr: BFB	111	70-130		%Rec	5	6/2/2021 5:22:48 PM	60345
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.12		mg/Kg	5	6/2/2021 5:22:48 PM	60345
Toluene	ND	0.24		mg/Kg	5	6/2/2021 5:22:48 PM	60345
Ethylbenzene	ND	0.24		mg/Kg	5	6/2/2021 5:22:48 PM	60345
Xylenes, Total	ND	0.48		mg/Kg	5	6/2/2021 5:22:48 PM	60345
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	5	6/2/2021 5:22:48 PM	60345

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 **2105C05**
Date Reported: **6/4/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SB-2/24'
Project: State D SWD 1
Collection Date: 5/26/2021 9:50:00 AM
Lab ID: 2105C05-004 **Matrix:** SOIL **Received Date:** 5/28/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	70	60		mg/Kg	20	6/3/2021 1:53:52 PM	60416
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	37	9.9		mg/Kg	1	6/2/2021 1:09:39 AM	60349
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/2/2021 1:09:39 AM	60349
Surr: DNOP	117	70-130		%Rec	1	6/2/2021 1:09:39 AM	60349
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/2/2021 5:46:37 PM	60345
Surr: BFB	105	70-130		%Rec	1	6/2/2021 5:46:37 PM	60345
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	6/2/2021 5:46:37 PM	60345
Toluene	ND	0.049		mg/Kg	1	6/2/2021 5:46:37 PM	60345
Ethylbenzene	ND	0.049		mg/Kg	1	6/2/2021 5:46:37 PM	60345
Xylenes, Total	ND	0.099		mg/Kg	1	6/2/2021 5:46:37 PM	60345
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	6/2/2021 5:46:37 PM	60345

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#: **2105C05**

04-Jun-21

Client: EOG

Project: State D SWD 1

Sample ID: **MB-60416**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **60416**	RunNo: **78817**							
Prep Date: **6/3/2021**	Analysis Date: **6/3/2021**	SeqNo: **2765651**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-60416**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **60416**	RunNo: **78817**							
Prep Date: **6/3/2021**	Analysis Date: **6/3/2021**	SeqNo: **2765652**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.9	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#: **2105C05**

04-Jun-21

Client: EOG

Project: State D SWD 1

Sample ID: **LCS-60318**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **60318**	RunNo: **78780**
Prep Date: **5/28/2021**	Analysis Date: **6/1/2021**	SeqNo: **2762508** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.2		5.000		105	70	130			

Sample ID: **LCS-60319**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **60319**	RunNo: **78780**
Prep Date: **5/28/2021**	Analysis Date: **6/1/2021**	SeqNo: **2762509** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.4		5.000		109	70	130			

Sample ID: **MB-60318**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **60318**	RunNo: **78780**
Prep Date: **5/28/2021**	Analysis Date: **6/1/2021**	SeqNo: **2762510** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		113	70	130			

Sample ID: **MB-60319**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **60319**	RunNo: **78780**
Prep Date: **5/28/2021**	Analysis Date: **6/1/2021**	SeqNo: **2762511** Units: **%Rec**

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

Sample ID: **LCS-60330**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **60330**	RunNo: **78780**
Prep Date: **5/28/2021**	Analysis Date: **6/1/2021**	SeqNo: **2762911** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.9		5.000		118	70	130			

Sample ID: **LCS-60349**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **60349**	RunNo: **78780**
Prep Date: **5/29/2021**	Analysis Date: **6/1/2021**	SeqNo: **2762912** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	10	50.00	0	104	68.9	141			
Surr: DNOP	5.7		5.000		114	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2105C05**
04-Jun-21

Client: EOG
Project: State D SWD 1

Sample ID: **MB-60349**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **60349**	RunNo: **78780**
Prep Date: **5/29/2021**	Analysis Date: **6/1/2021**	SeqNo: **2762914** 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		112	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#: **2105C05**

04-Jun-21

Client: EOG

Project: State D SWD 1

Sample ID: **MB-60329**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **60329**	RunNo: **78783**
Prep Date: **5/28/2021**	Analysis Date: **6/1/2021**	SeqNo: **2762565** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		102	70	130			

Sample ID: **lcs-60329**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **60329**	RunNo: **78783**
Prep Date: **5/28/2021**	Analysis Date: **6/1/2021**	SeqNo: **2762566** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		115	70	130			

