RANGER
ENVIRONMENTAL SERVICES, INC.

SITE STATUS UPDATE AND PROPOSED REMEDIATION PLAN

TANK BATTERY AREA
2RP-4576 & 2RP-5094

ROY SWD #3
UNIT P, SECTION 7, TOWNSHIP 19S, RANGE 25E
EDDY COUNTY, NEW MEXICO
32.67059, -104.51773

PREPARED FOR:

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

PREPARED BY:

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

NOVEMBER 1, 2022

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

William Kierdorf, REM
Project Manager

TABLE OF CONTENTS

RANGER
ENVIRONMENTAL SERVICES, INC.

SITE STATUS UPDATE AND PROPOSED REMEDIATION PLAN
TANK BATTERY AREA (2RP-4576 & 2RP-5094)

ROY SWD #3
UNIT P, SECTION 7, TOWNSHIP 19S, RANGE 25E
EDDY COUNTY, NEW MEXICO
32.67059, -104.51773
RANGER REFERENCE NO. 5375

1.0 INTRODUCTION

The Roy SWD #3 (site) is located on private land, approximately 13.6 miles southwest of Artesia, within Eddy County, New Mexico. The facility is situated in Unit N, Section 16, T20S-R24E at GPS coordinates 32.67059, -104.51773. The site, operated by EOG Resources, Inc. (EOG), formerly consisted of a saltwater disposal well, a tank battery with an earthen containment berm, pump houses and associated equipment. An earthen berm surrounded the extent of the facility pad footprint. Historically, operations at the site were conducted within the full extent of the facility pad, however a reduction of operations at the site left the southern approximate half of the facility pad unused. Reclamation efforts to decommission the southern portion of the pad have been completed. In April and May of 2022, plugging and abandonment of the on-site disposal well was completed. Additionally, the on-site tank battery and associated equipment has been taken out-of-service, decommissioned, and removed from the Site.

On January 4, 2018, a release was discovered at the Site due to a failure in the PVC waterleg line that connects the gun barrel to the water tank. The impacted area was approximately 90 feet (ft) by 20 ft inside of the battery berm to the north of the tanks. Initial response activities included source elimination and site stabilization activities, which recovered approximately 5 barrels (bbls) of fluid. The release and initial response activities were reported by EOG to New Mexico Oil Conservation Division (NMOCD) on Form C-141, dated January 18, 2018. NMOCD assigned Remediation Permit RP-4576 to the release. As part of the initial action, the visually impacted area of the release on the north side of the battery was excavated with the removal of impacted material resulting in an approximate 40 ft by 20 ft by 4 ft excavation which remained open for some time.

Souder, Miller and Associates (SMA) drilled two soil borings, L1 and L2, to 4 ft and 5 ft below ground surface (bgs), respectively, on January 23, 2018. Samples were collected at approximately 1-foot intervals and selected samples were analyzed for benzene, toluene, ethylbenzene and xylenes (BTEX), total petroleum hydrocarbons (TPH) and chlorides. Three samples were tested for TPH which ranged in concentration from 540 mg/kg (L1 at 1 ft) to 20,240 mg/kg (L1 at 3 ft). The lone L2 sample (L2 at 5 ft) had a TPH concentration of 8,950 mg/kg. Chloride concentrations in the shallow boring soil samples ranged from 1,000 mg/kg to 13,000 mg/kg in L1 and from 720 mg/kg to 21,000 mg/kg in L2. The chloride concentrations decreased with depth. It was at some point after the shallow borings were drilled and sampled the afore-mentioned excavation was conducted.

On November 13, 2018, another release was discovered at the Site due to failure on the line that connects the gun barrel to the produced water tank. The impacted area was approximately 20 ft by 150 ft and was confined within the battery's earthen containment. Initial response activities were conducted by EOG which included source elimination and site stabilization, recovering 120 bbls of fluid. The release and initial response activities were reported by EOG to NMOCD on Form C-141, dated November 28, 2018. NMOCD assigned Remediation Permit RP-5094 to the release.

A third soil boring, L3, was drilled to a depth of 30 ft bgs on December 10, 2018. Laboratory results documented BTEX and total TPH concentrations below laboratory reporting levels in the 15 to 27 ft bgs range; however, the chloride concentrations in this depth interval ranged from 1,420 mg/kg to 2,440 mg/kg. The SMA report also indicates that boring L2 was apparently deepened during October of 2018 and indicates samples were collected at depths of 10, 12, 14 and 17 ft bgs. Samples analyzed for BTEX were below the laboratory reporting levels and total TPH ranged from nondetect at 10 ft bgs to 11 mg/kg at 17 ft bgs. Chloride concentrations analyzed over the same depth interval ranged from 340 mg/kg at 12 ft bgs to 1,410 mg/kg at 17 ft bgs.

SMA returned to the Site in April 2019 to conduct assessment activities in response to the second release. A sonic drill rig was mobilized into the tank battery and re-entered sample locations L1, L2 and L3 (becoming then L1R, L2R and L3R). The borings were advanced to total depths of 70' (L1R) to 75' (L2R and L3R). Samples were collected at 5-foot intervals and field screened for chlorides. Selected samples were laboratory analyzed for BTEX, TPH and chlorides. Analytical data presented in SMA's June 13, 2019 report (*Table 3: Summary of Sample Results*) inexplicably omits results for the 5 ft to 25 ft bgs range for borings L1R and L3R. Below is a summary of the field and laboratory analytical data for the April 2019 soil borings:

- The BTEX and TPH results for the April 2019 soil borings were all nondetectable.
- Laboratory chloride concentrations in L1R ranged from 3,100 mg/kg at 35 ft to 530 mg/kg at 40 ft and 410 mg/kg at 60 ft bgs, with only minimal field screen results below 60 feet to the total depth of 70 feet bgs.
- The highest chloride concentration in L2R was 10,000 mg/kg at 25 ft bgs with 1,700 mg/kg being reported at both 0 ft and 20 ft bgs. Below 25 feet bgs, the field screens significantly declined with only minimal readings being noted below 35 feet bgs to the boring total depth of 75 feet bgs.
- The highest chloride concentration in L3R was 220 mg/kg at 30 ft bgs. Below this depth laboratory chloride concentrations were documented to decrease, and only minimal field screen results were documented to the boring total depth of 75 feet bgs.
- No groundwater was reported as being encountered to the boring total depths of 70'-75' bgs.

During September 3-4, 2019, GHD Services Inc. (GHD), on behalf of EOG, conducted additional assessment of the tank battery area. Eleven test pits (TP-1 through TP-8 and SWE, SWW and SWNC) were installed within the bermed area of the tank battery and a total of 21 soil samples were analyzed to assess the horizontal and vertical extents of the soil impacts. Further assessment was conducted in the northeast portion of the tank battery where the releases had

occurred. This included test pits (TP-1 and TP-2) at the approximate locations where the L1R and L2R borings were drilled in order to obtain additional TPH data. Test pit TP-3 was excavated beneath where the former easternmost produced water storage tank was located. Test pits SWE, SWW and SWNC were excavated at the approximate edges of the SMA excavation to confirm SMA's December 2018 sidewall sample results. Test pits TP-4 through TP-8 were installed within the remainder of the bermed tank battery area. The laboratory analytical results documented elevated TPH and/or chloride impacts in all of the installed test pits with the exception of test pits TP-4 and TP-8 which were located in the southern portion of the tank battery bermed area.

EOG subsequently retained Ranger Environmental Services, Inc. (Ranger) to oversee the remaining site assessment and remediation activities as Ranger is already conducting other assessment and remediation activities at the former Roy SWD #3 facility, on the southern half of the well pad and east of the well pad around a pipeline right-of-way (NMOCD Incident #nAPP2111046250), and in the northern on-pad area (NMOCD Incident # nAPP2123047534).

On May 18, 2022, Ranger mobilized to the Site with HCI Drilling (HCI) to conduct additional vertical soil delineation activities in the tank battery area to confirm the depth of the soil impacts in the release source area and the absence of any groundwater impacts. On August 22, 2022 and September 23, 2022, Ranger also conducted additional horizontal delineation activities through the installation and sampling of test excavations. This report has been prepared to provide a summary of the May-August 2022 assessment activities, as well as site characterization information, proposed closure criteria, and a conceptual site remediation plan. A copy of the Form C-141 Release Notifications, 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 multiple site maps illustrating the Site features, sampling locations, and proposed activities 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 (<25-year-old) water well information within one half-mile of the site is not available.

Attachment 1 includes the area USGS and NMOSE water well data and locations. In the area ranging between approximately 0.7 - 2 miles from the subject site, the depth to water was reported as ranging from approximately 72' bgs to 265' bgs. The depth to water for the wells located closest to the subject site ranged between 72' – 97' bgs. It should also be noted that during the on-site drilling of soil borings L1R through L3R, no groundwater was reported to have been encountered to the boring terminal depths of 70'-75' bgs.

Since a significant watercourse is located within 300 feet of the subject site, the site release will be treated as if it occurred less than 50 feet to ground water. Since this will result in the usage of the most stringent site cleanup levels, Ranger believes that the available depth to groundwater data is satisfactory, and that the depth to groundwater can reasonably be assumed to be greater than 75' bgs.

2.2 Wellhead Protection Area

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

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

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

2.3 Distance to Nearest Significant Watercourse

The closest significant watercourse, "Fourmile Draw" is located approximately 100 feet from the western facility pad boundary. Upon review of the National Wetland Inventory, "Fourmile Draw" is mapped as a wetland feature. The feature is classified as a R4SBJ, which is defined as a riverine, intermittent, streambed and intermittently flooded.

The presence of this significant watercourse located within 300 feet of the subject site will require the site release to be treated as if it occurred less than 50 feet to ground water in Table 1 of 19.15.29.12 NMAC.

2.4 Closure Criteria

Based upon the site characterization details (within 300' of a significant watercourse and a mapped wetland), and per NMAC 19.15.29.12, the Site will be remediated to the Table 1 19.15.29.12 NMAC (groundwater ≤50 feet) criteria, as well as the 19.15.29.13 NMAC Restoration, Reclamation and Re-Vegetation (Soils 0'-4') criteria. The proposed closure criteria are detailed below:

PROPOSED SITE CLOSURE CRITERIA

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 MAY 18, 2022 VERTICAL SOIL DELINEATION ACTIVITIES

3.1 Assessment Methodologies

On May 18, 2022, Ranger mobilized to the Site with HCI Drilling (HCI) to conduct vertical soil delineation activities in the former tank battery area to confirm the depth of the soil impacts in the

release source area and to ensure that groundwater is not threatened or affected. The soil borings were drilled and sampled using air rotary drilling techniques. Soil borings SB-1 and SB-2 were drilled in the northeastern portion of the former tank battery area within the former 40'x20'x4'-deep excavated area. Soil boring SB-3 was drilled in the central portion of the former tank battery to the west of the former excavation area. The soil borings were advanced to terminal drilling depths of 30 to 50 feet bgs. No groundwater was encountered.

Soil samples were continuously collected and monitored during the drilling process, and each soil sample was inspected and described by the on-site Ranger field geologist. The soils were generally field screened at one-foot intervals with an organic vapor monitor (OVM) and field chloride titration kit. The lithologic descriptions, field chloride readings and OVM readings are presented on the attached soil boring logs.

Multiple soil samples were collected from each soil boring for laboratory analysis, primarily from the intervals at and near the boring terminal depths in order to confirm the vertical extent of the soil closure criteria exceedances. Below is a discussion of the field chloride titration results and a summary of the soil samples collected from each boring:

- **SB-1**: In soil boring SB-1, the field chloride titration results began declining below the soil closure criteria at an approximate depth of 29' bgs, and no field chloride readings above the closure criteria were encountered beyond a depth of 35' bgs. As such, the boring was terminated at a depth of 40' bgs. One soil sample was collected for laboratory analysis at a depth of 23' bgs, which was the interval containing the highest field chloride result (1,050 ppm) below 6' bgs. Three soil samples were collected from the base of the boring at depths of 38', 39' and 40' bgs to confirm that the vertical extent of impact in this boring had been defined.

- **SB-2**: In soil boring SB-2, significantly elevated field chloride readings up to 3,000(+) ppm were encountered to a depth of 29' bgs. Due to poor recovery, no field readings were collected from 31'-39' bgs. The field chloride titration results began declining below the soil closure criteria at an approximate depth of 43' bgs, and no field chloride readings above the closure criteria were encountered beyond a depth of 46' bgs. As such, the boring was terminated at a depth of 50' bgs. One soil sample was collected for laboratory analysis at a depth of 29' bgs, which was one of the intervals containing the highest field chloride results below 6' bgs. Four soil samples were collected from the base of the boring at depths of 47', 48', 49' and 50' bgs to confirm that the vertical extent of impact in this boring had been defined.

- **SB-3**: In soil boring SB-3, there were no elevated field chloride titration results to the terminal boring depth of 30' bgs. Soil samples were collected for laboratory analysis at depths of 4', 14', 29' and 30' 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 soil samples collected for laboratory analysis were subsequently submitted to Hall 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.

RANGER ENVIRONMENTAL SERVICES, INC.

The attached "*Sample Location Map"* illustrates the locations of the May 2022 soil borings. The soil sample analytical results are summarized in the attached soil analytical table. A copy of the laboratory analytical report is also attached.

3.2 Assessment Results

The May 18, 2022 soil boring sample analytical results documented nondetectable BTEX and TPH concentrations in all three of the soil borings. Below is a summary of the soil chloride analytical results for each of the three soil borings and a comparison to the proposed site soil chloride closure criteria (600 mg/Kg):

- **SB-1**: In soil boring SB-1, the sample collected for laboratory analysis at a depth of 23' bgs, which was the interval containing the highest field chloride result below 6' bgs, was documented to contain a chloride concentration of 1,400 mg/kg which exceeds the proposed closure criteria. The three soil samples collected from the base of the boring at depths of 38', 39' and 40' bgs confirmed that the vertical extent of impact in this boring had been defined. The 38' sample had a minor exceedance of the proposed site closure criteria (670 mg/Kg chloride); however, the samples collected at depths of 39' and 40' were both documented to contain chloride concentrations below the closure criteria. As such, the maximum extent of soil impact in this boring was documented to be approximately 38' bgs.

- **SB-2**: In soil boring SB-2, the soil sample collected for laboratory analysis at a depth of 29' bgs, which was one of the intervals containing the highest field chloride results below 6' bgs, was documented to contain 5,200 mg/Kg chloride which is significantly in excess of the proposed closure criteria. The four soil samples collected from the base of the boring at depths of 47', 48', 49' and 50' bgs confirmed that the vertical extent of impact in this boring had been defined. The 47' sample had a minor exceedance of the proposed site closure criteria (750 mg/Kg chloride); however, the samples collected at depths of 48', 49' and 50' were documented to contain chloride concentrations below the closure criteria. As such, the maximum extent of soil impact in this boring was documented to be approximately 47' bgs.

- **SB-3**: In soil boring SB-3, all soil analytical results were found to be below the proposed site closure criteria.

In summary, soil borings SB-1 and SB-2, which were installed in the northeastern portion of the former tank battery area within the former 40'x20'x4'-deep excavated area, were found to contain soil chloride impacts in excess of the proposed site closure criteria. No impacts exceeding the proposed site closure criteria were documented in soil boring SB-3, located just west of the former 40'x20'x4'-deep excavated area.

The maximum vertical extent of the soil impacts in the release source area was documented to be approximately 47' bgs. As such, the vertical delineation activities documented that the soil impacts do not appear to pose a threat to the underlying groundwater. As summarized in Section 2.1, the depth to water for the wells located closest to the subject site ranged between 72' – 97' bgs, and during the on-site drilling of soil borings L1R through L3R, no groundwater was reported to have been encountered to the boring terminal depths of 70'-75' bgs.

4.0 AUGUST AND SEPTEMBER, 2022 HORIZONTAL SOIL DELINEATION ACTIVITIES

On August 22-23, 2022, Ranger personnel and representatives for EOG returned to the Site to complete additional horizontal soil delineation activities. As summarized in Section 1.0, above, the September 3-4, 2019 GHD test pit assessment activities had documented elevated TPH and/or chloride impacts in all of the installed test pits within the tank battery bermed area with the exception of test pits TP-4 and TP-8 which were located in the southern portion of the tank battery bermed area. As such, eight (8) excavation test holes (RTP-1 thru RTP-8) were completed along the western, northern and eastern boundaries of the former tank battery bermed area.

During the test pit installation process, the excavated soils were screened with an OVM and a field chloride titration kit to assist in evaluating the soil conditions and to determine appropriate sample locations and depths. The test pit excavation soils were screened at the surface and at one-foot intervals thereafter until reaching a minimum terminal depth of 6' bgs or until the field chloride readings were below 600 mg/kg. The deepest test hole was RTP-2 which was advanced to a terminal depth of 11' bgs.

Soil samples were subsequently collected from each test excavation. For those excavations in which elevated field chloride readings were obtained, samples were collected at depths of 1' bgs, the zone(s) exhibiting the highest field chloride reading(s), and at the terminal excavation depths. For those excavations in which no elevated field chloride readings were obtained, samples were collected at depths of 1' bgs and at the terminal excavation depths. It should be noted that there were no elevated field OVM readings or other field indications of hydrocarbon impact (e.g. – staining, odor, etc.) noted during the test excavation installation process.

The soil samples collected for laboratory analysis were subsequently submitted to Hall 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.

The soil analytical results documented elevated (>600 mg/Kg) chloride concentrations in select samples collected from test holes RTP-2 and RTP-6. It should be noted that the terminal depth samples collected from these two test pits at depths of 11' bgs and 7' bgs, respectively, contained relatively minor chloride concentrations (610-670 mg/Kg) at their terminal depths which were slightly higher than their field chloride results which were below 600 mg/Kg.

Based upon the August 2022 assessment results, additional horizontal delineation activities were conducted at the subject site on September 23, 2022. Two additional test pits were installed to the north and northwest of RTP-2, and one additional test pit was installed to the north of RTP-6. The additional test pits were field screened and sampled in general accordance with the above-described methodologies utilized on August 22-23, 2022. Due to the absence of any elevated field readings, the test pits were only advanced to a terminal depth of 4' bgs.