Sample ID: **mb-60345**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **60345**	RunNo: **78783**
Prep Date: **5/29/2021**	Analysis Date: **6/1/2021**	SeqNo: **2762589** 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-60345**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **60345**	RunNo: **78783**
Prep Date: **5/29/2021**	Analysis Date: **6/1/2021**	SeqNo: **2762590** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.3	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#: **2105C05**

04-Jun-21

Client: EOG

Project: State D SWD 1

Sample ID: **MB-60329**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **60329**	RunNo: **78783**
Prep Date: **5/28/2021**	Analysis Date: **6/1/2021**	SeqNo: **2762613** Units: **%Rec**

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

Sample ID: **LCS-60329**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **60329**	RunNo: **78783**
Prep Date: **5/28/2021**	Analysis Date: **6/1/2021**	SeqNo: **2762614** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		106	70	130			

Sample ID: **mb-60345**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **60345**	RunNo: **78783**
Prep Date: **5/29/2021**	Analysis Date: **6/1/2021**	SeqNo: **2762632** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		99.6	70	130			

Sample ID: **LCS-60345**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **60345**	RunNo: **78783**
Prep Date: **5/29/2021**	Analysis Date: **6/1/2021**	SeqNo: **2762633** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	96.1	80	120			
Toluene	0.98	0.050	1.000	0	98.0	80	120			
Ethylbenzene	0.98	0.050	1.000	0	98.0	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.9	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
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: **2105C05** RcptNo: 1

Received By: **Juan Rojas** **5/28/2021 7:30:00 AM**

Completed By: **Sean Livingston** **5/28/2021 8:03:14 AM**

Reviewed By: JR 5/28/21

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 ☐	

10 5-28-21

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

Adjusted?

Checked by:

Special Handling (if applicable)

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

Person Notified: Date:

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

Regarding:

Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.0	Good				

Released to Imaging: 9/21/2021 11:38:18 AM

Received by OCD: 6/17/2021 3:10:17 PM

Chain-of-Custody Record

Client: EOG-ARTESIA / RANGER ENV

Mailing Address: EOG- 104 S 4TH ST ARTESIA NM 88210

RANGER - PO BOX 201179 AUSTIN TX 78720

Phone #: 512-289-3272

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: STATE O SWD #1

Project #: 5375

Project Manager: W. KIERDORF (RANGER)
C. SETTLE (EOG)

Sampler: W. KIERDORF / R. MARTIN

On Ice: ☐ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 3.1+0=3.0

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. 2105C05	BTEX / MTBE / TMBs (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	CHLORIDE (EPA 300)
5/26/21	0820	SOIL	SB-1/20'	1 x 4oz JAR	ICE	001	X	X									X
	0836		SB-1/23'			002											
	0943		SB-2/23'			003											
	0950		SB-2/24'			004											

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
5/27/21	0700				5/27/21	0700
5/27/21	1900				5/28/21	7:30

Remarks: PLEASE EMAIL REPORT TO:
- WILL@RANGERENV.
- CHASE_SETTLE@EOGRESOURCES.COM

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

June 16, 2021

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

RE: State D SWD 1 OrderNo.: 2106361

Dear Will Kierdorf:

Hall Environmental Analysis Laboratory received 11 sample(s) on 6/8/2021 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 **2106361**
Date Reported: **6/16/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SP-S.S/0'
Project: State D SWD 1
Collection Date: 6/7/2021 7:30:00 AM
Lab ID: 2106361-001 **Matrix:** SOIL **Received Date:** 6/8/2021 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	6/11/2021 6:04:51 PM	60582
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	6/11/2021 9:37:42 PM	60491
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	6/11/2021 9:37:42 PM	60491
Surr: DNOP	112	70-130		%Rec	1	6/11/2021 9:37:42 PM	60491
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/10/2021 4:14:23 AM	60487
Surr: BFB	105	70-130		%Rec	1	6/10/2021 4:14:23 AM	60487
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	6/10/2021 4:14:23 AM	60487
Toluene	ND	0.048		mg/Kg	1	6/10/2021 4:14:23 AM	60487
Ethylbenzene	ND	0.048		mg/Kg	1	6/10/2021 4:14:23 AM	60487
Xylenes, Total	ND	0.096		mg/Kg	1	6/10/2021 4:14:23 AM	60487
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	6/10/2021 4:14:23 AM	60487

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 **2106361**
Date Reported: **6/16/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SP-S.E/0'
Project: State D SWD 1
Collection Date: 6/7/2021 7:40:00 AM
Lab ID: 2106361-002 **Matrix:** SOIL **Received Date:** 6/8/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	380	60		mg/Kg	20	6/11/2021 6:42:05 PM	60582
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	49	9.1		mg/Kg	1	6/11/2021 8:25:28 PM	60491
Motor Oil Range Organics (MRO)	120	46		mg/Kg	1	6/11/2021 8:25:28 PM	60491
Surr: DNOP	102	70-130		%Rec	1	6/11/2021 8:25:28 PM	60491
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/10/2021 4:38:10 AM	60487
Surr: BFB	106	70-130		%Rec	1	6/10/2021 4:38:10 AM	60487
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	6/10/2021 4:38:10 AM	60487
Toluene	ND	0.049		mg/Kg	1	6/10/2021 4:38:10 AM	60487
Ethylbenzene	ND	0.049		mg/Kg	1	6/10/2021 4:38:10 AM	60487
Xylenes, Total	ND	0.099		mg/Kg	1	6/10/2021 4:38:10 AM	60487
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	1	6/10/2021 4:38:10 AM	60487

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 **2106361**
Date Reported: **6/16/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SP-S.W/0'
Project: State D SWD 1
Collection Date: 6/7/2021 7:42:00 AM
Lab ID: 2106361-003 **Matrix:** SOIL **Received Date:** 6/8/2021 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	6/11/2021 6:54:30 PM	60582
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	6/11/2021 10:01:46 PM	60491
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/11/2021 10:01:46 PM	60491
Surr: DNOP	92.5	70-130		%Rec	1	6/11/2021 10:01:46 PM	60491
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/10/2021 10:11:25 AM	60487
Surr: BFB	105	70-130		%Rec	1	6/10/2021 10:11:25 AM	60487
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	6/10/2021 10:11:25 AM	60487
Toluene	ND	0.048		mg/Kg	1	6/10/2021 10:11:25 AM	60487
Ethylbenzene	ND	0.048		mg/Kg	1	6/10/2021 10:11:25 AM	60487
Xylenes, Total	ND	0.097		mg/Kg	1	6/10/2021 10:11:25 AM	60487
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	6/10/2021 10:11:25 AM	60487

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 **2106361**
Date Reported: **6/16/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SP-N.A/7'
Project: State D SWD 1
Collection Date: 6/7/2021 7:48:00 AM
Lab ID: 2106361-004 **Matrix:** SOIL **Received Date:** 6/8/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	370	60		mg/Kg	20	6/11/2021 7:06:55 PM	60582
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	8.4		mg/Kg	1	6/11/2021 10:25:48 PM	60491
Motor Oil Range Organics (MRO)	ND	42		mg/Kg	1	6/11/2021 10:25:48 PM	60491
Surr: DNOP	103	70-130		%Rec	1	6/11/2021 10:25:48 PM	60491
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/10/2021 10:34:52 AM	60487
Surr: BFB	109	70-130		%Rec	1	6/10/2021 10:34:52 AM	60487
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	6/10/2021 10:34:52 AM	60487
Toluene	ND	0.047		mg/Kg	1	6/10/2021 10:34:52 AM	60487
Ethylbenzene	ND	0.047		mg/Kg	1	6/10/2021 10:34:52 AM	60487
Xylenes, Total	ND	0.095		mg/Kg	1	6/10/2021 10:34:52 AM	60487
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	1	6/10/2021 10:34:52 AM	60487

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 **2106361**
Date Reported: **6/16/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SP-N.A/8'
Project: State D SWD 1
Collection Date: 6/7/2021 7:50:00 AM
Lab ID: 2106361-005 **Matrix:** SOIL **Received Date:** 6/8/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	280	60		mg/Kg	20	6/11/2021 7:19:20 PM	60582
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	6/10/2021 12:16:34 PM	60528
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/10/2021 12:16:34 PM	60528
Surr: DNOP	91.1	70-130		%Rec	1	6/10/2021 12:16:34 PM	60528
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/10/2021 10:58:20 AM	60525
Surr: BFB	109	70-130		%Rec	1	6/10/2021 10:58:20 AM	60525
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	6/10/2021 10:58:20 AM	60525
Toluene	ND	0.049		mg/Kg	1	6/10/2021 10:58:20 AM	60525
Ethylbenzene	ND	0.049		mg/Kg	1	6/10/2021 10:58:20 AM	60525
Xylenes, Total	ND	0.098		mg/Kg	1	6/10/2021 10:58:20 AM	60525
Surr: 4-Bromofluorobenzene	107	70-130		%Rec	1	6/10/2021 10:58:20 AM	60525