The soil analytical results for the September 23, 2022 samples were all found to be below the site closure criteria with the exception of a relatively minimal TPH concentration (156 mg/Kg) reported for soil sample RTP-6N/1 which was collected at one foot bgs. Since there were no field indications of a potential contaminant impact (no staining, odor, or elevated OVM readings) at this location, Ranger considers this result as being potentially suspect; however, as noted below, the exceedance will be addressed under the site Remediation Plan (including both the delineation and remediation of this area).

The attached "*Sample Location Map*" illustrates the locations of the August-September 2022 test holes. The soil sample analytical results are summarized in the attached soil analytical table. Copies of the laboratory analytical reports are attached.

5.0 REMEDIATION PLAN

Since the vertical soil delineation activities documented that the site soil impacts do not appear to pose any imminent threat of impact to the underlying groundwater, the proposed remediation plan for the subject site is to request a variance to NMAC 19.15.29.12 in order to excavate and dispose of all soils which contain exceedances of the proposed site closure criteria in the 0'-6' bgs depth interval, and to place a geosynthetic clay liner (GCL) over any remaining soils below 6' bgs which contain exceedances of the site closure criteria. The remediation plans for the northern on-pad area and the southern half of the well pad and east of the well pad around a pipeline right-of-way (NMOCD Incident Nos. nAPP2123047534 and nAPP2111046250) contained these same provisions and the plans have been approved by the NMOCD.

All soils in the former tank battery area which contain exceedances of the proposed site closure criteria and that are within the 0'-6' bgs depth interval will be excavated and disposed at an authorized off-site disposal facility. Areas of BTEX and TPH concentrations above the Table 1 Criteria at a depth of 6' bgs, encountered during the confirmation sampling process, will be over-excavated until concentrations are confirmed be within the Table 1 Criteria via the proposed confirmation sampling methods detailed below. Additional areas of elevated chloride concentrations may be excavated deeper than 6' bgs depending upon the encountered site conditions. Any remaining soils below 6' bgs which contain exceedances of the site closure criteria for chloride are proposed to be covered with a geosynthetic clay liner (GCL) as a variance to NMAC 19.15.29.12. Prior to the liner placement, the excavation base will be prepared according to manufacturer's specifications. Subsequent to the liner placement, the excavation will be backfilled with clean fill material.

The attached "*Proposed Remediation Map*" illustrates the approximate boundaries of the areas at the site which exceed the site closure criteria and require remediation. It should be noted that the boundaries of the proposed remediation area may be subject to change if field conditions warrant. The proposed remediation area may potentially be expanded based upon the results of the proposed field screening and cleanup confirmation sampling activities. The proposed remediation area also does not include any additional benching and shoring areas that may be necessary for safety reasons or as field conditions warrant.

During the performance of the site excavation activities, Ranger will utilize an OVM and field chloride titration kit to guide the excavation boundaries. Upon reaching excavation limits which appear to be within the site closure criteria, cleanup confirmation sampling activities will be conducted. Excavation sidewall samples are proposed to be collected in accordance with NMAC 19.15.29.12, as five-part composite samples, with each sample representing no more than 200 square feet. The excavation base samples are proposed to be collected as five-part composite samples, with each sample representing no more than 400 square feet. Each cleanup confirmation soil sample collected for laboratory analysis will be analyzed for TPH using EPA Method 8015; BTEX using EPA Method 8021; and, total chloride using EPA Method 300.

The attached "*Proposed Remediation Map*" illustrates the approximate area to be excavated to a depth of 6' bgs and covered with the geosynthetic clay liner. Based on the proposed excavation

boundaries and depth, it is anticipated that approximately 1,500 cubic yards of soil will be excavated and disposed.

Following placement of the GCL liner, the excavated areas will be backfilled to grade with clean fill material of similar type to that which was removed. The location will then be re-vegetated during the subsequent facility pad reclamation efforts.

Upon approval of the proposed remediation plan, all field activities will be scheduled as soon as reasonably possible. It is anticipated that the proposed remedial operations and cleanup confirmation soil sampling activities can be completed within 120 days of initiation. If for any reason the proposed activities cannot be completed within this timeframe, the NMOCD will be updated and provided with a revised schedule. Appropriate notification to the NMOCD will also be provided prior to the performance of the cleanup confirmation soil sampling activities.

6.0 REPORTING

Upon completion of the remedial excavation, liner installation 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

NM OIL CONSERVATION
ARTESIA DISTRICT
JAN 19 2018
RECEIVED

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised April 3, 2017

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

Release Notification and Corrective Action

OPERATOR

nAB1801936658

☒ Initial Report ☐ Final Report

Name of Company EOG Y Resources, Inc. 25575	Contact Chase Settle
Address 104 S. 4th Street Artesia NM 88210	Telephone No. 575-748-1471
Facility Name Roy #3 SWD	Facility Type SWD

Surface Owner Private	Mineral Owner Private	API No. 30-015-26562

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	7	19S	25E	810	South	660	East	Eddy

Latitude 32.6705933 **Longitude** -104.5177307 NAD83

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 6 B/PW	Volume Recovered 5 B/PW
Source of Release Pipeline	Date and Hour of Occurrence 1/4/2018; 8:00 AM	Date and Hour of Discovery 1/4/2018; 8:00 AM
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.* N/A

Describe Cause of Problem and Remedial Action Taken.*
There was a failure in the pvc waterleg line that connects the gunbarrel to the water tank. A vacuum truck was called to collect all free standing fluids and a backhoe contracted to remove all visually impacted soils.

Describe Area Affected and Cleanup Action Taken.*
The impacted area was approximately 90 feet by 20 feet inside of the battery berm to the north of the produced water tanks. Vertical and horizontal delineation samples will be taken and analysis ran for TPH, BTEX and chlorides. If initial analytical results for TPH & BTEX are under RRAL's (site ranking is 10) a Final Report, C-141 will be submitted to the OCD requesting closure. If the analytical results are above the RRAL's a work plan will be submitted to the OCD. **Depth to Ground Water: <100' (90', Section 7, T19S, R25E, per NMOSE, USGS), Wellhead Protection Area: No, Distance to Surface Water Body: >1000', SITE RANKING IS 10.**

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

Signature: Chase Settle	OIL CONSERVATION DIVISION Signed By Mike Bratcher
Printed Name: Chase Settle	Approved by Environmental Specialist:
Title: Rep Safety & Environmental II	Approval Date: 1/19/18 Expiration Date: N/A
E-mail Address: chase_settle@eogresources.com	Conditions of Approval: See Attached Attached ☐ 2RP-4576
Date: January 18, 2018 Phone:575-748-4171	

* Attach Additional Sheets If Necessary

1/19/18 AB

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 1/19/2018 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 2RP-4576 has been assigned. **Please refer to this case number in all future correspondence.**

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

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

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District 2 office in ARTESIA on or before 2/19/2018. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

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

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.

- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.

- Nominal detection limits for field and laboratory analyses must be provided.

- Composite sampling is not generally allowed.

- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

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

●Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

● If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

● Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

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

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

Bratcher, Mike, EMNRD

From: Chase Settle <Chase_Settle@eogresources.com>
Sent: Friday, January 19, 2018 8:10 AM
To: Bratcher, Mike, EMNRD; Weaver, Crystal, EMNRD
Cc: Bob Asher; Heather Patterson; Austin Weyant
Subject: C-141 Initial Roy #3 SWD
Attachments: C-141_Initial Roy #3 SWD.pdf

Please find attached the C-141 Initial for the below listed location.

Roy #3 SWD
30-015-26562
Sec. 7, T19S-R25E
Eddy County, New Mexico

Thank you,

Chase Settle, M.S.
Rep Safety & Environmental II

EOG Resources
105 S. 4th Street
Artesia, NM 88210
575-748-4171 (Office)
575-703-6537 (Cell)
eog resources

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	NAB1834454137
District RP	2RP-5094
Facility ID	
Application ID	pAB1834453495

Release Notification

Responsible Party

Responsible Party EOG Y Resources, Inc.	OGRID 25575
Contact Name Chase Settle	Contact Telephone 575-748-4171
Contact email chase_settle@eogresources.com	Incident # *(assigned by OCD)*
Contact mailing address 104 S. 4th	

Location of Release Source

Latitude 32.6705933 Longitude -104.5177307
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Roy #3 SWD	Site Type
Date Release Discovered 11/13/18	API# *30-015-26562*

Unit Letter	Section	Township	Range	County
P	7	19S	25E	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)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 190	Volume Recovered (bbls) 120
	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
Coupling between 2 pvc nipples failed on the line between gun barrel and produced water tank.

State of New Mexico
Oil Conservation Division

Incident ID	NAB1834454137
District RP	2RP-5094
Facility ID	
Application ID	pAB1834453495

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? ** ** Operator failed to supply the answer to this question regarding the major release. AB
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? ** ** Operator failed to supply the answer to these questions. AB	

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 II

Signature: Date: 11-28-18

email: chase_settle@eogresources.com Telephone: 575-748-4171

OCD Only

Received by: Date: 12/10/2018

State of New Mexico
Oil Conservation Division

Incident ID	nAB1801936658
District RP	2RP-4576
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	>75’ (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☒ Yes ☐ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☒ Yes ☐ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	nAB1801936658
District RP	2RP-4576
Facility ID	
Application ID	

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

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

Signature: Chase Settle Date: 02/03/2023

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

OCD Only

Received by: Jocelyn Harimon Date: 03/02/2023

State of New Mexico
Oil Conservation Division

Incident ID	nAB1801936658
District RP	2RP-4576
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: 02/03/2023

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

OCD Only

Received by: Jocelyn Harimon Date: 02/03/2023

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

Signature: Date:

State of New Mexico
Oil Conservation Division

Incident ID	nAB1834454137
District RP	2RP-5094
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	>75' (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
Oil Conservation Division

Incident ID	nAB1834454137
District RP	2RP-5094
Facility ID	
Application ID	

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

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

Signature: Chase Settle Date: 02/03/2023

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

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	nAB1834454137
District RP	2RP-5094
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: 02/03/2023

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

OCD Only

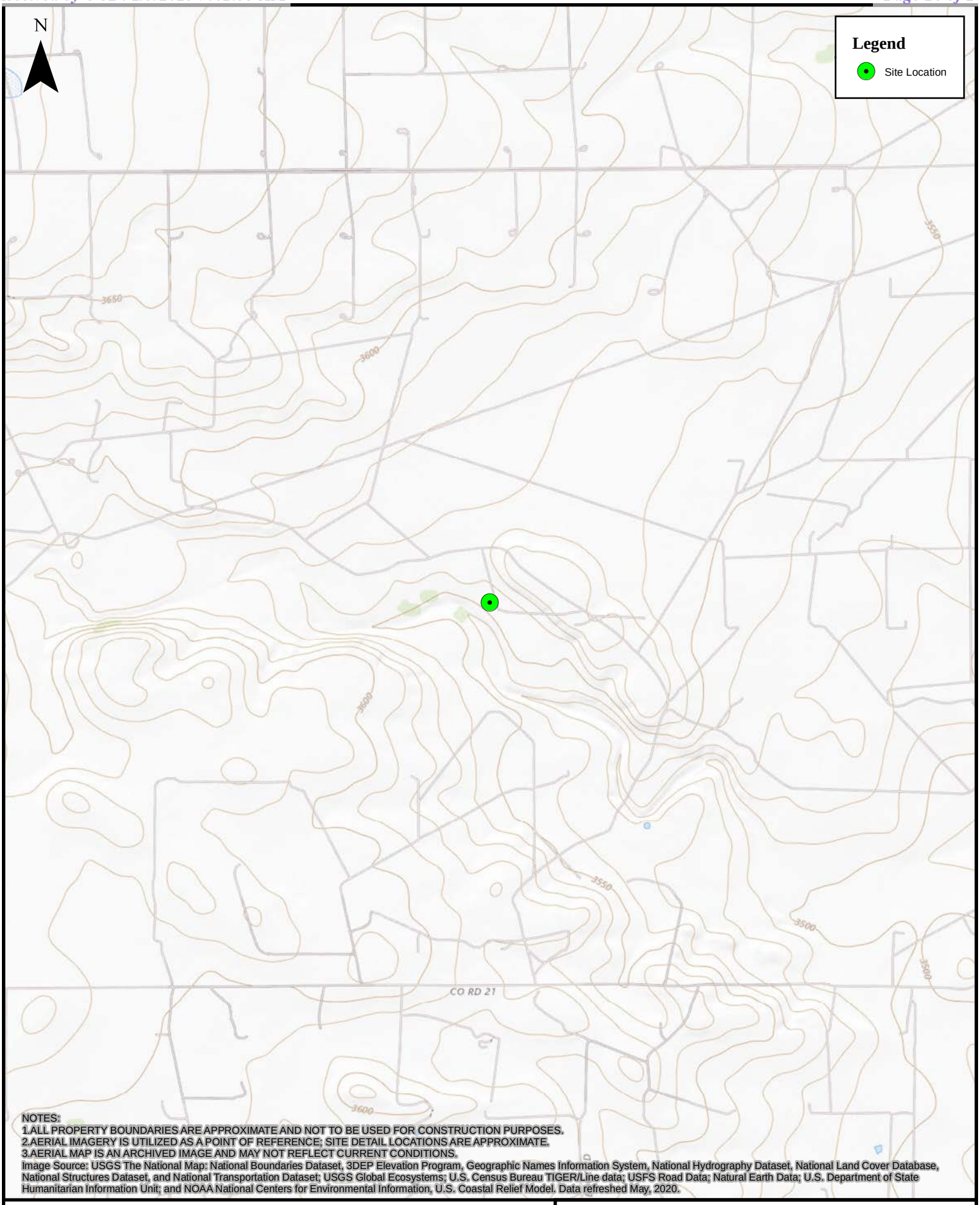
Received by: _____ Date: _____

☐ 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
- Sample Location Map
- Proposed Remediation Map



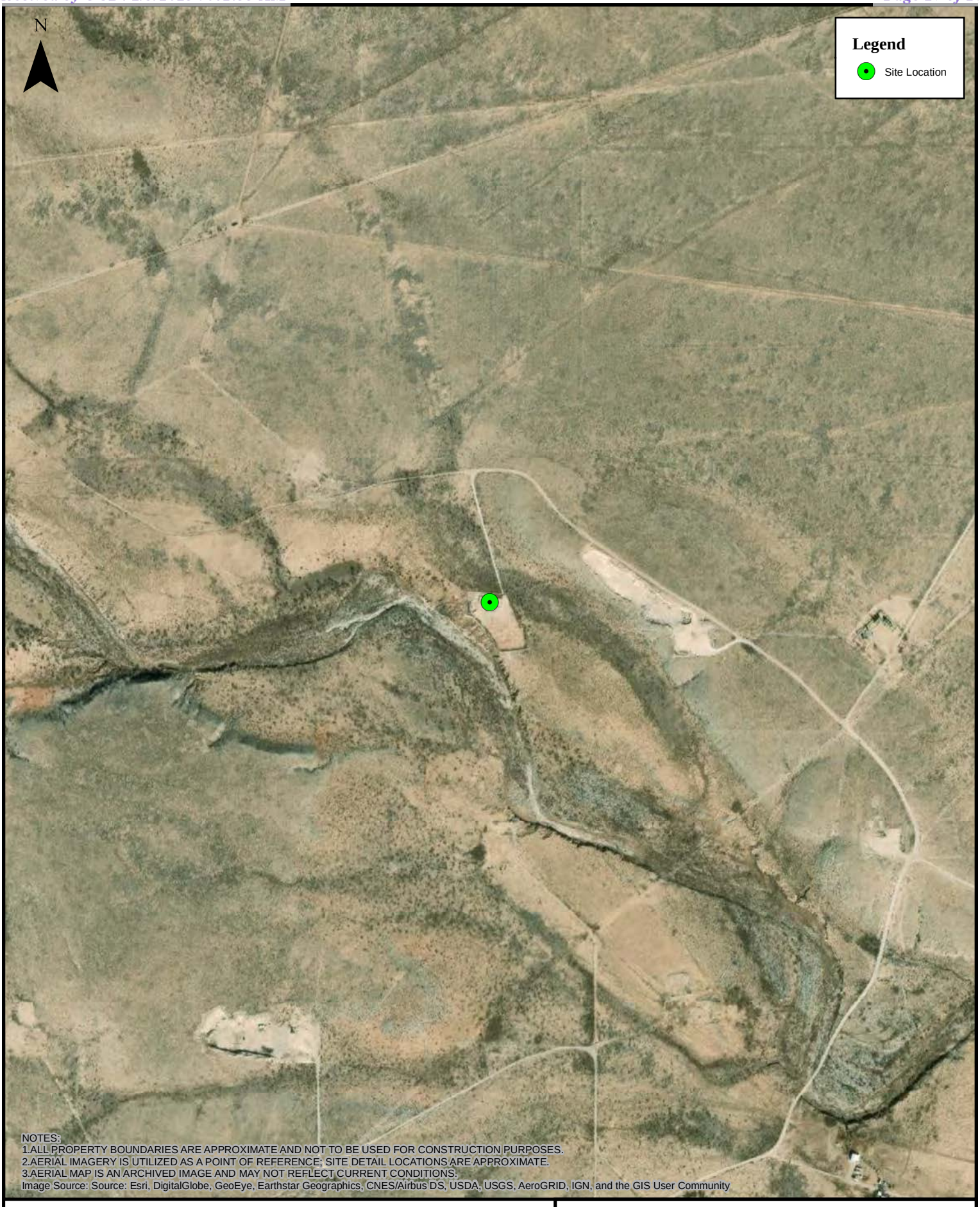
NOTES:
1.ALL PROPERTY BOUNDARIES ARE APPROXIMATE AND NOT TO BE USED FOR CONSTRUCTION PURPOSES.
2.AERIAL IMAGERY IS UTILIZED AS A POINT OF REFERENCE; SITE DETAIL LOCATIONS ARE APPROXIMATE.
3.AERIAL MAP IS AN ARCHIVED IMAGE AND MAY NOT REFLECT CURRENT CONDITIONS.
Image Source: USGS The National Map: National 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
Roy SWD #3
EOG Resources, Inc.



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

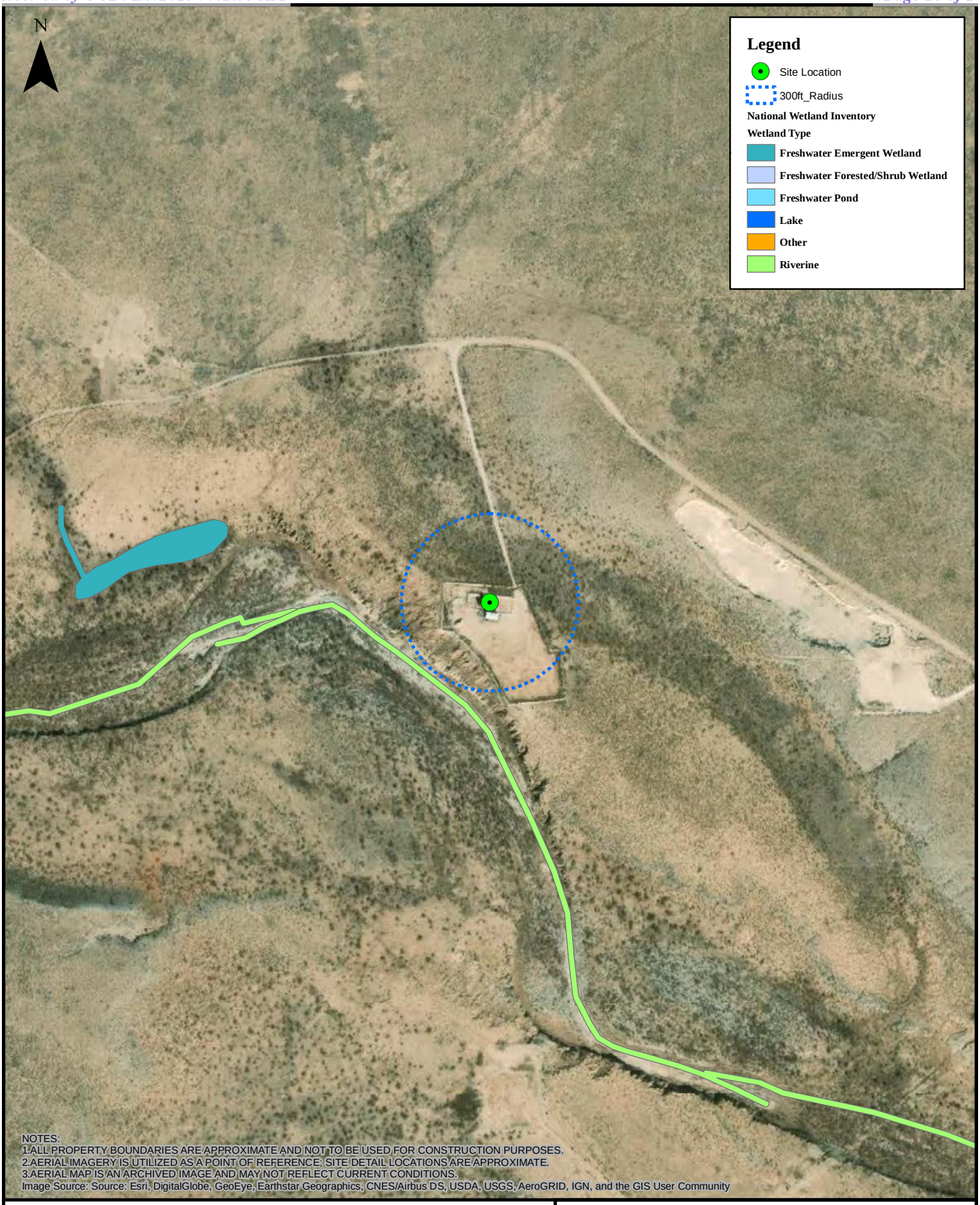
RANGER ENVIRONMENTAL SERVICES, INC.

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

1:10,000

Area Map

Roy SWD #3
EOG Resources, Inc.



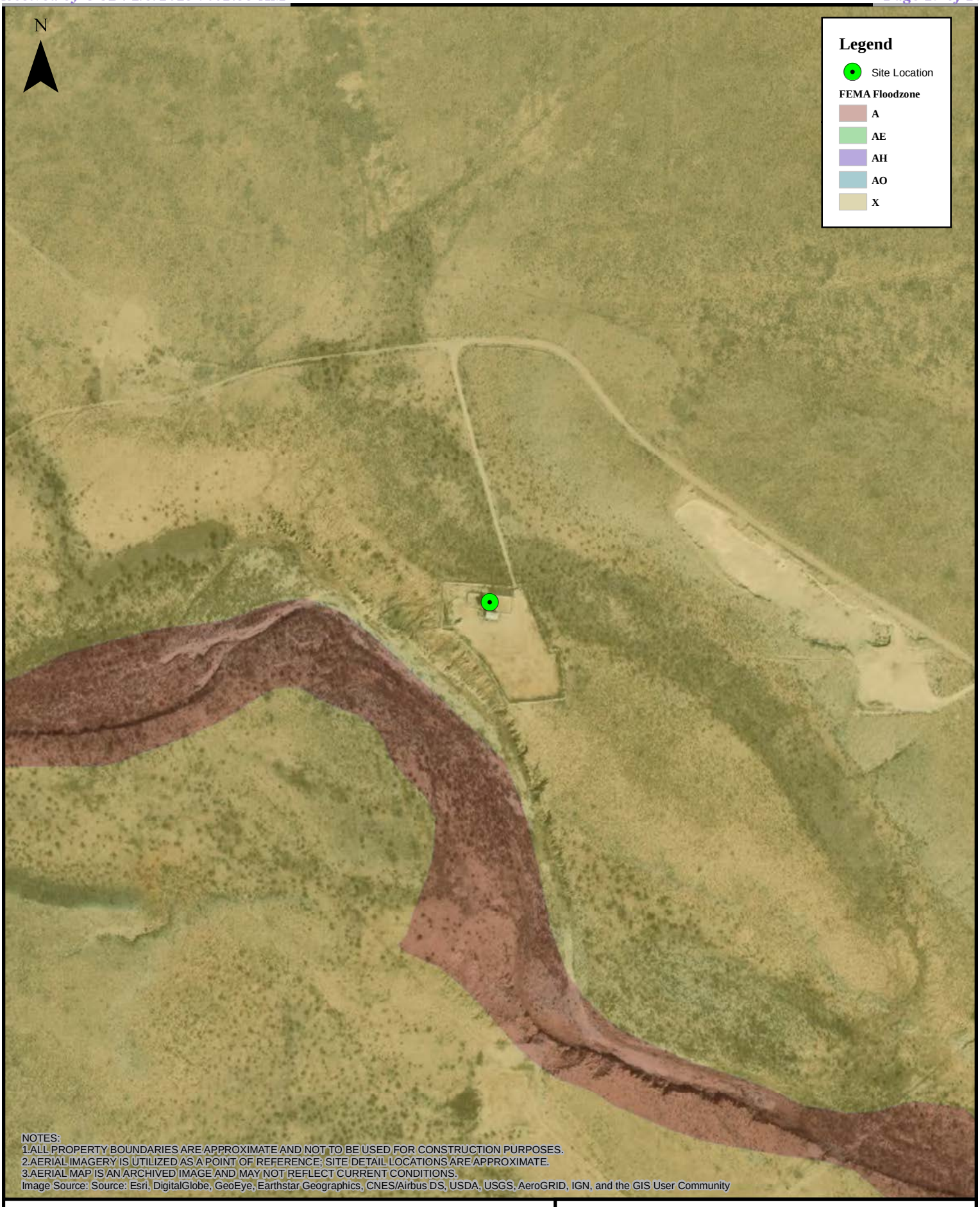
NOTES:
1.ALL PROPERTY BOUNDARIES ARE APPROXIMATE AND NOT TO BE USED FOR CONSTRUCTION PURPOSES.
2.AERIAL IMAGERY IS UTILIZED AS A POINT OF REFERENCE; SITE DETAIL LOCATIONS ARE APPROXIMATE.
3.AERIAL MAP IS AN ARCHIVED IMAGE AND MAY NOT REFLECT CURRENT CONDITIONS.
Image Source: Source: Esri, DigitalGlobe,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

RANGER ENVIRONMENTAL SERVICES, INC.

0 125 250 500 750 1,000 Feet

1:5,000

National Wetland Inventory Map
Roy SWD #3
EOG Resources, Inc.



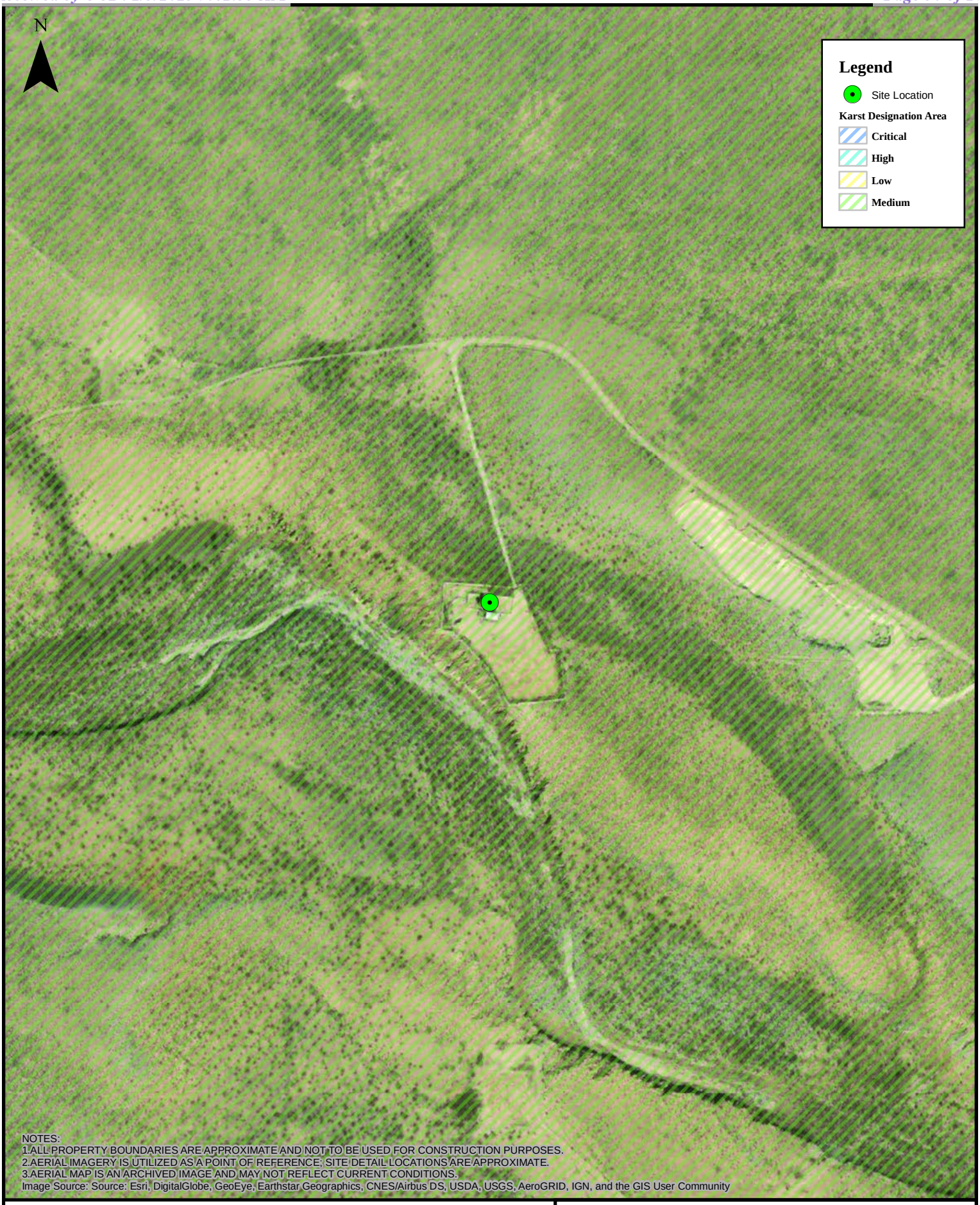
NOTES:
1.ALL PROPERTY BOUNDARIES ARE APPROXIMATE AND NOT TO BE USED FOR CONSTRUCTION PURPOSES.
2.AERIAL IMAGERY IS UTILIZED AS A POINT OF REFERENCE; SITE DETAIL LOCATIONS ARE APPROXIMATE.
3.AERIAL MAP IS AN ARCHIVED IMAGE AND MAY NOT REFLECT CURRENT CONDITIONS.
Image Source: Source: Esri, DigitalGlobe,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

RANGER ENVIRONMENTAL SERVICES, INC.

0 125 250 500 750 1,000 Feet

1:5,000

FEMA Floodplain Map
Roy SWD #3
EOG Resources, Inc.



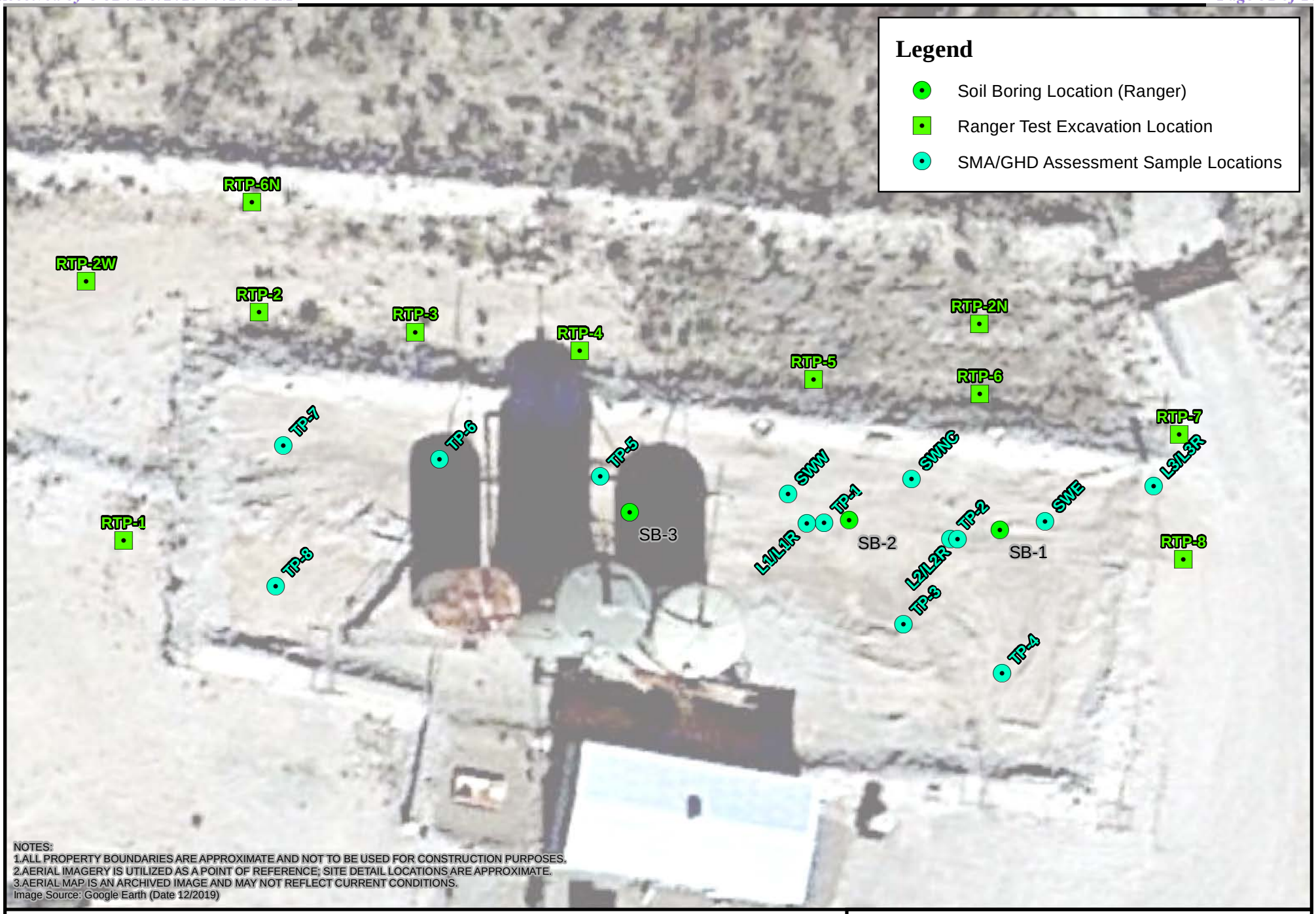
NOTES:
1.ALL PROPERTY BOUNDARIES ARE APPROXIMATE AND NOT TO BE USED FOR CONSTRUCTION PURPOSES.
2.AERIAL IMAGERY IS UTILIZED AS A POINT OF REFERENCE; SITE DETAIL LOCATIONS ARE APPROXIMATE.
3.AERIAL MAP IS AN ARCHIVED IMAGE AND MAY NOT REFLECT CURRENT CONDITIONS.
Image Source: Source: Esri, DigitalGlobe,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

RANGER ENVIRONMENTAL SERVICES, INC.