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2106361**
Date Reported: **6/16/2021**

CLIENT: EOG
Client Sample ID: SP-N.E/2'
Project: State D SWD 1
Collection Date: 6/7/2021 8:11:00 AM
Lab ID: 2106361-006 **Matrix:** SOIL **Received Date:** 6/8/2021 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	6/11/2021 7:31:45 PM	60582
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	6/10/2021 1:29:48 PM	60528
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/10/2021 1:29:48 PM	60528
Surr: DNOP	115	70-130		%Rec	1	6/10/2021 1:29:48 PM	60528
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/10/2021 12:08:56 PM	60525
Surr: BFB	109	70-130		%Rec	1	6/10/2021 12:08:56 PM	60525
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	6/10/2021 12:08:56 PM	60525
Toluene	ND	0.049		mg/Kg	1	6/10/2021 12:08:56 PM	60525
Ethylbenzene	ND	0.049		mg/Kg	1	6/10/2021 12:08:56 PM	60525
Xylenes, Total	ND	0.099		mg/Kg	1	6/10/2021 12:08:56 PM	60525
Surr: 4-Bromofluorobenzene	107	70-130		%Rec	1	6/10/2021 12:08:56 PM	60525

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 **2106361**
Date Reported: **6/16/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SP-N.E/5'
Project: State D SWD 1
Collection Date: 6/7/2021 8:15:00 AM
Lab ID: 2106361-007 **Matrix:** SOIL **Received Date:** 6/8/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	190	60		mg/Kg	20	6/11/2021 8:08:59 PM	60582
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	6/10/2021 1:54:19 PM	60528
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/10/2021 1:54:19 PM	60528
Surr: DNOP	110	70-130		%Rec	1	6/10/2021 1:54:19 PM	60528
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/10/2021 1:19:32 PM	60525
Surr: BFB	108	70-130		%Rec	1	6/10/2021 1:19:32 PM	60525
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	6/10/2021 1:19:32 PM	60525
Toluene	ND	0.049		mg/Kg	1	6/10/2021 1:19:32 PM	60525
Ethylbenzene	ND	0.049		mg/Kg	1	6/10/2021 1:19:32 PM	60525
Xylenes, Total	ND	0.097		mg/Kg	1	6/10/2021 1:19:32 PM	60525
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	6/10/2021 1:19:32 PM	60525

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 **2106361**
Date Reported: **6/16/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SP-N.N/2'
Project: State D SWD 1
Collection Date: 6/7/2021 8:25:00 AM
Lab ID: 2106361-008 **Matrix:** SOIL **Received Date:** 6/8/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	140	60		mg/Kg	20	6/11/2021 8:21:24 PM	60582
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	6/10/2021 2:18:35 PM	60528
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	6/10/2021 2:18:35 PM	60528
Surr: DNOP	113	70-130		%Rec	1	6/10/2021 2:18:35 PM	60528
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/10/2021 1:43:15 PM	60525
Surr: BFB	106	70-130		%Rec	1	6/10/2021 1:43:15 PM	60525
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	6/10/2021 1:43:15 PM	60525
Toluene	ND	0.050		mg/Kg	1	6/10/2021 1:43:15 PM	60525
Ethylbenzene	ND	0.050		mg/Kg	1	6/10/2021 1:43:15 PM	60525
Xylenes, Total	ND	0.10		mg/Kg	1	6/10/2021 1:43:15 PM	60525
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	6/10/2021 1:43:15 PM	60525

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 **2106361**
Date Reported: **6/16/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SP-N.N/5'
Project: State D SWD 1
Collection Date: 6/7/2021 8:30:00 AM
Lab ID: 2106361-009 **Matrix:** SOIL **Received Date:** 6/8/2021 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	6/11/2021 8:33:48 PM	60582
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	8.7		mg/Kg	1	6/10/2021 2:43:05 PM	60528
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	6/10/2021 2:43:05 PM	60528
Surr: DNOP	135	70-130	S	%Rec	1	6/10/2021 2:43:05 PM	60528
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/10/2021 2:06:52 PM	60525
Surr: BFB	108	70-130		%Rec	1	6/10/2021 2:06:52 PM	60525
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	6/10/2021 2:06:52 PM	60525
Toluene	ND	0.049		mg/Kg	1	6/10/2021 2:06:52 PM	60525
Ethylbenzene	ND	0.049		mg/Kg	1	6/10/2021 2:06:52 PM	60525
Xylenes, Total	ND	0.098		mg/Kg	1	6/10/2021 2:06:52 PM	60525
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	6/10/2021 2:06:52 PM	60525

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 **2106361**
Date Reported: **6/16/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SP-N.W/2'
Project: State D SWD 1
Collection Date: 6/7/2021 8:49:00 AM
Lab ID: 2106361-010
Matrix: SOIL
Received Date: 6/8/2021 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	6/11/2021 8:46:13 PM	60582
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	6/10/2021 3:07:26 PM	60528
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	6/10/2021 3:07:26 PM	60528
Surr: DNOP	76.0	70-130		%Rec	1	6/10/2021 3:07:26 PM	60528
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/10/2021 2:30:32 PM	60525
Surr: BFB	112	70-130		%Rec	1	6/10/2021 2:30:32 PM	60525
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	6/10/2021 2:30:32 PM	60525
Toluene	ND	0.047		mg/Kg	1	6/10/2021 2:30:32 PM	60525
Ethylbenzene	ND	0.047		mg/Kg	1	6/10/2021 2:30:32 PM	60525
Xylenes, Total	ND	0.095		mg/Kg	1	6/10/2021 2:30:32 PM	60525
Surr: 4-Bromofluorobenzene	109	70-130		%Rec	1	6/10/2021 2:30:32 PM	60525

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 **2106361**
Date Reported: **6/16/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SP-N.W/5'
Project: State D SWD 1
Collection Date: 6/7/2021 8:53:00 AM
Lab ID: 2106361-011 **Matrix:** SOIL **Received Date:** 6/8/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	490	60		mg/Kg	20	6/11/2021 8:58:38 PM	60582
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	6/10/2021 3:31:53 PM	60528
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/10/2021 3:31:53 PM	60528
Surr: DNOP	95.7	70-130		%Rec	1	6/10/2021 3:31:53 PM	60528
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/10/2021 3:41:45 PM	60525
Surr: BFB	113	70-130		%Rec	1	6/10/2021 3:41:45 PM	60525
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	6/10/2021 3:41:45 PM	60525
Toluene	ND	0.050		mg/Kg	1	6/10/2021 3:41:45 PM	60525
Ethylbenzene	ND	0.050		mg/Kg	1	6/10/2021 3:41:45 PM	60525
Xylenes, Total	ND	0.10		mg/Kg	1	6/10/2021 3:41:45 PM	60525
Surr: 4-Bromofluorobenzene	109	70-130		%Rec	1	6/10/2021 3:41:45 PM	60525

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#: **2106361**

16-Jun-21

Client: EOG

Project: State D SWD 1

Sample ID: **MB-60582**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **60582**	RunNo: **79021**
Prep Date: **6/11/2021**	Analysis Date: **6/11/2021**	SeqNo: **2772778** Units: **mg/Kg**

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

Sample ID: **LCS-60582**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **60582**	RunNo: **79021**
Prep Date: **6/11/2021**	Analysis Date: **6/11/2021**	SeqNo: **2772779** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.7	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#: **2106361**

16-Jun-21

Client: EOG

Project: State D SWD 1

Sample ID: **MB-60528**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **60528**	RunNo: **78977**
Prep Date: **6/9/2021**	Analysis Date: **6/10/2021**	SeqNo: **2771631** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		103	70	130			

Sample ID: **LCS-60528**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **60528**	RunNo: **78977**
Prep Date: **6/9/2021**	Analysis Date: **6/10/2021**	SeqNo: **2771632** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	101	68.9	141			
Surr: DNOP	4.7		5.000		94.9	70	130			

Sample ID: **MB-60491**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **60491**	RunNo: **79023**
Prep Date: **6/8/2021**	Analysis Date: **6/11/2021**	SeqNo: **2772815** 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	12		10.00		118	70	130			