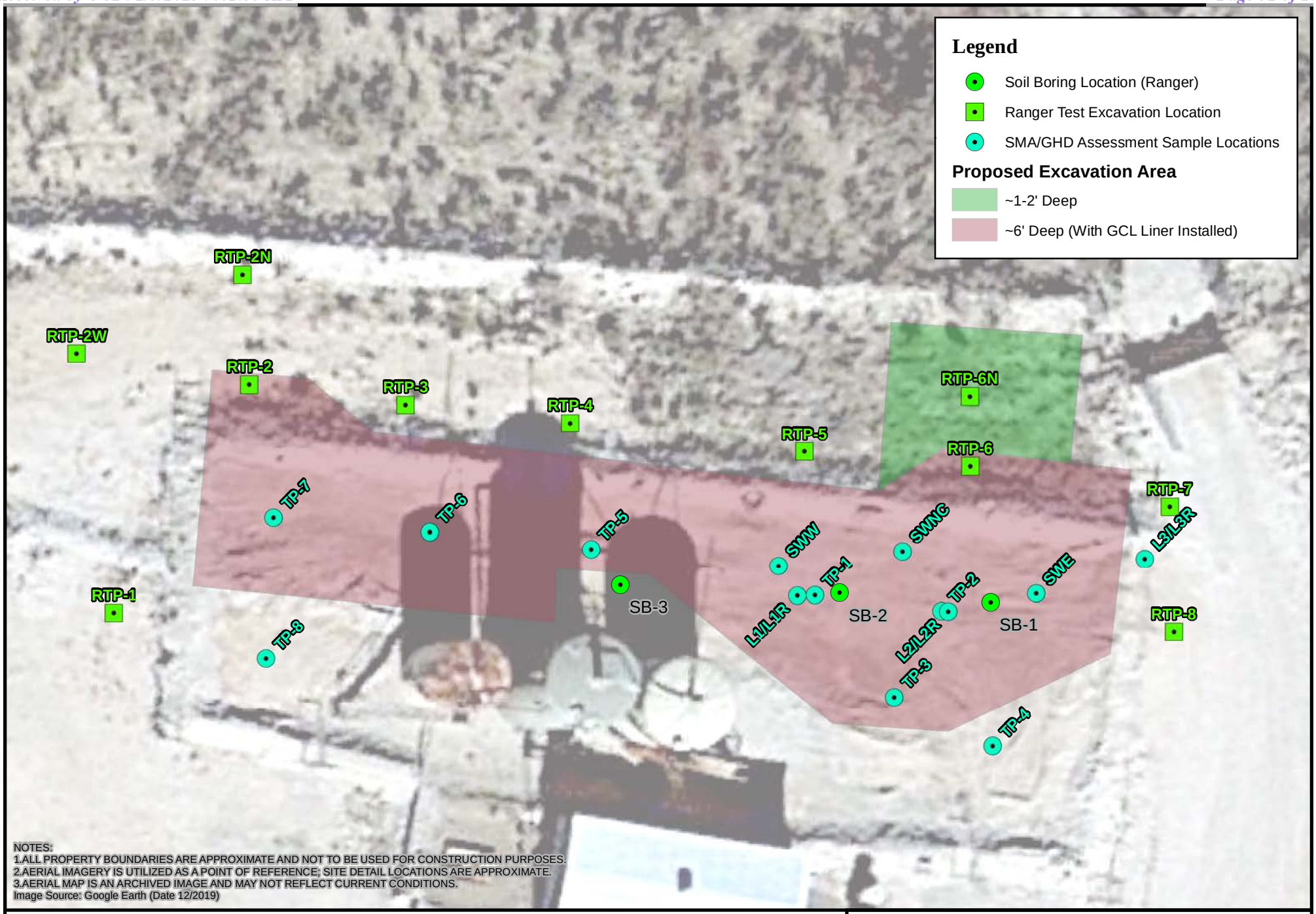
0 125 250 500 750 1,000 Feet

1:5,000

Karst Topography Map
Roy SWD #3
EOG Resources, Inc.



Sample Location Map
Roy SWD #3
EOG Resources, Inc.



Proposed Remediation Map
Roy SWD #3
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
ROY SWD #3 - TANK BATTERY AREA
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
April 10-11, 2019 Soil Borings													
L1R / 35'	4/10/2019	35	<0.025	<0.050	<0.050	<0.10	<0.225	<5.0	<9.9	<50	<14.9	<64.9	**3,100**
L1R / 40'	4/10/2019	40	<0.025	<0.048	<0.048	<0.097	<0.225	<4.8	<9.9	<49	<14.7	<63.7	530
L1R / 60'	4/10/2019	60	<0.023	<0.047	<0.047	<0.093	<0.210	<4.7	<9.1	<45	<13.8	<58.8	410
L2R / 0'	4/11/2019	0	<0.024	<0.048	<0.048	<0.097	<0.0217	<4.8	<9.0	<45	<13.8	<58.8	**1,700**
L2R / 20'	4/11/2019	20	<0.023	<0.047	<0.047	<0.094	<0.211	<4.7	<9.0	<45	<13.7	<58.7	**1,700**
L2R / 25'	4/11/2019	25	<0.024	<0.048	<0.048	<0.097	<0.217	<4.8	<8.8	<44	<13.6	<57.6	**10,000**
L3R / 30'	4/11/2019	30	<0.212	<0.047	<0.047	<0.094	<0.212	<4.7	<8.7	<44	<13.4	<57.4	220
L3R / 35'	4/11/2019	35	<0.208	<0.046	<0.046	<0.093	<0.208	<4.6	<8.9	<45	<13.5	<58.5	140
L3R / 40'	4/11/2019	40	<0.212	<0.047	<0.047	<0.094	<0.212	<4.7	<9.8	<49	<14.5	<63.5	110
September 3-4, 2019 Test Pits													
TP-1-12'	9/3/2019	12	<0.025	<0.050	<0.050	<0.100	<0.225	<5.0	<9.3	<46	<9.3	<60.3	**2,900**
TP-1-16'	9/3/2019	16	<0.024	<0.048	<0.048	<0.097	<0.217	<4.8	<9.9	<50	<9.9	<64.7	**940**
TP-1-20'	9/3/2019	20	<0.025	<0.049	<0.049	<0.099	<0.222	<4.9	<8.8	<44	<8.8	<57.7	**3,500**
TP-2-12'	9/3/2019	12	<0.025	<0.049	<0.049	<0.098	<0.221	<4.9	<9.4	<47	<9.4	<61.3	320
TP-2-16'	9/3/2019	16	<0.025	<0.050	<0.050	<0.099	<0.224	11	290	150	301	**451**	**760**
TP-2-20'	9/3/2019	20	<0.024	<0.049	<0.049	<0.098	<0.220	<4.9	<9.1	<45	<9.1	<59.0	**1,000**
TP-3-16'	9/3/2019	16	<0.024	<0.048	<0.048	<0.097	<0.217	<4.8	<9.0	<45	<9.0	<58.8	**13,000**
TP-3-20'	9/3/2019	20	<0.025	<0.049	<0.049	<0.099	<0.222	<4.9	<9.6	<48	<9.6	<62.5	**12,000**
SWE-4'	9/4/2019	4	<0.025	<0.049	<0.049	<0.098	<0.221	<4.9	<9.7	<49	<9.7	<63.6	**1,800**
SWW-4'	9/4/2019	4	<0.024	<0.048	<0.048	<0.096	<0.216	<4.8	7,100	5,000	7,100	**12,100**	**3,900**
SWNC-4'	9/4/2019	4	<0.025	<0.049	<0.049	<0.098	<0.221	<4.9	830	790	830	**1,620**	**1,100**
TP-4-5'	9/4/2019	5	<0.024	<0.047	<0.047	<0.095	<0.213	<4.7	<8.7	<44	<8.7	<57.4	400
TP-4-12'	9/4/2019	12	<0.023	<0.047	<0.047	<0.093	<0.210	<4.7	<9.6	<48	<9.6	<62.3	300
TP-5-5'	9/4/2019	5	<0.024	<0.048	<0.048	<0.096	<0.216	<4.8	1,200	1,100	1,200	**2,300**	200
TP-5-12'	9/4/2019	12	<0.024	<0.048	<0.048	<0.097	<0.217	<4.8	1,300	750	1,300	**2,050**	260
TP-6-5'	9/4/2019	5	<0.120	<0.24	<0.24	<0.49	<1.09	17	4,200	2,100	4,217	**6,317**	350
TP-6-12'	9/4/2019	12	<0.023	<0.047	<0.047	<0.094	<0.211	<4.7	<9.3	<47	<9.3	<61	240
TP-7-5'	9/4/2019	5	<0.024	<0.048	<0.048	<0.097	<0.217	<4.8	280	610	280	**890**	<60
TP-7-12'	9/4/2019	12	<0.025	<0.049	<0.049	<0.098	<0.221	<4.9	<10	<50	<10	<64.9	<60

SOIL BTEX (EPA 8260), TPH (EPA 8015) & CHLORIDE (EPA 300) ANALYTICAL DATA
ROY SWD #3 - TANK BATTERY AREA
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
TP-8-5'	9/4/2019	5	<0.024	<0.048	<0.048	<0.096	<0.216	<4.8	<8.5	<42	<8.5	<55.3	530
TP-8-12'	9/4/2019	12	<0.023	<0.046	<0.046	<0.093	<0.208	<4.6	<10	<51	<10	<65.6	430
May 18, 2022 Soil Borings													
SB1-23	5/18/2022	23'	<0.024	<0.048	<0.048	<0.097	<0.10	<4.8	<9.2	<46	<9.2	<46	**1,400**
SB1-38	5/18/2022	38'	<0.024	<0.048	<0.048	<0.095	<0.10	<4.8	<9.5	<47	<9.5	<47	**670**
SB1-39	5/18/2022	39'	<0.024	<0.047	<0.047	<0.094	<0.09	<4.7	<9.0	<45	<9.0	<45	590
SB1-40	5/18/2022	40'	<0.024	<0.048	<0.048	<0.096	<0.10	<4.8	<9.0	<45	<9.0	<45	260
SB2-29	5/18/2022	29'	<0.023	<0.046	<0.046	<0.092	<0.09	<4.6	<9.8	<49	<9.8	<49	**5,200**
SB2-47	5/18/2022	47'	<0.024	<0.048	<0.048	<0.096	<0.10	<4.8	<8.6	<43	<8.6	<43	**750**
SB2-48	5/18/2022	48'	<0.024	<0.048	<0.048	<0.095	<0.10	<4.8	<9.9	<49	<9.9	<49	310
SB2-49	5/18/2022	49'	<0.025	<0.049	<0.049	<0.098	<0.10	<4.9	<9.9	<49	<9.9	<49	300
SB2-50	5/18/2022	50'	<0.025	<0.049	<0.049	<0.098	<0.10	<4.9	<9.1	<45	<9.1	<45	500
SB3-4	5/18/2022	4'	<0.024	<0.048	<0.048	<0.096	<0.10	<4.8	<10	<50	<10	<50	130
SB3-14	5/18/2022	14'	<0.023	<0.047	<0.047	<0.094	<0.09	<4.7	<10	<50	<10	<50	<60
SB3-29	5/18/2022	29'	<0.025	<0.049	<0.049	<0.099	<0.10	<4.9	<10	<50	<10	<50	63
SB3-30	5/18/2022	30'	<0.024	<0.049	<0.049	<0.098	<0.10	<4.9	<9.5	<47	<9.5	<47	<60
August 2022 - Test Excavations													
RTP-1/1	8/22/2022	1'	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<14	<48	<14	<48	<60
RTP-1/6	8/22/2022	6'	<0.024	<0.048	<0.048	<0.095	<0.10	<4.8	<15	<49	<15	<49	370
RTP-2/1	8/22/2022	1'	<0.024	<0.047	<0.047	<0.094	<0.09	<4.7	<13	<44	<13	<44	<60
RTP-2/6	8/22/2022	6'	<0.025	<0.050	<0.050	<0.099	<0.10	<5.0	<15	<50	<15	<50	**810**
RTP-2/9	8/22/2022	9'	<0.024	<0.048	<0.048	<0.097	<0.10	<4.8	<15	<49	<15	<49	**1,200**
RTP-2/11	8/22/2022	11'	<0.024	<0.048	<0.048	<0.095	<0.10	<4.8	<15	<48	<15	<48	**610**
RTP-3/1	8/22/2022	1'	<0.023	<0.047	<0.047	<0.093	<0.09	<4.7	<15	<49	<15	<49	<60
RTP-3/4	8/22/2022	4'	<0.024	<0.049	<0.049	<0.097	<0.10	<4.9	<14	<47	<14	<47	440
RTP-3/6	8/22/2022	6'	<0.025	<0.049	<0.049	<0.099	<0.10	<4.9	<13	<45	<13	<45	440
RTP-4/1	8/22/2022	1'	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<14	<48	<14	<48	<60
RTP-4/6	8/22/2022	6'	<0.025	<0.049	<0.049	<0.098	<0.10	<4.9	<14	<46	<14	<46	80
RTP-5/1	8/22/2022	1'	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<13	<44	<13	<44	<60
RTP-5/6	8/22/2022	6'	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<14	<47	<14	<47	260

SOIL BTEX (EPA 8260), TPH (EPA 8015) & CHLORIDE (EPA 300) ANALYTICAL DATA
ROY SWD #3 - TANK BATTERY AREA
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
RTP-6/1	8/22/2022	1'	<0.024	<0.049	<0.049	<0.097	<0.10	<4.9	<13	<44	<13	<44	<60
RTP-6/6	8/22/2022	6'	<0.024	<0.048	<0.048	<0.095	<0.10	<4.8	<14	<45	<14	<45	**940**
RTP-6/7	8/22/2022	7'	<0.024	<0.048	<0.048	<0.097	<0.10	<4.8	<15	<49	<15	<49	**670**
RTP-7/1	8/23/2022	1'	<0.023	<0.046	<0.046	<0.091	<0.09	<4.6	<15	<49	<15	<49	<60
RTP-7/6	8/23/2022	6'	<0.024	<0.048	<0.048	<0.095	<0.10	<4.8	<15	<50	<15	<50	<60
RTP-8/1	8/23/2022	1'	<0.024	<0.047	<0.047	<0.094	<0.09	<4.7	20	72	20	92	69
RTP-8/6	8/23/2022	6'	<0.024	<0.049	<0.049	<0.098	<0.10	<4.9	<15	<49	<15	<49	140
September 2022 - Test Excavations													
RTP-2W/2	9/23/2022	2'	<0.025	<0.050	<0.050	<0.099	<0.10	<5.0	<14	<48	<14	<48	160
RTP-2W/4	9/23/2022	4'	<0.024	<0.047	<0.047	<0.094	<0.09	<4.7	<15	<49	<15	<49	590
RTP-2N/1	9/23/2022	1'	<0.024	<0.047	<0.047	<0.094	<0.09	<4.7	<14	<46	<14	<46	<60
RTP-2N/4	9/23/2022	4'	<0.024	<0.049	<0.049	<0.097	<0.10	<4.9	<14	<48	<14	<48	95
RTP-6N/1	9/23/2022	1'	<0.023	<0.046	<0.046	<0.093	<0.09	<4.6	61	95	61	**156**	<60
RTP-6N/4	9/23/2022	4'	<0.023	<0.047	<0.047	<0.094	<0.09	<4.7	<14	<46	<14	<46	<60
19.15.29.12 NMAC Table 1 Closure Criteria for Soils Impacted by a Release (GW <50')			**10**	**---**	**---**	**---**	**50**	**---**	**---**	**---**	**---**	**100**	**600**
19.15.29.13 NMAC Reclamation Criteria (0'-4' Soils Only)			**10[3]**				**50[3]**					**100[3]**	**600**

Notes:

1. Results exceeding the Table 1 Closure Criteria are presented in bold type and are highlighted yellow.

2. Results exceeding the NMAC Restoration, Reclamation and re-vegetation chloride concentration requirements are presented in bold red type.

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

4. NA - Not Analyzed

ATTACHMENT 1 – USGS AND NMOSE WATER WELL DATA

District Boundary
SiteBoundaries
State Trust Lands
Estates

0 17
0 28

Esri, HERE, iPC

New Mexico Office of the State Engineer

Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Tws	Rng	(NAD83 UTM in meters) X	Y
	RA 06418	1	2	3	17	19S	25E	545925	3613710*

Driller License: 406 **Driller Company:** TIDWELL, CLYDE J.

Driller Name:

Drill Start Date:	12/11/1978	**Drill Finish Date:**	12/18/1978	**Plug Date:**	
Log File Date:	12/26/1978	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:	7.00	**Depth Well:**	120 feet	**Depth Water:**	72 feet

Water Bearing Stratifications:	Top	Bottom	Description
	72	75	Shallow Alluvium/Basin Fill
	106	112	Shallow Alluvium/Basin Fill

Casing Perforations:	Top	Bottom
	51	109

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

New Mexico Office of the State Engineer

Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Twn	Rng	(NAD83 UTM in meters) X	Y
	RA 04426	4	3		18	19S	25E	544412	3613201*

Driller License:
Driller Company:
Driller Name: PETERS

Drill Start Date:
Drill Finish Date:
Plug Date:
Log File Date:
PCW Rcv Date:
Source:
Pump Type:
Pipe Discharge Size:
Estimated Yield:
Casing Size: 7.00
Depth Well: 715 feet
Depth Water:

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

USGS science for a changing world

USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

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

Click to hideNews Bulletins

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

Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

site_no list =
- 323948104302801

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

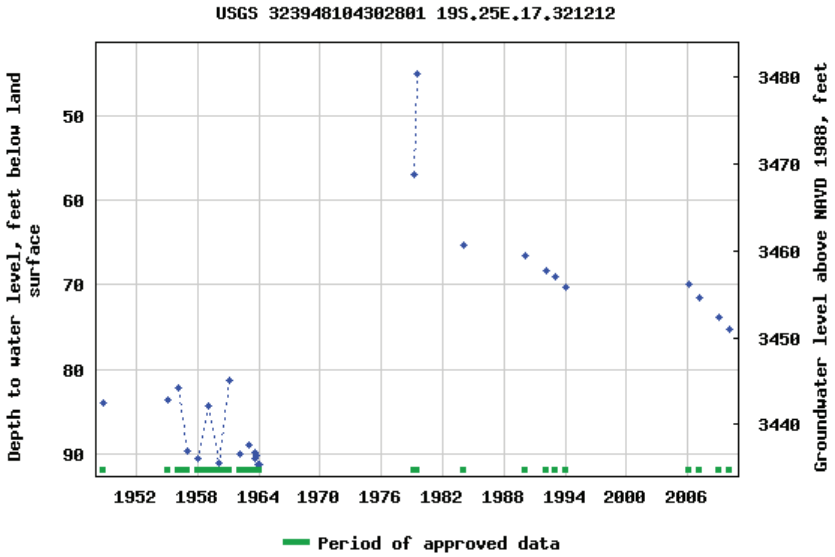
USGS 323948104302801 19S.25E.17.321212

Groundwater: Field measurements | GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°39'48", Longitude 104°30'28" NAD27
Land-surface elevation 3,526 feet above NAVD88
This well is completed in the Roswell Basin aquifer system (S400RSWLBS) national aquifer.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

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



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

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

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: 2021-10-08 15:51:31 EDT
0.61 0.53 nadww02