Sample ID: **LCS-60491**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **60491**	RunNo: **79023**
Prep Date: **6/8/2021**	Analysis Date: **6/11/2021**	SeqNo: **2772816** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	91.2	68.9	141			
Surr: DNOP	5.0		5.000		99.3	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
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#: **2106361**
16-Jun-21

Client: EOG
Project: State D SWD 1

Sample ID: **mb-60487**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **60487**	RunNo: **78935**
Prep Date: **6/8/2021**	Analysis Date: **6/9/2021**	SeqNo: **2770425** 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	1100		1000		106	70	130			

Sample ID: **lcs-60487**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **60487**	RunNo: **78935**
Prep Date: **6/8/2021**	Analysis Date: **6/9/2021**	SeqNo: **2770426** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	95.0	78.6	131			
Surr: BFB	1200		1000		115	70	130			

Sample ID: **mb-60525**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **60525**	RunNo: **78974**
Prep Date: **6/9/2021**	Analysis Date: **6/10/2021**	SeqNo: **2771373** 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	1100		1000		108	70	130			

Sample ID: **lcs-60525**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **60525**	RunNo: **78974**
Prep Date: **6/9/2021**	Analysis Date: **6/10/2021**	SeqNo: **2771374** 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	107	78.6	131			
Surr: BFB	1200		1000		123	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#: **2106361**

16-Jun-21

Client: EOG

Project: State D SWD 1

Sample ID: **mb-60487**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **60487**	RunNo: **78935**
Prep Date: **6/8/2021**	Analysis Date: **6/9/2021**	SeqNo: **2770477** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		103	70	130			

Sample ID: **LCS-60487**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **60487**	RunNo: **78935**
Prep Date: **6/8/2021**	Analysis Date: **6/9/2021**	SeqNo: **2770478** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	92.0	80	120			
Toluene	0.93	0.050	1.000	0	92.8	80	120			
Ethylbenzene	0.92	0.050	1.000	0	91.6	80	120			
Xylenes, Total	2.8	0.10	3.000	0	92.7	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		110	70	130			

Sample ID: **mb-60525**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **60525**	RunNo: **78974**
Prep Date: **6/9/2021**	Analysis Date: **6/10/2021**	SeqNo: **2771402** Units: **mg/Kg**

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

Sample ID: **LCS-60525**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **60525**	RunNo: **78974**
Prep Date: **6/9/2021**	Analysis Date: **6/10/2021**	SeqNo: **2771403** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	100	80	120			
Toluene	1.0	0.050	1.000	0	101	80	120			
Ethylbenzene	1.0	0.050	1.000	0	99.6	80	120			
Xylenes, Total	3.0	0.10	3.000	0	100	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		110	70	130			

Qualifiers:

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

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: 2106361 | RcptNo: 1

Received By: Juan Rojas 6/8/2021 7:30:00 AM

Completed By: Cheyenne Cason 6/8/2021 8:00:51 AM

Reviewed By: JR 6/8/21

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 ☐	

10. JO 6.8.21

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

Adjusted?

Checked by:

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	2.0	Good				

Page 131 of 138

Chain-of-Custody Record

Client: EOG-Artesia / Ranger Env.

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

Ranger: PO Box 201179, Austin TX 78720

Phone #: 521-335-1785

email or Fax#: Will@RangerEnv.com

QA/QC Package:

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

Accreditation: ☐ Az Compliance

■ **NELAC** ☐ Other

■ **EDD** (Type) Excel

Turn-Around Time: 5 Day

☒ Standard ☐ **Rush**

Project Name: STATE D SWD #1

Project #: 5375

Project Manager: W. Kierdorf

Sampler: W. KIERDORF / R. MARTIN

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 1.9+0.1=2.0

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. 2106361	BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride (EPA 300)
6/7/21	0730	SOIL	SP-S.S/0'	1 x 4oz JAR	ICE	001	X	X	X
	0740		SP-S.E/0'			002			
	0742		SP-S.W/0'			003			
	0748		SP-N.A/7'			004			
	0750		SP-N.A/8'			005			
	0811		SP-N.E/2'			006			
	0815		SP-N.E/5'			007			
	0825		SP-N.N/2'			008			
	0830		SP-N.N/5'			009			
	0849		SP-N.W/2'			010			
	0853		SP-N.W/5'			011			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
6/7/21	1322				6/7/21	1322
6/7/21	1900				6/8/21	7:30

Remarks: Bill to EOG Artesia

PLEASE EMAIL RPT TO CHASE_SETTLE@ENGRESOURCES.COM & WILL@RANGERENV.COM

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

Received by OCD: 6/17/2021 3:10:17 PM

Released to Imaging: 9/21/2021 11:38:18 AM

ATTACHMENT 4 – SOIL BORING LOGS

Ranger Envrionmental Services, Inc.
P.O. Box 201179
Austin, Texas 78720
Telephone: 512-335-1785
Fax: 512-335-0527

BORING NUMBER SB-1

PAGE 1 OF 1

CLIENT EOG Resources, Inc.
PROJECT NAME State D SWD #1
PROJECT NUMBER 5375
PROJECT LOCATION Eddy County, New Mexico
DATE STARTED 5/26/2021 **COMPLETED** 5/26/2021
GROUND WATER LEVELS:
DRILLING CONTRACTOR Talon, LPE
AT TIME OF DRILLING ---
DRILLING METHOD Air Rotary
AFTER DRILLING ---
LOGGED BY Robert Martin **CHECKED BY** Patrick Finn
BTOC = Below Top Of Casing
GB = Grab Sample
GEO = Geotech Sample
GPS COORDINATES 32.568160°, -104.594985°

DEPTH (ft)	SOIL SAMPLE ANALYSIS	GROUNDWATER LEVELS (BTOC)	PID (In ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
0			0.2		(CL) Gravelly Clay, dark brown, contains approximately 10% gravel(<0.5-0.75" diameter, angular), low plasticity, hydrocarbon odor	No Well Set
			0.5			
			5.9		(CL) Gravelly Clay, dark brown, contains approximately 20% gravel (1" diameter, subrounded to subangular), moderate plasticity, hydrocarbon odor & discoloration,	
			390			
5			240			
			445		(ML) Clayey Silt, dark brown to gray, low plasticity, damp, hydrocarbon discoloration, strong hydrocarbon odor	
			243			
			159			
			125			
10			62		Clayey Silt, light brown, low plasticity, damp, minor hydrocarbon discoloration, strong hydrocarbon odor	
			53.7			
			20.6		(SW) Gravelly Sand, brown to gray, well graded, 50% gravel(<0.25-1" diameter, subrounded to subangular), dry, hydrocarbon odor	
			8.6			
			5.2		Gravel size decreases <0.25-0.5"	
15			6.7			
			5.9			
			4.0			
			3.4			
			2.4			
20	GB		3.4		Gravel decreases in amount and size, <0.25" diameter, approxmiately 30% gravel	
			2.1		(GW) Sandy Gravel, light brown, well graded, contains ~60% gravel (<0.25" diameter, subrounded to subangular)	
			0.6		(ML) Sandy Silt, light buff to tan, very fine grained, contains <5% gravel(subangular to subrounded)	
	GB		0.8			

1.0
5.0
11.0
20.0
21.0
23.0

Bottom of borehole at 23.0 feet.

ENVIRONMENTAL BH - GINT STD US.GDT - 6/4/21 14:50 - R:\DRAFTING FILES\GINT LOGS\5375 - STATE D SWD #1 - BORING LOGS.GPJ

Ranger Envrionmental Services, Inc.
P.O. Box 201179
Austin, Texas 78720
Telephone: 512-335-1785
Fax: 512-335-0527

BORING NUMBER SB-2

PAGE 1 OF 1

CLIENT EOG Resources, Inc.
PROJECT NAME State D SWD #1
PROJECT NUMBER 5375
PROJECT LOCATION Eddy County, New Mexico
DATE STARTED 5/26/2021 **COMPLETED** 5/26/2021
GROUND WATER LEVELS:
DRILLING CONTRACTOR Talon, LPE
AT TIME OF DRILLING ---
DRILLING METHOD Air Rotary
AFTER DRILLING ---
LOGGED BY Robert Martin **CHECKED BY** Patrick Finn
BTOC = Below Top Of Casing
GB = Grab Sample
GEO = Geotech Sample
GPS COORDINATES 32.568097°, -104.594981°

DEPTH (ft)	SOIL SAMPLE ANALYSIS	GROUNDWATER LEVELS (BTOC)	PID (In ppm)	GRAPHIC LOG		MATERIAL DESCRIPTION	WELL DIAGRAM
0			37			(CL) Gravelly Clay, dark brown, firm, medium to low plasticity, damp, hydrocarbon staining and odor present	No Well Set
			66.9				
			226.2				
			582.3				
5			370				
			362.2				
			248.5				
			313				
			509		9.0	(CL) Gravelly Clay, light to medium gray, soft, low plasticity, dry, hydrocarbon staining and odor	
10			418.7			(GC) Clayey Gravel, light to medium gray, gravel inclusions, <0.25-1" diameter, subrounded	
			231.3		11.0		
			135.9			Chert, dark gray to maroon, vuggy, hard	
			141.3		13.0		
			158.6			(GM) Silty Sandy Gravel, brown to buff, poorly graded, 80% gravel inclusions(<0.25-0.4" diameter, subangular to subrounded chert), hydrocarbon odor	
15			179.6				
			71.6		16.0		
			50.0			(SP) Gravelly Sand, brown, poorly graded, 30% gravel inclusions(<0.25" diameter, subrounded chert), hydrocarbon odor	
			50.2		18.0		
			39.4			(GM) Silty Sandy Gravel, brown to buff, moderately sorted, 80% gravel inclusions, <0.25-0.4", subangular to subrounded chert	
20			89				
			40.1				
			18.6		22.0		
	GB		26.1		23.0	(GP) Sandy Gravel, brown, 90% gravel(<0.2-0.3" diameter, rounded), poorly graded, hydrocarbon odor	
	GB		9.7		24.0	(SM) Silty Sand, light brown to tan, poorly graded, <5% gravel(subrounded to subangular, 0.15"-0.2" diameter)	

Bottom of borehole at 24.0 feet.

ENVIRONMENTAL BH - GINT STD US.GDT - 6/4/21 14:50 - R:\DRAFTING FILES\GINT LOGS\5375 - STATE D SWD #1 - BORING LOGS.GPJ

ATTACHMENT 5 – STATE LAND OFFICE LOAMY SITES SEED MIXTURE

NMSLO Seed Mix — Loamy (L)

LOAMY (L) SITES SEED MIXTURE:

COMMON NAME	VARIETY	APPLICATION RATE (PLS/Acre)	DRILL BOX
Grasses:			
Black grama	VNS, Southern	1.0	D
Blue grama	Lovington	1.0	D
Sideoats grama	Vaughn, El Reno	4.0	F
Sand dropseed	VNS, Southern	2.0	S
Alkali sacaton	VNS, Southern	1.0	
Little bluestem	Cimarron, Pastura	1.5	F
Forbs:			
Firewheel (*Gaillardia*)	VNS, Southern	1.0	D
Shrubs:			
Fourwing saltbush	Marana, Santa Rita	1.0	D
Common winterfat	VNS, Southern	0.5	F
	Total PLS/acre	**18.0**	

S = Small seed drill box, D = Standard seed drill box, F = Fluffy seed drill box
VNS = Variety Not Stated, PLS = Pure Live Seed

- Seed mixes should be provided in bags separating seed types into the three categories: small (S), standard (D) and fluffy (F).
- VNS, Southern – Seed should be from a southern latitude collection of this species.
- Double seed application rate for broadcast or hydroseeding.
- If one species is not available, contact the SLO for an approved substitute; alternatively the SLO may require other species proportionately increased.
- Additional information on these seed species can be found on the USDA Plants Database website at http://plants.usda.gov.

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2111048003
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

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

☐ Extents of contamination must be fully delineated.

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

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

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

Signature: Chase Settle Date: 06/17/2021

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

OCD Only

Received by: Robert Hamlet Date: 9/21/2021

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

Signature: Robert Hamlet Date: 9/21/2021

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

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

CONDITIONS

Action 32649

CONDITIONS

Operator:	OGRID:
EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	7377
	Action Number: 32649
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	The Remediation Plan is Conditionally Approved. The variance request for the alternative confirmation sampling plan including twenty-six (26) areas throughout the excavation area is approved. This release is in a high karst area and will need to be remediated to the strictest closure criteria of <50' depth to groundwater from Table 1 of the spill rule. Please make sure the edges/sidewalls and floor samples are delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg TPH.	9/21/2021