Click to hideNews Bulletins

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

Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

site_no list =
- 323948104302901

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

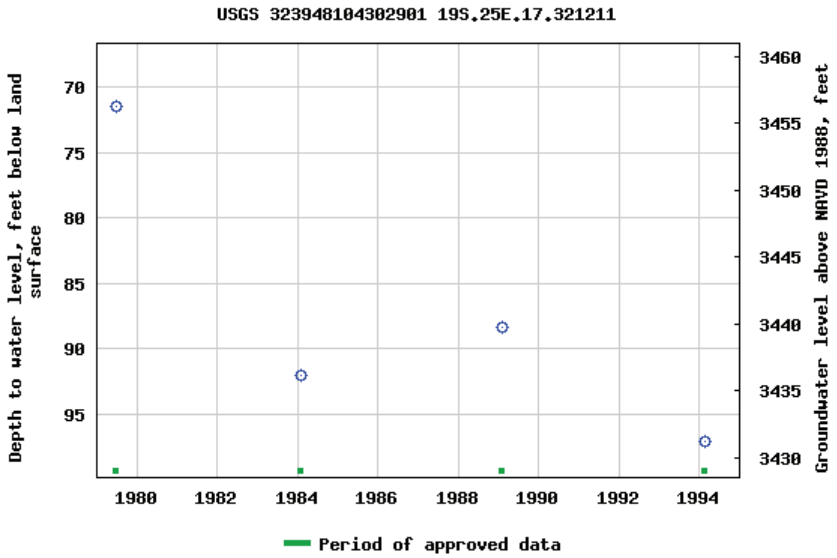
USGS 323948104302901 19S.25E.17.321211

Groundwater: Field measurements GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°39'48", Longitude 104°30'29" NAD27
Land-surface elevation 3,528 feet above NAVD88
The depth of the well is 120 feet below land surface.
This well is completed in the Roswell Basin aquifer system (S400RSWLBS) national aquifer.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

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



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

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

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: 2021-10-08 15:49:26 EDT
0.55 0.48 nadww02

Click to hideNews Bulletins

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

Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

site_no list =
- 324004104285801

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

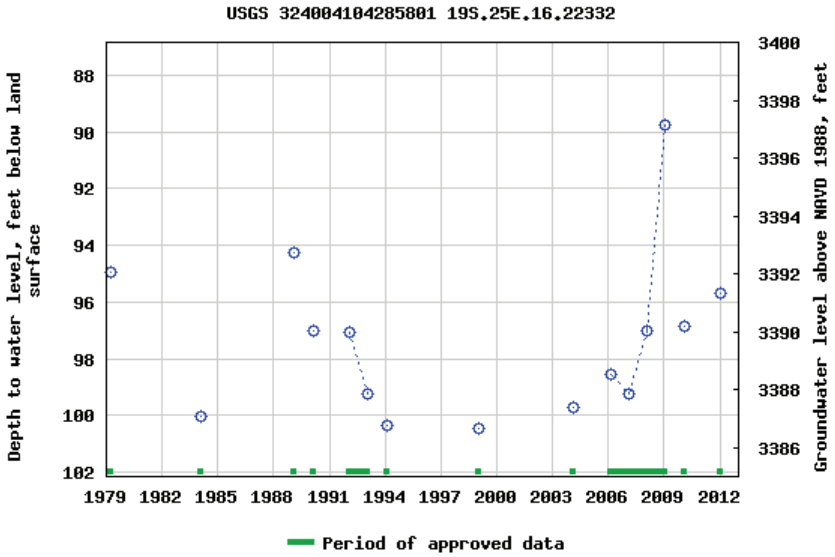
USGS 324004104285801 19S.25E.16.22332

Groundwater: Field measurements GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°40'04", Longitude 104°28'58" NAD27
Land-surface elevation 3,487 feet above NAVD88
This well is completed in the Roswell Basin aquifer system (S400RSWLBS) national aquifer.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

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



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

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

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: 2021-10-08 15:55:24 EDT
0.59 0.5 nadww02

National Water Information System: Web Interface

USGS Water Resources

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

Click to hideNews Bulletins

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

Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

site_no list =
- 324024104322201

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

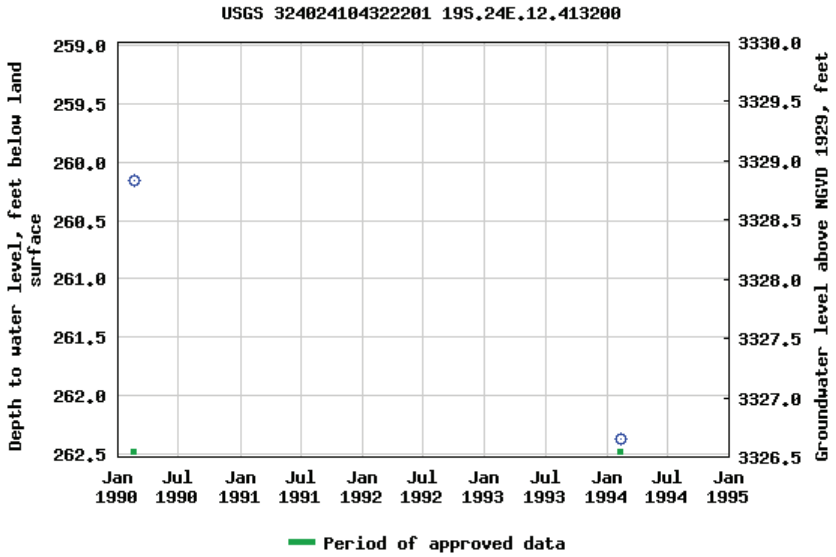
USGS 324024104322201 19S.24E.12.413200

Groundwater: Field measurements | GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°40'24", Longitude 104°32'22" NAD27
Land-surface elevation 3,589 feet above NGVD29
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



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

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

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: 2021-10-08 15:22:52 EDT
0.71 0.63 nadww02

Click to hideNews Bulletins

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

Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

site_no list =
- 324041104294801

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

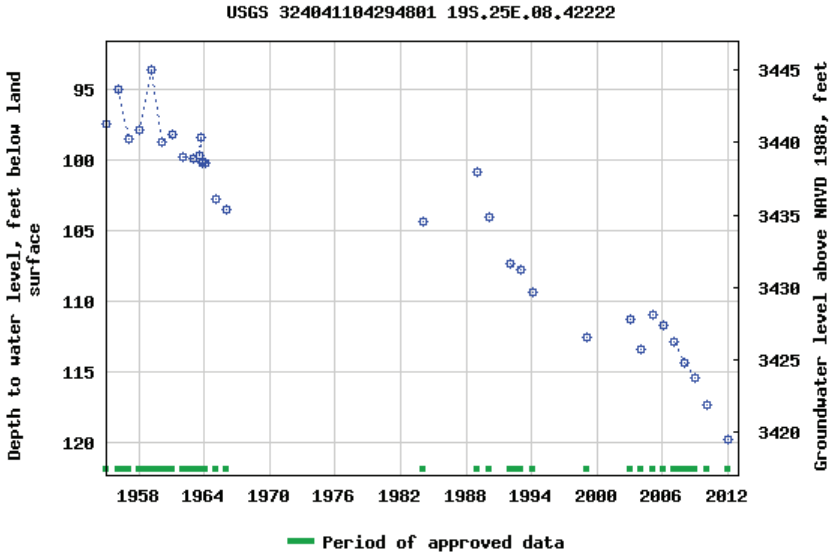
USGS 324041104294801 19S.25E.08.42222

Groundwater: Field measurements GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°40'41", Longitude 104°29'48" NAD27
Land-surface elevation 3,539 feet above NAVD88
The depth of the well is 142 feet below land surface.
This well is completed in the Roswell Basin aquifer system (S400RSWLBS) national aquifer.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

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



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

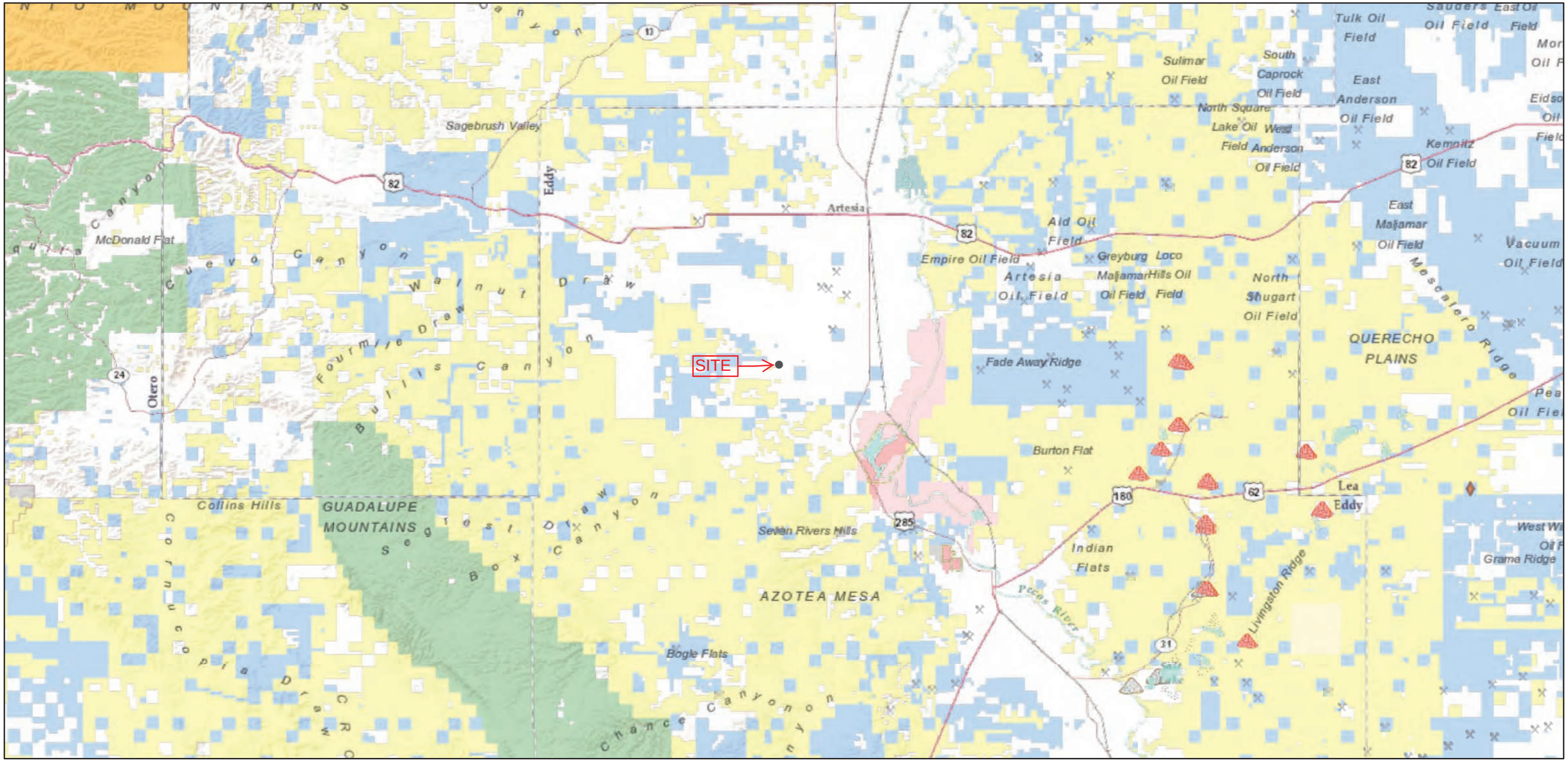
[Questions about sites/data?](#)
[Feedback on this web site](#)
[Automated retrievals](#)
[Help](#)
[Data Tips](#)
[Explanation of terms](#)
[Subscribe for system changes](#)
[News](#)

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: 2021-10-08 15:54:11 EDT
0.6 0.51 nadww02

ATTACHMENT 2 – NM ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT ACTIVE MINES MAP

Active Mines in New Mexico



10/8/2021, 9:48:01 AM

1:577,791

0 5 10 20 mi

0 5 10 20 km

Land Ownership

- Bureau of Land Management
- Bureau of Reclamation
- Department of Agriculture
- Department of Defense
- Department of Energy
- National Park Service
- Private Land
- State Game and Fish
- State Land
- State Parks
- Tribal
- US Fish and Wildlife Service
- US Forest Service

Registered Mines

- Aggregate, Stone etc.
- Aggregate, Stone etc.
- Aggregate, Stone etc.
- Aggregate, Stone etc.
- Industrial Minerals (Other)
- Potash
- Salt

U.S. Bureau of Land Management - New Mexico State Office, Sources: Esri, USGS, NOAA, Sources: Esri, Garmin, USGS, NPS

EMNRD MMD GIS Coordinator

NM Energy, Minerals and Natural Resources Department (http://nm-emnrd.maps.arcgis.com/apps/webappviewer/index.html?id=1b5e577974664d689b47790897ca2795)

ATTACHMENT 3 – PHOTOGRAPHIC DOCUMENTATION

PHOTOGRAPH NO. 1 – A typical view of the soil boring installation activities at the SB-2 location. The view is towards the west.

(Approximate GPS: 32.670983, -104.517602)

PHOTOGRAPH NO. 2 – A typical view of the soil boring plugging and abandonment activities following installation and sampling.

(Approximate GPS: 32.670981, -104.517583)

PHOTOGRAPH NO. 3 – A typical view of the assessment activities on August 23, 2022. The view is towards the north.

(Approximate GPS: 32.670948, -104.517505)

ATTACHMENT 4 – LABORATORY REPORTS

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

June 02, 2022

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

RE: Roy SWD 3 OrderNo.: 2205923

Dear Will Kierdorf:

Hall Environmental Analysis Laboratory received 21 sample(s) on 5/20/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2205923**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SB1-23
Project: Roy SWD 3
Collection Date: 5/18/2022 8:37:00 AM
Lab ID: 2205923-001 **Matrix:** SOIL **Received Date:** 5/20/2022 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	1400	60		mg/Kg	20	5/25/2022 7:29:55 PM	67690
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	5/23/2022 1:17:23 PM	67607
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/23/2022 1:17:23 PM	67607
Surr: DNOP	86.1	51.1-141		%Rec	1	5/23/2022 1:17:23 PM	67607
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/24/2022	67603
Surr: BFB	83.8	37.7-212		%Rec	1	5/24/2022	67603
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.024		mg/Kg	1	5/24/2022	67603
Toluene	ND	0.048		mg/Kg	1	5/24/2022	67603
Ethylbenzene	ND	0.048		mg/Kg	1	5/24/2022	67603
Xylenes, Total	ND	0.097		mg/Kg	1	5/24/2022	67603
Surr: 4-Bromofluorobenzene	86.0	70-130		%Rec	1	5/24/2022	67603

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

Qualifiers:

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

Analytical Report
Lab Order **2205923**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SB1-38
Project: Roy SWD 3
Collection Date: 5/18/2022 9:35:00 AM
Lab ID: 2205923-002 **Matrix:** SOIL **Received Date:** 5/20/2022 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	670	60		mg/Kg	20	5/25/2022 7:42:16 PM	67690
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/23/2022 1:41:05 PM	67607
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/23/2022 1:41:05 PM	67607
Surr: DNOP	82.3	51.1-141		%Rec	1	5/23/2022 1:41:05 PM	67607
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/24/2022 12:40:00 AM	67603
Surr: BFB	90.9	37.7-212		%Rec	1	5/24/2022 12:40:00 AM	67603
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.024		mg/Kg	1	5/24/2022 12:40:00 AM	67603
Toluene	ND	0.048		mg/Kg	1	5/24/2022 12:40:00 AM	67603
Ethylbenzene	ND	0.048		mg/Kg	1	5/24/2022 12:40:00 AM	67603
Xylenes, Total	ND	0.095		mg/Kg	1	5/24/2022 12:40:00 AM	67603
Surr: 4-Bromofluorobenzene	89.9	70-130		%Rec	1	5/24/2022 12:40:00 AM	67603

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

Qualifiers:

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

Analytical Report
Lab Order **2205923**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SB1-39
Project: Roy SWD 3
Collection Date: 5/18/2022 9:36:00 AM
Lab ID: 2205923-003 **Matrix:** SOIL **Received Date:** 5/20/2022 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	590	60		mg/Kg	20	5/25/2022 7:54:37 PM	67690
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	5/23/2022 2:04:55 PM	67607
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	5/23/2022 2:04:55 PM	67607
Surr: DNOP	82.4	51.1-141		%Rec	1	5/23/2022 2:04:55 PM	67607
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/24/2022 12:59:00 AM	67603
Surr: BFB	92.9	37.7-212		%Rec	1	5/24/2022 12:59:00 AM	67603
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.024		mg/Kg	1	5/24/2022 12:59:00 AM	67603
Toluene	ND	0.047		mg/Kg	1	5/24/2022 12:59:00 AM	67603
Ethylbenzene	ND	0.047		mg/Kg	1	5/24/2022 12:59:00 AM	67603
Xylenes, Total	ND	0.094		mg/Kg	1	5/24/2022 12:59:00 AM	67603
Surr: 4-Bromofluorobenzene	93.4	70-130		%Rec	1	5/24/2022 12:59:00 AM	67603

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

Qualifiers:

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

Analytical Report
Lab Order **2205923**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SB1-40
Project: Roy SWD 3
Collection Date: 5/18/2022 9:37:00 AM
Lab ID: 2205923-004 **Matrix:** SOIL **Received Date:** 5/20/2022 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	260	61		mg/Kg	20	5/25/2022 8:06:57 PM	67690
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	5/23/2022 2:28:44 PM	67607
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	5/23/2022 2:28:44 PM	67607
Surr: DNOP	80.4	51.1-141		%Rec	1	5/23/2022 2:28:44 PM	67607
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/24/2022 1:19:00 AM	67603
Surr: BFB	93.2	37.7-212		%Rec	1	5/24/2022 1:19:00 AM	67603
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.024		mg/Kg	1	5/24/2022 1:19:00 AM	67603
Toluene	ND	0.048		mg/Kg	1	5/24/2022 1:19:00 AM	67603
Ethylbenzene	ND	0.048		mg/Kg	1	5/24/2022 1:19:00 AM	67603
Xylenes, Total	ND	0.096		mg/Kg	1	5/24/2022 1:19:00 AM	67603
Surr: 4-Bromofluorobenzene	95.3	70-130		%Rec	1	5/24/2022 1:19:00 AM	67603

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

Qualifiers:

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

Analytical Report
Lab Order **2205923**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SB2-29
Project: Roy SWD 3
Collection Date: 5/18/2022 10:49:00 AM
Lab ID: 2205923-005 **Matrix:** SOIL **Received Date:** 5/20/2022 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	5200	300		mg/Kg	100	5/26/2022 10:36:38 AM	67690
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	5/23/2022 2:52:34 PM	67607
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/23/2022 2:52:34 PM	67607
Surr: DNOP	83.2	51.1-141		%Rec	1	5/23/2022 2:52:34 PM	67607
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	5/24/2022 1:39:00 AM	67603
Surr: BFB	94.5	37.7-212		%Rec	1	5/24/2022 1:39:00 AM	67603
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.023		mg/Kg	1	5/24/2022 1:39:00 AM	67603
Toluene	ND	0.046		mg/Kg	1	5/24/2022 1:39:00 AM	67603
Ethylbenzene	ND	0.046		mg/Kg	1	5/24/2022 1:39:00 AM	67603
Xylenes, Total	ND	0.092		mg/Kg	1	5/24/2022 1:39:00 AM	67603
Surr: 4-Bromofluorobenzene	96.1	70-130		%Rec	1	5/24/2022 1:39:00 AM	67603

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

Qualifiers:

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

Analytical Report
Lab Order **2205923**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SB2-47
Project: Roy SWD 3
Collection Date: 5/18/2022 11:57:00 AM
Lab ID: 2205923-006 **Matrix:** SOIL **Received Date:** 5/20/2022 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	750	60		mg/Kg	20	5/25/2022 8:56:19 PM	67690
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	8.6		mg/Kg	1	5/23/2022 3:16:20 PM	67607
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	5/23/2022 3:16:20 PM	67607
Surr: DNOP	85.5	51.1-141		%Rec	1	5/23/2022 3:16:20 PM	67607
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/24/2022 1:58:00 AM	67603
Surr: BFB	91.4	37.7-212		%Rec	1	5/24/2022 1:58:00 AM	67603
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.024		mg/Kg	1	5/24/2022 1:58:00 AM	67603
Toluene	ND	0.048		mg/Kg	1	5/24/2022 1:58:00 AM	67603
Ethylbenzene	ND	0.048		mg/Kg	1	5/24/2022 1:58:00 AM	67603
Xylenes, Total	ND	0.096		mg/Kg	1	5/24/2022 1:58:00 AM	67603
Surr: 4-Bromofluorobenzene	93.4	70-130		%Rec	1	5/24/2022 1:58:00 AM	67603

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

Qualifiers:

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

Analytical Report
Lab Order **2205923**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SB2-48
Project: Roy SWD 3
Collection Date: 5/18/2022 11:58:00 AM
Lab ID: 2205923-007 **Matrix:** SOIL **Received Date:** 5/20/2022 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	310	60		mg/Kg	20	5/25/2022 9:08:40 PM	67690
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/23/2022 3:40:20 PM	67607
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/23/2022 3:40:20 PM	67607
Surr: DNOP	84.3	51.1-141		%Rec	1	5/23/2022 3:40:20 PM	67607
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/24/2022 2:18:00 AM	67603
Surr: BFB	92.2	37.7-212		%Rec	1	5/24/2022 2:18:00 AM	67603
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.024		mg/Kg	1	5/24/2022 2:18:00 AM	67603
Toluene	ND	0.048		mg/Kg	1	5/24/2022 2:18:00 AM	67603
Ethylbenzene	ND	0.048		mg/Kg	1	5/24/2022 2:18:00 AM	67603
Xylenes, Total	ND	0.095		mg/Kg	1	5/24/2022 2:18:00 AM	67603
Surr: 4-Bromofluorobenzene	95.8	70-130		%Rec	1	5/24/2022 2:18:00 AM	67603

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

Qualifiers:

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

Analytical Report
Lab Order **2205923**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SB2-49
Project: Roy SWD 3
Collection Date: 5/18/2022 11:59:00 AM
Lab ID: 2205923-008 **Matrix:** SOIL **Received Date:** 5/20/2022 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	300	60		mg/Kg	20	5/25/2022 9:21:00 PM	67690
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/23/2022 4:04:25 PM	67607
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/23/2022 4:04:25 PM	67607
Surr: DNOP	81.5	51.1-141		%Rec	1	5/23/2022 4:04:25 PM	67607
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/24/2022 2:38:00 AM	67603
Surr: BFB	95.7	37.7-212		%Rec	1	5/24/2022 2:38:00 AM	67603
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.025		mg/Kg	1	5/24/2022 2:38:00 AM	67603
Toluene	ND	0.049		mg/Kg	1	5/24/2022 2:38:00 AM	67603
Ethylbenzene	ND	0.049		mg/Kg	1	5/24/2022 2:38:00 AM	67603
Xylenes, Total	ND	0.098		mg/Kg	1	5/24/2022 2:38:00 AM	67603
Surr: 4-Bromofluorobenzene	97.4	70-130		%Rec	1	5/24/2022 2:38:00 AM	67603

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2205923**
Date Reported: **6/2/2022**

CLIENT: EOG
Client Sample ID: SB2-50
Project: Roy SWD 3
Collection Date: 5/18/2022 12:00:00 PM
Lab ID: 2205923-009 **Matrix:** SOIL **Received Date:** 5/20/2022 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	500	60		mg/Kg	20	5/25/2022 9:33:21 PM	67690
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	5/23/2022 4:28:29 PM	67607
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	5/23/2022 4:28:29 PM	67607
Surr: DNOP	83.7	51.1-141		%Rec	1	5/23/2022 4:28:29 PM	67607
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/24/2022 2:58:00 AM	67603
Surr: BFB	101	37.7-212		%Rec	1	5/24/2022 2:58:00 AM	67603
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.025		mg/Kg	1	5/24/2022 2:58:00 AM	67603
Toluene	ND	0.049		mg/Kg	1	5/24/2022 2:58:00 AM	67603
Ethylbenzene	ND	0.049		mg/Kg	1	5/24/2022 2:58:00 AM	67603
Xylenes, Total	ND	0.098		mg/Kg	1	5/24/2022 2:58:00 AM	67603
Surr: 4-Bromofluorobenzene	98.8	70-130		%Rec	1	5/24/2022 2:58:00 AM	67603

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

Qualifiers:

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

Analytical Report
Lab Order **2205923**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SB3-4
Project: Roy SWD 3
Collection Date: 5/18/2022 1:04:00 PM
Lab ID: 2205923-010 **Matrix:** SOIL **Received Date:** 5/20/2022 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	130	60		mg/Kg	20	5/25/2022 10:35:03 PM	67699
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/23/2022 4:52:34 PM	67607
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/23/2022 4:52:34 PM	67607
Surr: DNOP	87.9	51.1-141		%Rec	1	5/23/2022 4:52:34 PM	67607
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/24/2022 3:17:00 AM	67603
Surr: BFB	97.3	37.7-212		%Rec	1	5/24/2022 3:17:00 AM	67603
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.024		mg/Kg	1	5/24/2022 3:17:00 AM	67603
Toluene	ND	0.048		mg/Kg	1	5/24/2022 3:17:00 AM	67603
Ethylbenzene	ND	0.048		mg/Kg	1	5/24/2022 3:17:00 AM	67603
Xylenes, Total	ND	0.096		mg/Kg	1	5/24/2022 3:17:00 AM	67603
Surr: 4-Bromofluorobenzene	99.1	70-130		%Rec	1	5/24/2022 3:17:00 AM	67603

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

Qualifiers:

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

Analytical Report
Lab Order **2205923**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SB3-14
Project: Roy SWD 3
Collection Date: 5/18/2022 1:14:00 PM
Lab ID: 2205923-011
Matrix: SOIL
Received Date: 5/20/2022 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	ND	60		mg/Kg	20	5/25/2022 10:47:24 PM	67699
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **ED**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/26/2022 1:40:05 AM	67669
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/26/2022 1:40:05 AM	67669
Surr: DNOP	96.5	51.1-141		%Rec	1	5/26/2022 1:40:05 AM	67669
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/24/2022 3:37:00 AM	67603
Surr: BFB	92.9	37.7-212		%Rec	1	5/24/2022 3:37:00 AM	67603
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.023		mg/Kg	1	5/24/2022 3:37:00 AM	67603
Toluene	ND	0.047		mg/Kg	1	5/24/2022 3:37:00 AM	67603
Ethylbenzene	ND	0.047		mg/Kg	1	5/24/2022 3:37:00 AM	67603
Xylenes, Total	ND	0.094		mg/Kg	1	5/24/2022 3:37:00 AM	67603
Surr: 4-Bromofluorobenzene	97.1	70-130		%Rec	1	5/24/2022 3:37:00 AM	67603

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

Qualifiers:

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

Analytical Report
Lab Order **2205923**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SB3-29
Project: Roy SWD 3
Collection Date: 5/18/2022 1:31:00 PM
Lab ID: 2205923-012 **Matrix:** SOIL **Received Date:** 5/20/2022 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	63	60		mg/Kg	20	5/25/2022 11:24:26 PM	67699
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **ED**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/26/2022 2:53:17 AM	67669
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/26/2022 2:53:17 AM	67669
Surr: DNOP	93.8	51.1-141		%Rec	1	5/26/2022 2:53:17 AM	67669
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/23/2022 9:40:57 PM	67605
Surr: BFB	90.7	37.7-212		%Rec	1	5/23/2022 9:40:57 PM	67605
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	5/23/2022 9:40:57 PM	67605
Toluene	ND	0.049		mg/Kg	1	5/23/2022 9:40:57 PM	67605
Ethylbenzene	ND	0.049		mg/Kg	1	5/23/2022 9:40:57 PM	67605
Xylenes, Total	ND	0.099		mg/Kg	1	5/23/2022 9:40:57 PM	67605
Surr: 4-Bromofluorobenzene	95.5	70-130		%Rec	1	5/23/2022 9:40:57 PM	67605

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

Qualifiers:

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

Analytical Report
Lab Order **2205923**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SB3-30
Project: Roy SWD 3
Collection Date: 5/18/2022 1:32:00 PM
Lab ID: 2205923-013 **Matrix:** SOIL **Received Date:** 5/20/2022 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	ND	60		mg/Kg	20	5/25/2022 11:36:46 PM	67699
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **ED**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/26/2022 3:17:42 AM	67669
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/26/2022 3:17:42 AM	67669
Surr: DNOP	91.1	51.1-141		%Rec	1	5/26/2022 3:17:42 AM	67669
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/23/2022 10:51:34 PM	67605
Surr: BFB	92.4	37.7-212		%Rec	1	5/23/2022 10:51:34 PM	67605
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	5/23/2022 10:51:34 PM	67605
Toluene	ND	0.049		mg/Kg	1	5/23/2022 10:51:34 PM	67605
Ethylbenzene	ND	0.049		mg/Kg	1	5/23/2022 10:51:34 PM	67605
Xylenes, Total	ND	0.098		mg/Kg	1	5/23/2022 10:51:34 PM	67605
Surr: 4-Bromofluorobenzene	97.0	70-130		%Rec	1	5/23/2022 10:51:34 PM	67605

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

Qualifiers:

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

Analytical Report
Lab Order **2205923**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SB4-10
Project: Roy SWD 3
Collection Date: 5/19/2022 7:40:00 AM
Lab ID: 2205923-014 **Matrix:** SOIL **Received Date:** 5/20/2022 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	1300	59		mg/Kg	20	5/25/2022 11:49:07 PM	67699
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **ED**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/26/2022 4:06:15 AM	67669
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/26/2022 4:06:15 AM	67669
Surr: DNOP	96.6	51.1-141		%Rec	1	5/26/2022 4:06:15 AM	67669
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/24/2022 12:02:08 AM	67605
Surr: BFB	89.7	37.7-212		%Rec	1	5/24/2022 12:02:08 AM	67605
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	5/24/2022 12:02:08 AM	67605
Toluene	ND	0.050		mg/Kg	1	5/24/2022 12:02:08 AM	67605
Ethylbenzene	ND	0.050		mg/Kg	1	5/24/2022 12:02:08 AM	67605
Xylenes, Total	ND	0.10		mg/Kg	1	5/24/2022 12:02:08 AM	67605
Surr: 4-Bromofluorobenzene	94.2	70-130		%Rec	1	5/24/2022 12:02:08 AM	67605

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

Qualifiers:

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

Analytical Report
Lab Order **2205923**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SB4-15
Project: Roy SWD 3
Collection Date: 5/19/2022 7:45:00 AM
Lab ID: 2205923-015 **Matrix:** SOIL **Received Date:** 5/20/2022 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	890	60		mg/Kg	20	5/26/2022 12:01:28 AM	67699
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **ED**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	5/26/2022 4:30:33 AM	67669
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/26/2022 4:30:33 AM	67669
Surr: DNOP	97.9	51.1-141		%Rec	1	5/26/2022 4:30:33 AM	67669
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/24/2022 12:25:48 AM	67605
Surr: BFB	92.3	37.7-212		%Rec	1	5/24/2022 12:25:48 AM	67605
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	5/24/2022 12:25:48 AM	67605
Toluene	ND	0.049		mg/Kg	1	5/24/2022 12:25:48 AM	67605
Ethylbenzene	ND	0.049		mg/Kg	1	5/24/2022 12:25:48 AM	67605
Xylenes, Total	ND	0.097		mg/Kg	1	5/24/2022 12:25:48 AM	67605
Surr: 4-Bromofluorobenzene	95.4	70-130		%Rec	1	5/24/2022 12:25:48 AM	67605

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

Qualifiers:

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

Analytical Report
Lab Order **2205923**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SB4-20
Project: Roy SWD 3
Collection Date: 5/19/2022 7:50:00 AM
Lab ID: 2205923-016 **Matrix:** SOIL **Received Date:** 5/20/2022 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	250	59		mg/Kg	20	5/26/2022 12:13:48 AM	67699
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **ED**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	5/26/2022 4:54:48 AM	67669
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/26/2022 4:54:48 AM	67669
Surr: DNOP	97.4	51.1-141		%Rec	1	5/26/2022 4:54:48 AM	67669
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/24/2022 12:49:23 AM	67605
Surr: BFB	89.7	37.7-212		%Rec	1	5/24/2022 12:49:23 AM	67605
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	5/24/2022 12:49:23 AM	67605
Toluene	ND	0.049		mg/Kg	1	5/24/2022 12:49:23 AM	67605
Ethylbenzene	ND	0.049		mg/Kg	1	5/24/2022 12:49:23 AM	67605
Xylenes, Total	ND	0.097		mg/Kg	1	5/24/2022 12:49:23 AM	67605
Surr: 4-Bromofluorobenzene	93.3	70-130		%Rec	1	5/24/2022 12:49:23 AM	67605

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

Qualifiers:

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

Analytical Report
Lab Order **2205923**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SB4-30
Project: Roy SWD 3
Collection Date: 5/19/2022 8:00:00 AM
Lab ID: 2205923-017
Matrix: SOIL
Received Date: 5/20/2022 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	ND	60		mg/Kg	20	5/26/2022 12:26:09 AM	67699
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **ED**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	5/26/2022 5:18:59 AM	67669
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/26/2022 5:18:59 AM	67669
Surr: DNOP	95.4	51.1-141		%Rec	1	5/26/2022 5:18:59 AM	67669
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/24/2022 1:13:03 AM	67605
Surr: BFB	89.4	37.7-212		%Rec	1	5/24/2022 1:13:03 AM	67605
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	5/24/2022 1:13:03 AM	67605
Toluene	ND	0.050		mg/Kg	1	5/24/2022 1:13:03 AM	67605
Ethylbenzene	ND	0.050		mg/Kg	1	5/24/2022 1:13:03 AM	67605
Xylenes, Total	ND	0.10		mg/Kg	1	5/24/2022 1:13:03 AM	67605
Surr: 4-Bromofluorobenzene	93.6	70-130		%Rec	1	5/24/2022 1:13:03 AM	67605

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

Qualifiers:

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

Analytical Report
Lab Order **2205923**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SB5-26
Project: Roy SWD 3
Collection Date: 5/19/2022 8:46:00 AM
Lab ID: 2205923-018 **Matrix:** SOIL **Received Date:** 5/20/2022 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	4300	150		mg/Kg	50	5/26/2022 10:48:58 AM	67699
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **ED**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	5/26/2022 5:43:08 AM	67669
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/26/2022 5:43:08 AM	67669
Surr: DNOP	97.8	51.1-141		%Rec	1	5/26/2022 5:43:08 AM	67669
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/24/2022 1:36:44 AM	67605
Surr: BFB	91.6	37.7-212		%Rec	1	5/24/2022 1:36:44 AM	67605
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	5/24/2022 1:36:44 AM	67605
Toluene	ND	0.048		mg/Kg	1	5/24/2022 1:36:44 AM	67605
Ethylbenzene	ND	0.048		mg/Kg	1	5/24/2022 1:36:44 AM	67605
Xylenes, Total	ND	0.095		mg/Kg	1	5/24/2022 1:36:44 AM	67605
Surr: 4-Bromofluorobenzene	93.5	70-130		%Rec	1	5/24/2022 1:36:44 AM	67605

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

Qualifiers:

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

Analytical Report
Lab Order **2205923**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SB5-38
Project: Roy SWD 3
Collection Date: 5/19/2022 9:20:00 AM
Lab ID: 2205923-019 **Matrix:** SOIL **Received Date:** 5/20/2022 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	1100	60		mg/Kg	20	5/26/2022 12:50:51 AM	67699
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **ED**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	5/26/2022 6:07:01 AM	67669
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/26/2022 6:07:01 AM	67669
Surr: DNOP	100	51.1-141		%Rec	1	5/26/2022 6:07:01 AM	67669
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/24/2022 2:00:25 AM	67605
Surr: BFB	92.6	37.7-212		%Rec	1	5/24/2022 2:00:25 AM	67605
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	5/24/2022 2:00:25 AM	67605
Toluene	ND	0.049		mg/Kg	1	5/24/2022 2:00:25 AM	67605
Ethylbenzene	ND	0.049		mg/Kg	1	5/24/2022 2:00:25 AM	67605
Xylenes, Total	ND	0.098		mg/Kg	1	5/24/2022 2:00:25 AM	67605
Surr: 4-Bromofluorobenzene	94.8	70-130		%Rec	1	5/24/2022 2:00:25 AM	67605

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

Qualifiers:

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

Analytical Report
Lab Order **2205923**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SB5-39
Project: Roy SWD 3
Collection Date: 5/19/2022 9:21:00 AM
Lab ID: 2205923-020 **Matrix:** SOIL **Received Date:** 5/20/2022 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	420	60		mg/Kg	20	5/26/2022 1:03:12 AM	67699
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **ED**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	5/26/2022 6:30:56 AM	67669
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/26/2022 6:30:56 AM	67669
Surr: DNOP	100	51.1-141		%Rec	1	5/26/2022 6:30:56 AM	67669
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/24/2022 3:11:22 AM	67605
Surr: BFB	94.6	37.7-212		%Rec	1	5/24/2022 3:11:22 AM	67605
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	5/24/2022 3:11:22 AM	67605
Toluene	ND	0.048		mg/Kg	1	5/24/2022 3:11:22 AM	67605
Ethylbenzene	ND	0.048		mg/Kg	1	5/24/2022 3:11:22 AM	67605
Xylenes, Total	ND	0.095		mg/Kg	1	5/24/2022 3:11:22 AM	67605
Surr: 4-Bromofluorobenzene	94.2	70-130		%Rec	1	5/24/2022 3:11:22 AM	67605

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

Qualifiers:

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

Analytical Report
Lab Order **2205923**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: SB5-40
Project: Roy SWD 3
Collection Date: 5/19/2022 9:22:00 AM
Lab ID: 2205923-021 **Matrix:** SOIL **Received Date:** 5/20/2022 7:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	380	60		mg/Kg	20	5/26/2022 1:15:33 AM	67699
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **ED**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	5/26/2022 6:54:55 AM	67669
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/26/2022 6:54:55 AM	67669
Surr: DNOP	101	51.1-141		%Rec	1	5/26/2022 6:54:55 AM	67669
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/24/2022 3:35:01 AM	67605
Surr: BFB	91.2	37.7-212		%Rec	1	5/24/2022 3:35:01 AM	67605
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	5/24/2022 3:35:01 AM	67605
Toluene	ND	0.049		mg/Kg	1	5/24/2022 3:35:01 AM	67605
Ethylbenzene	ND	0.049		mg/Kg	1	5/24/2022 3:35:01 AM	67605
Xylenes, Total	ND	0.098		mg/Kg	1	5/24/2022 3:35:01 AM	67605
Surr: 4-Bromofluorobenzene	93.6	70-130		%Rec	1	5/24/2022 3:35:01 AM	67605

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2205923**

02-Jun-22

Client: EOG

Project: Roy SWD 3

Sample ID: **MB-67690**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **67690**	RunNo: **88285**
Prep Date: **5/25/2022**	Analysis Date: **5/25/2022**	SeqNo: **3130981** Units: **mg/Kg**

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

Sample ID: **LCS-67690**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **67690**	RunNo: **88285**
Prep Date: **5/25/2022**	Analysis Date: **5/25/2022**	SeqNo: **3130982** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.1	90	110			

Sample ID: **LCS-67699**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **67699**	RunNo: **88285**
Prep Date: **5/25/2022**	Analysis Date: **5/25/2022**	SeqNo: **3131011** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.0	90	110			

Sample ID: **MB-67699**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **67699**	RunNo: **88285**
Prep Date: **5/25/2022**	Analysis Date: **5/25/2022**	SeqNo: **3131012** Units: **mg/Kg**

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2205923**

02-Jun-22

Client: EOG

Project: Roy SWD 3

Sample ID: **LCS-67607**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **67607**	RunNo: **88200**
Prep Date: **5/20/2022**	Analysis Date: **5/23/2022**	SeqNo: **3127567** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	58	10	50.00	0	116	64.4	127			
Surr: DNOP	6.4		5.000		127	51.1	141			

Sample ID: **MB-67607**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **67607**	RunNo: **88200**
Prep Date: **5/20/2022**	Analysis Date: **5/23/2022**	SeqNo: **3127570** 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	13		10.00		132	51.1	141			

Sample ID: **MB-67669**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **67669**	RunNo: **88246**
Prep Date: **5/24/2022**	Analysis Date: **5/26/2022**	SeqNo: **3131392** 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		92.1	51.1	141			

Sample ID: **LCS-67669**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **67669**	RunNo: **88246**
Prep Date: **5/24/2022**	Analysis Date: **5/26/2022**	SeqNo: **3131393** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.4	64.4	127			
Surr: DNOP	4.8		5.000		95.9	51.1	141			

Sample ID: **MB-67666**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **67666**	RunNo: **88263**
Prep Date: **5/24/2022**	Analysis Date: **5/26/2022**	SeqNo: **3131422** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		101	51.1	141			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2205923**

02-Jun-22

Client: EOG

Project: Roy SWD 3

Sample ID: **LCS-67666**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **67666**	RunNo: **88263**
Prep Date: **5/24/2022**	Analysis Date: **5/26/2022**	SeqNo: **3131423** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.4		5.000		108	51.1	141			

Sample ID: **MB-67680**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **67680**	RunNo: **88246**
Prep Date: **5/25/2022**	Analysis Date: **5/26/2022**	SeqNo: **3132682** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.3		10.00		93.1	51.1	141			

Sample ID: **LCS-67680**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **67680**	RunNo: **88246**
Prep Date: **5/25/2022**	Analysis Date: **5/26/2022**	SeqNo: **3132685** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.000		93.1	51.1	141			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2205923**

02-Jun-22

Client: EOG

Project: Roy SWD 3

Sample ID: **mb-67605**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **67605**	RunNo: **88206**
Prep Date: **5/20/2022**	Analysis Date: **5/24/2022**	SeqNo: **3126958** 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		91.8	37.7	212			

Sample ID: **lcs-67605**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **67605**	RunNo: **88206**
Prep Date: **5/20/2022**	Analysis Date: **5/23/2022**	SeqNo: **3126959** 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	102	72.3	137			
Surr: BFB	2000		1000		200	37.7	212			

Sample ID: **lcs-67603**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **67603**	RunNo: **88207**
Prep Date: **5/20/2022**	Analysis Date: **5/23/2022**	SeqNo: **3127053** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	96.1	72.3	137			
Surr: BFB	2000		1000		198	37.7	212			

Sample ID: **mb-67603**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **67603**	RunNo: **88207**
Prep Date: **5/20/2022**	Analysis Date: **5/23/2022**	SeqNo: **3127054** 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	850		1000		85.5	37.7	212			

Sample ID: **lcs-67637**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **67637**	RunNo: **88236**
Prep Date: **5/23/2022**	Analysis Date: **5/24/2022**	SeqNo: **3128820** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	2000		1000		202	37.7	212			

Sample ID: **mb-67637**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **67637**	RunNo: **88236**
Prep Date: **5/23/2022**	Analysis Date: **5/24/2022**	SeqNo: **3128821** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	930		1000		93.2	37.7	212			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2205923**

02-Jun-22

Client: EOG

Project: Roy SWD 3

Sample ID: **mb-67605**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **67605**	RunNo: **88206**
Prep Date: **5/20/2022**	Analysis Date: **5/24/2022**	SeqNo: **3127001** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.95		1.000		95.4	70	130			

Sample ID: **LCS-67605**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **67605**	RunNo: **88206**
Prep Date: **5/20/2022**	Analysis Date: **5/23/2022**	SeqNo: **3127002** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	1.000	0	89.3	80	120			
Toluene	0.92	0.050	1.000	0	92.3	80	120			
Ethylbenzene	0.93	0.050	1.000	0	92.6	80	120			
Xylenes, Total	2.8	0.10	3.000	0	92.6	80	120			
Surr: 4-Bromofluorobenzene	0.99		1.000		98.8	70	130			

Sample ID: **lcs-67603**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **67603**	RunNo: **88207**
Prep Date: **5/20/2022**	Analysis Date: **5/23/2022**	SeqNo: **3127099** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	94.1	80	120			
Toluene	0.95	0.050	1.000	0	95.0	80	120			
Ethylbenzene	0.95	0.050	1.000	0	94.8	80	120			
Xylenes, Total	2.8	0.10	3.000	0	94.0	80	120			
Surr: 4-Bromofluorobenzene	0.90		1.000		90.4	70	130			

Sample ID: **mb-67603**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **67603**	RunNo: **88207**
Prep Date: **5/20/2022**	Analysis Date: **5/23/2022**	SeqNo: **3127100** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.89		1.000		88.7	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2205923**

02-Jun-22

Client: EOG

Project: Roy SWD 3

Sample ID: **lcs-67637**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **67637**	RunNo: **88236**
Prep Date: **5/23/2022**	Analysis Date: **5/24/2022**	SeqNo: **3128876** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.94		1.000		94.0	70	130			

Sample ID: **mb-67637**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **67637**	RunNo: **88236**
Prep Date: **5/23/2022**	Analysis Date: **5/24/2022**	SeqNo: **3128877** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.94		1.000		94.5	70	130			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: EOG Work Order Number: 2205923 RcptNo: 1

Received By: Juan Rojas 5/20/2022 7:05:00 AM

Completed By: Juan Rojas 5/20/2022 7:36:50 AM

Reviewed By: JR 5/20/22

Chain of Custody

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

Log In

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

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

Adjusted? _____

Checked by: JR 5/20/22

Special Handling (if applicable)

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

Person Notified: _____ Date _____

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

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.5	Good				

Chain-of-Custody Record

Client: EOG-Artesia / Ranger Env.

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

Ranger: PO Box 201179, Austin TX 78720

Phone #: 521-335-1785

email or Fax#: Will@RangerEnv.com

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

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

Turn-Around Time:
☒ Standard ☒ Rush 5 Day

Project Name:
Roy SWD #3

Project #: 5375

Project Manager: W. Kierdorf

Sampler: W. Kennedy
On Ice: ☐ Yes ☐ No
# of Coolers: 1
Cooler Temp(including CF): 1.6-0.1=1.5

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2205923	BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride (EPA 300)
per Erin 5/20/22 sa 5/20/22 5/18/22	0837	Soil	SB1-23	1 4oz Jar	Ice	-001	X	X	X
	0935		SB1-38			-002			
	0936		SB1-39			-003			
	0937		SB1-40			-004			
	1049		SB2-29			-005			
	1157		SB2-47			-006			
	1158		SB2-48			-007			
	1159		SB2-49			-008			
	1200		SB2-50			-009			
	1304		SB3-4			-010			
	1314		SB3-14			-011			
	1331		SB3-29			-012			

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
5/19/22	1215	W. Kennedy			5/19/22	1215
5/19/22	1900			Couriers	5/20/22	7:05

Remarks: Bill to EOG Artesia

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

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)

Turn-Around Time:
☒ Standard ☒ Rush 5 Day

Project Name: Roy SWD #3

Project #: 5375

Project Manager: W. Kierdorf

Sampler: W. Kennedy

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 1.6-0.1=1.5 (°C)

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2205923	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Chloride (EPA 300)
5/18/22	1332	soil	SB3-30	1 4oz Jar	Ice	-013	X	X									X
5/19/22	0740		SB4-10			-014											
	0745		SB4-15			-015											
	0750		SB4-20			-016											
	0800		SB4-30			-017											
	0846		SB5-26			-018											
	0920		SB5-38			-019											
	0921		SB5-39			~~-020~~											
	0922		SB5-40			-021											

Date: 5/19/22 Time: 1215 Relinquished by: W. Kennedy
Received by: Via: Date Time: 5/19/22 1215

Date: 5/19/22 Time: 1900 Relinquished by:
Received by: Courier Via: Date Time: 5/20/22 7:05

Remarks: Bill to EOG - Artesia

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

September 02, 2022

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

RE: Roy SWD 3 OrderNo.: 2208E19

Dear Will Kierdorf:

Hall Environmental Analysis Laboratory received 16 sample(s) on 8/24/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2208E19**
Date Reported: **9/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: RTP-2/1
Project: Roy SWD 3
Collection Date: 8/22/2022 9:48:00 AM
Lab ID: 2208E19-001 **Matrix:** SOIL **Received Date:** 8/24/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	8/30/2022 1:15:20 PM	69846
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	8/27/2022 12:18:52 AM	69775
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	8/27/2022 12:18:52 AM	69775
Surr: DNOP	97.6	21-129		%Rec	1	8/27/2022 12:18:52 AM	69775
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/26/2022 4:41:57 AM	69740
Surr: BFB	99.1	37.7-212		%Rec	1	8/26/2022 4:41:57 AM	69740
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/26/2022 4:41:57 AM	69740
Toluene	ND	0.047		mg/Kg	1	8/26/2022 4:41:57 AM	69740
Ethylbenzene	ND	0.047		mg/Kg	1	8/26/2022 4:41:57 AM	69740
Xylenes, Total	ND	0.094		mg/Kg	1	8/26/2022 4:41:57 AM	69740
Surr: 4-Bromofluorobenzene	93.9	70-130		%Rec	1	8/26/2022 4:41:57 AM	69740

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

Qualifiers:

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

Analytical Report
Lab Order **2208E19**
Date Reported: **9/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: RTP-2/6
Project: Roy SWD 3
Collection Date: 8/22/2022 10:00:00 AM
Lab ID: 2208E19-002 **Matrix:** SOIL **Received Date:** 8/24/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	810	60		mg/Kg	20	8/30/2022 1:52:34 PM	69846
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/27/2022 12:40:36 AM	69775
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/27/2022 12:40:36 AM	69775
Surr: DNOP	83.4	21-129		%Rec	1	8/27/2022 12:40:36 AM	69775
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/25/2022 6:44:00 PM	69740
Surr: BFB	105	37.7-212		%Rec	1	8/25/2022 6:44:00 PM	69740
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.025		mg/Kg	1	8/25/2022 6:44:00 PM	69740
Toluene	ND	0.050		mg/Kg	1	8/25/2022 6:44:00 PM	69740
Ethylbenzene	ND	0.050		mg/Kg	1	8/25/2022 6:44:00 PM	69740
Xylenes, Total	ND	0.099		mg/Kg	1	8/25/2022 6:44:00 PM	69740
Surr: 4-Bromofluorobenzene	98.9	70-130		%Rec	1	8/25/2022 6:44:00 PM	69740

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

Qualifiers:

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

Analytical Report
Lab Order **2208E19**
Date Reported: **9/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: RTP-2/9
Project: Roy SWD 3
Collection Date: 8/22/2022 10:20:00 AM
Lab ID: 2208E19-003 **Matrix:** SOIL **Received Date:** 8/24/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	1200	60		mg/Kg	20	8/30/2022 2:04:59 PM	69846
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/27/2022 12:51:31 AM	69775
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/27/2022 12:51:31 AM	69775
Surr: DNOP	81.4	21-129		%Rec	1	8/27/2022 12:51:31 AM	69775
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/25/2022 7:03:00 PM	69740
Surr: BFB	101	37.7-212		%Rec	1	8/25/2022 7:03:00 PM	69740
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.024		mg/Kg	1	8/25/2022 7:03:00 PM	69740
Toluene	ND	0.048		mg/Kg	1	8/25/2022 7:03:00 PM	69740
Ethylbenzene	ND	0.048		mg/Kg	1	8/25/2022 7:03:00 PM	69740
Xylenes, Total	ND	0.097		mg/Kg	1	8/25/2022 7:03:00 PM	69740
Surr: 4-Bromofluorobenzene	99.1	70-130		%Rec	1	8/25/2022 7:03:00 PM	69740

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

Qualifiers:

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

Analytical Report
Lab Order **2208E19**
Date Reported: **9/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: RTP-2/11
Project: Roy SWD 3
Collection Date: 8/22/2022 10:26:00 AM
Lab ID: 2208E19-004 **Matrix:** SOIL **Received Date:** 8/24/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	610	60		mg/Kg	20	8/30/2022 2:42:14 PM	69846
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/27/2022 1:02:25 AM	69775
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/27/2022 1:02:25 AM	69775
Surr: DNOP	84.6	21-129		%Rec	1	8/27/2022 1:02:25 AM	69775
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/25/2022 7:23:00 PM	69740
Surr: BFB	103	37.7-212		%Rec	1	8/25/2022 7:23:00 PM	69740
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.024		mg/Kg	1	8/25/2022 7:23:00 PM	69740
Toluene	ND	0.048		mg/Kg	1	8/25/2022 7:23:00 PM	69740
Ethylbenzene	ND	0.048		mg/Kg	1	8/25/2022 7:23:00 PM	69740
Xylenes, Total	ND	0.095		mg/Kg	1	8/25/2022 7:23:00 PM	69740
Surr: 4-Bromofluorobenzene	99.5	70-130		%Rec	1	8/25/2022 7:23:00 PM	69740

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

Qualifiers:

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

Analytical Report
Lab Order **2208E19**
Date Reported: **9/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: RTP-1/1
Project: Roy SWD 3
Collection Date: 8/22/2022 10:42:00 AM
Lab ID: 2208E19-005 **Matrix:** SOIL **Received Date:** 8/24/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	8/30/2022 2:54:39 PM	69846
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/27/2022 1:13:21 AM	69775
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/27/2022 1:13:21 AM	69775
Surr: DNOP	104	21-129		%Rec	1	8/27/2022 1:13:21 AM	69775
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/25/2022 7:43:00 PM	69740
Surr: BFB	103	37.7-212		%Rec	1	8/25/2022 7:43:00 PM	69740
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.025		mg/Kg	1	8/25/2022 7:43:00 PM	69740
Toluene	ND	0.050		mg/Kg	1	8/25/2022 7:43:00 PM	69740
Ethylbenzene	ND	0.050		mg/Kg	1	8/25/2022 7:43:00 PM	69740
Xylenes, Total	ND	0.10		mg/Kg	1	8/25/2022 7:43:00 PM	69740
Surr: 4-Bromofluorobenzene	97.5	70-130		%Rec	1	8/25/2022 7:43:00 PM	69740

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

Qualifiers:

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

Analytical Report
Lab Order **2208E19**
Date Reported: **9/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: RTP-1/6
Project: Roy SWD 3
Collection Date: 8/22/2022 10:56:00 AM
Lab ID: 2208E19-006
Matrix: SOIL
Received Date: 8/24/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**JMT**
Chloride	370	60		mg/Kg	20	8/30/2022 3:07:04 PM	69846
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**DGH**
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/27/2022 1:24:19 AM	69775
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/27/2022 1:24:19 AM	69775
Surr: DNOP	83.4	21-129		%Rec	1	8/27/2022 1:24:19 AM	69775
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**BRM**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/25/2022 8:03:00 PM	69740
Surr: BFB	103	37.7-212		%Rec	1	8/25/2022 8:03:00 PM	69740
EPA METHOD 8021B: VOLATILES						Analyst:	**BRM**
Benzene	ND	0.024		mg/Kg	1	8/25/2022 8:03:00 PM	69740
Toluene	ND	0.048		mg/Kg	1	8/25/2022 8:03:00 PM	69740
Ethylbenzene	ND	0.048		mg/Kg	1	8/25/2022 8:03:00 PM	69740
Xylenes, Total	ND	0.095		mg/Kg	1	8/25/2022 8:03:00 PM	69740
Surr: 4-Bromofluorobenzene	98.3	70-130		%Rec	1	8/25/2022 8:03:00 PM	69740

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

Qualifiers:

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

Analytical Report
Lab Order **2208E19**
Date Reported: **9/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: RTP-3/1
Project: Roy SWD 3
Collection Date: 8/22/2022 12:02:00 PM
Lab ID: 2208E19-007 **Matrix:** SOIL **Received Date:** 8/24/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	8/30/2022 3:19:29 PM	69846
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/27/2022 1:35:17 AM	69775
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/27/2022 1:35:17 AM	69775
Surr: DNOP	82.5	21-129		%Rec	1	8/27/2022 1:35:17 AM	69775
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/25/2022 8:22:00 PM	69740
Surr: BFB	101	37.7-212		%Rec	1	8/25/2022 8:22:00 PM	69740
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.023		mg/Kg	1	8/25/2022 8:22:00 PM	69740
Toluene	ND	0.047		mg/Kg	1	8/25/2022 8:22:00 PM	69740
Ethylbenzene	ND	0.047		mg/Kg	1	8/25/2022 8:22:00 PM	69740
Xylenes, Total	ND	0.093		mg/Kg	1	8/25/2022 8:22:00 PM	69740
Surr: 4-Bromofluorobenzene	98.2	70-130		%Rec	1	8/25/2022 8:22:00 PM	69740

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

Qualifiers:

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

Analytical Report
Lab Order **2208E19**
Date Reported: **9/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: RTP-3/4
Project: Roy SWD 3
Collection Date: 8/22/2022 1:30:00 PM
Lab ID: 2208E19-008 **Matrix:** SOIL **Received Date:** 8/24/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	440	60		mg/Kg	20	8/30/2022 3:31:54 PM	69846
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/29/2022 3:20:27 PM	69807
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/29/2022 3:20:27 PM	69807
Surr: DNOP	88.8	21-129		%Rec	1	8/29/2022 3:20:27 PM	69807
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/26/2022 10:31:00 AM	69768
Surr: BFB	103	37.7-212		%Rec	1	8/26/2022 10:31:00 AM	69768
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.024		mg/Kg	1	8/26/2022 10:31:00 AM	69768
Toluene	ND	0.049		mg/Kg	1	8/26/2022 10:31:00 AM	69768
Ethylbenzene	ND	0.049		mg/Kg	1	8/26/2022 10:31:00 AM	69768
Xylenes, Total	ND	0.097		mg/Kg	1	8/26/2022 10:31:00 AM	69768
Surr: 4-Bromofluorobenzene	97.8	70-130		%Rec	1	8/26/2022 10:31:00 AM	69768

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

Qualifiers:

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

Analytical Report
Lab Order **2208E19**
Date Reported: **9/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: RTP-3/6
Project: Roy SWD 3
Collection Date: 8/22/2022 1:36:00 PM
Lab ID: 2208E19-009
Matrix: SOIL
Received Date: 8/24/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	440	60		mg/Kg	20	8/30/2022 3:44:19 PM	69846
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	8/29/2022 3:52:46 PM	69807
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	8/29/2022 3:52:46 PM	69807
Surr: DNOP	90.9	21-129		%Rec	1	8/29/2022 3:52:46 PM	69807
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/26/2022 11:30:00 AM	69768
Surr: BFB	104	37.7-212		%Rec	1	8/26/2022 11:30:00 AM	69768
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.025		mg/Kg	1	8/26/2022 11:30:00 AM	69768
Toluene	ND	0.049		mg/Kg	1	8/26/2022 11:30:00 AM	69768
Ethylbenzene	ND	0.049		mg/Kg	1	8/26/2022 11:30:00 AM	69768
Xylenes, Total	ND	0.099		mg/Kg	1	8/26/2022 11:30:00 AM	69768
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	8/26/2022 11:30:00 AM	69768

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

Qualifiers:

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

Analytical Report
Lab Order **2208E19**
Date Reported: **9/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: RTP-4/1
Project: Roy SWD 3
Collection Date: 8/22/2022 2:10:00 PM
Lab ID: 2208E19-010
Matrix: SOIL
Received Date: 8/24/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	8/30/2022 11:27:22 AM	69853
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/29/2022 4:24:51 PM	69807
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/29/2022 4:24:51 PM	69807
Surr: DNOP	87.3	21-129		%Rec	1	8/29/2022 4:24:51 PM	69807
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/26/2022 12:29:00 PM	69768
Surr: BFB	111	37.7-212		%Rec	1	8/26/2022 12:29:00 PM	69768
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.025		mg/Kg	1	8/26/2022 12:29:00 PM	69768
Toluene	ND	0.050		mg/Kg	1	8/26/2022 12:29:00 PM	69768
Ethylbenzene	ND	0.050		mg/Kg	1	8/26/2022 12:29:00 PM	69768
Xylenes, Total	ND	0.10		mg/Kg	1	8/26/2022 12:29:00 PM	69768
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	8/26/2022 12:29:00 PM	69768

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

Qualifiers:

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

Analytical Report
Lab Order **2208E19**
Date Reported: **9/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: RTP-4/6
Project: Roy SWD 3
Collection Date: 8/22/2022 2:30:00 PM
Lab ID: 2208E19-011
Matrix: SOIL
Received Date: 8/24/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	80	60		mg/Kg	20	8/30/2022 11:39:43 AM	69853
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/29/2022 4:35:44 PM	69807
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/29/2022 4:35:44 PM	69807
Surr: DNOP	94.3	21-129		%Rec	1	8/29/2022 4:35:44 PM	69807
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/26/2022 12:49:00 PM	69768
Surr: BFB	107	37.7-212		%Rec	1	8/26/2022 12:49:00 PM	69768
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.025		mg/Kg	1	8/26/2022 12:49:00 PM	69768
Toluene	ND	0.049		mg/Kg	1	8/26/2022 12:49:00 PM	69768
Ethylbenzene	ND	0.049		mg/Kg	1	8/26/2022 12:49:00 PM	69768
Xylenes, Total	ND	0.098		mg/Kg	1	8/26/2022 12:49:00 PM	69768
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	8/26/2022 12:49:00 PM	69768

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

Qualifiers:

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

Analytical Report
Lab Order **2208E19**
Date Reported: **9/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: RTP-5/1
Project: Roy SWD 3
Collection Date: 8/22/2022 2:35:00 PM
Lab ID: 2208E19-012
Matrix: SOIL
Received Date: 8/24/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	8/30/2022 11:52:04 AM	69853
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	8/29/2022 4:46:35 PM	69807
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	8/29/2022 4:46:35 PM	69807
Surr: DNOP	96.2	21-129		%Rec	1	8/29/2022 4:46:35 PM	69807
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/26/2022 1:08:00 PM	69768
Surr: BFB	106	37.7-212		%Rec	1	8/26/2022 1:08:00 PM	69768
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.025		mg/Kg	1	8/26/2022 1:08:00 PM	69768
Toluene	ND	0.050		mg/Kg	1	8/26/2022 1:08:00 PM	69768
Ethylbenzene	ND	0.050		mg/Kg	1	8/26/2022 1:08:00 PM	69768
Xylenes, Total	ND	0.10		mg/Kg	1	8/26/2022 1:08:00 PM	69768
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	8/26/2022 1:08:00 PM	69768

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

Qualifiers:

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

Analytical Report
Lab Order **2208E19**
Date Reported: **9/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: RTP-5/6
Project: Roy SWD 3
Collection Date: 8/22/2022 2:45:00 PM
Lab ID: 2208E19-013
Matrix: SOIL
Received Date: 8/24/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	260	60		mg/Kg	20	8/30/2022 12:04:24 PM	69853
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/29/2022 5:09:24 PM	69807
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/29/2022 5:09:24 PM	69807
Surr: DNOP	94.8	21-129		%Rec	1	8/29/2022 5:09:24 PM	69807
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/26/2022 1:28:00 PM	69768
Surr: BFB	106	37.7-212		%Rec	1	8/26/2022 1:28:00 PM	69768
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.025		mg/Kg	1	8/26/2022 1:28:00 PM	69768
Toluene	ND	0.050		mg/Kg	1	8/26/2022 1:28:00 PM	69768
Ethylbenzene	ND	0.050		mg/Kg	1	8/26/2022 1:28:00 PM	69768
Xylenes, Total	ND	0.10		mg/Kg	1	8/26/2022 1:28:00 PM	69768
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	8/26/2022 1:28:00 PM	69768

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

Qualifiers:

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

Analytical Report
Lab Order **2208E19**
Date Reported: **9/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: RTP-6/1
Project: Roy SWD 3
Collection Date: 8/22/2022 3:02:00 PM
Lab ID: 2208E19-014 **Matrix:** SOIL **Received Date:** 8/24/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	8/30/2022 12:16:46 PM	69853
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	8/29/2022 5:20:15 PM	69807
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	8/29/2022 5:20:15 PM	69807
Surr: DNOP	95.3	21-129		%Rec	1	8/29/2022 5:20:15 PM	69807
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/26/2022 2:08:00 PM	69768
Surr: BFB	106	37.7-212		%Rec	1	8/26/2022 2:08:00 PM	69768
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.024		mg/Kg	1	8/26/2022 2:08:00 PM	69768
Toluene	ND	0.049		mg/Kg	1	8/26/2022 2:08:00 PM	69768
Ethylbenzene	ND	0.049		mg/Kg	1	8/26/2022 2:08:00 PM	69768
Xylenes, Total	ND	0.097		mg/Kg	1	8/26/2022 2:08:00 PM	69768
Surr: 4-Bromofluorobenzene	99.3	70-130		%Rec	1	8/26/2022 2:08:00 PM	69768

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

Qualifiers:

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

Analytical Report
Lab Order **2208E19**
Date Reported: **9/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: RTP-6/6
Project: Roy SWD 3
Collection Date: 8/22/2022 3:20:00 PM
Lab ID: 2208E19-015 **Matrix:** SOIL **Received Date:** 8/24/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	940	61		mg/Kg	20	8/30/2022 12:29:07 PM	69853
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/29/2022 5:31:05 PM	69807
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	8/29/2022 5:31:05 PM	69807
Surr: DNOP	89.8	21-129		%Rec	1	8/29/2022 5:31:05 PM	69807
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/26/2022 2:27:00 PM	69768
Surr: BFB	109	37.7-212		%Rec	1	8/26/2022 2:27:00 PM	69768
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.024		mg/Kg	1	8/26/2022 2:27:00 PM	69768
Toluene	ND	0.048		mg/Kg	1	8/26/2022 2:27:00 PM	69768
Ethylbenzene	ND	0.048		mg/Kg	1	8/26/2022 2:27:00 PM	69768
Xylenes, Total	ND	0.095		mg/Kg	1	8/26/2022 2:27:00 PM	69768
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	8/26/2022 2:27:00 PM	69768

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

Qualifiers:

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

Analytical Report
Lab Order **2208E19**
Date Reported: **9/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: RTP-6/7
Project: Roy SWD 3
Collection Date: 8/22/2022 3:24:00 PM
Lab ID: 2208E19-016 **Matrix:** SOIL **Received Date:** 8/24/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	670	61		mg/Kg	20	8/30/2022 12:49:05 PM	69853
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/29/2022 6:18:48 PM	69807
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/29/2022 6:18:48 PM	69807
Surr: DNOP	99.6	21-129		%Rec	1	8/29/2022 6:18:48 PM	69807
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/26/2022 2:47:00 PM	69768
Surr: BFB	107	37.7-212		%Rec	1	8/26/2022 2:47:00 PM	69768
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.024		mg/Kg	1	8/26/2022 2:47:00 PM	69768
Toluene	ND	0.048		mg/Kg	1	8/26/2022 2:47:00 PM	69768
Ethylbenzene	ND	0.048		mg/Kg	1	8/26/2022 2:47:00 PM	69768
Xylenes, Total	ND	0.097		mg/Kg	1	8/26/2022 2:47:00 PM	69768
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	8/26/2022 2:47:00 PM	69768

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2208E19**

02-Sep-22

Client: EOG

Project: Roy SWD 3

Sample ID: **MB-69853** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **69853** RunNo: **90679**
Prep Date: **8/30/2022** Analysis Date: **8/30/2022** SeqNo: **3240572** Units: **mg/Kg**

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

Sample ID: **LCS-69853** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **69853** RunNo: **90679**
Prep Date: **8/30/2022** Analysis Date: **8/30/2022** SeqNo: **3240573** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.9	90	110			

Sample ID: **MB-69846** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **69846** RunNo: **90664**
Prep Date: **8/30/2022** Analysis Date: **8/30/2022** SeqNo: **3241292** Units: **mg/Kg**

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

Sample ID: **LCS-69846** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **69846** RunNo: **90664**
Prep Date: **8/30/2022** Analysis Date: **8/30/2022** SeqNo: **3241294** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.1	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2208E19**

02-Sep-22

Client: EOG

Project: Roy SWD 3

Sample ID: **LCS-69775**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **69775**	RunNo: **90606**
Prep Date: **8/25/2022**	Analysis Date: **8/26/2022**	SeqNo: **3238776** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	15	50.00	0	92.8	64.4	127			
Surr: DNOP	4.3		5.000		85.2	21	129			

Sample ID: **MB-69775**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **69775**	RunNo: **90606**
Prep Date: **8/25/2022**	Analysis Date: **8/26/2022**	SeqNo: **3238777** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.4		10.00		84.1	21	129			

Sample ID: **LCS-69807**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **69807**	RunNo: **90634**
Prep Date: **8/26/2022**	Analysis Date: **8/29/2022**	SeqNo: **3238841** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	15	50.00	0	80.1	64.4	127			
Surr: DNOP	4.0		5.000		79.2	21	129			

Sample ID: **MB-69807**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **69807**	RunNo: **90634**
Prep Date: **8/26/2022**	Analysis Date: **8/29/2022**	SeqNo: **3238842** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.8		10.00		88.3	21	129			

Sample ID: **LCS-69837**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **69837**	RunNo: **90655**
Prep Date: **8/29/2022**	Analysis Date: **8/30/2022**	SeqNo: **3239736** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.6		5.000		91.9	21	129			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2208E19**
02-Sep-22

Client: EOG
Project: Roy SWD 3

Sample ID: **MB-69837**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **69837**	RunNo: **90655**
Prep Date: **8/29/2022**	Analysis Date: **8/30/2022**	SeqNo: **3239737** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		101	21	129			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2208E19**
02-Sep-22

Client: EOG
Project: Roy SWD 3

Sample ID: **mb-69740** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS** Batch ID: **69740** RunNo: **90581**
Prep Date: **8/24/2022** Analysis Date: **8/25/2022** SeqNo: **3235756** 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		99.6	37.7	212			

Sample ID: **lcs-69740** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS** Batch ID: **69740** RunNo: **90581**
Prep Date: **8/24/2022** Analysis Date: **8/25/2022** SeqNo: **3235757** 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	99.4	72.3	137			
Surr: BFB	2000		1000		196	37.7	212			

Sample ID: **lcs-69768** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS** Batch ID: **69768** RunNo: **90614**
Prep Date: **8/25/2022** Analysis Date: **8/26/2022** SeqNo: **3237469** 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	109	72.3	137			
Surr: BFB	2300		1000		227	37.7	212			S

Sample ID: **mb-69768** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS** Batch ID: **69768** RunNo: **90614**
Prep Date: **8/25/2022** Analysis Date: **8/26/2022** SeqNo: **3237470** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	970		1000		97.0	37.7	212			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2208E19**
02-Sep-22

Client: EOG
Project: Roy SWD 3

Sample ID: **mb-69740** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS** Batch ID: **69740** RunNo: **90581**
Prep Date: **8/24/2022** Analysis Date: **8/25/2022** SeqNo: **3235803** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.95		1.000		94.7	70	130			

Sample ID: **LCS-69740** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS** Batch ID: **69740** RunNo: **90581**
Prep Date: **8/24/2022** Analysis Date: **8/25/2022** SeqNo: **3235804** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	93.4	80	120			
Toluene	0.96	0.050	1.000	0	96.0	80	120			
Ethylbenzene	0.97	0.050	1.000	0	96.8	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.1	80	120			
Surr: 4-Bromofluorobenzene	0.97		1.000		96.8	70	130			

Sample ID: **lcs-69768** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS** Batch ID: **69768** RunNo: **90614**
Prep Date: **8/25/2022** Analysis Date: **8/26/2022** SeqNo: **3237522** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.81	0.025	1.000	0	80.9	80	120			
Toluene	0.83	0.050	1.000	0	83.1	80	120			
Ethylbenzene	0.85	0.050	1.000	0	84.5	80	120			
Xylenes, Total	2.5	0.10	3.000	0	84.5	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		99.7	70	130			

Sample ID: **mb-69768** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS** Batch ID: **69768** RunNo: **90614**
Prep Date: **8/25/2022** Analysis Date: **8/26/2022** SeqNo: **3237523** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.95		1.000		95.3	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 interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: EOG Work Order Number: 2208E19 RcptNo: 1

Received By: **Juan Rojas** 8/24/2022 7:15:00 AM

Completed By: **Juan Rojas** 8/24/2022 7:25:37 AM

Reviewed By: 8-24-22

Chain of Custody

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

Log In

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

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

Adjusted? _____

Checked by: JM 8/24/22

Special Handling (if applicable)

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

Person Notified: _____ Date _____

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

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.6	Good	Not Present			

Chain-of-Custody Record

Client: EOG-Artesia / Ranger Env.

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

Ranger: PO Box 201179, Austin TX 78720

Phone #: 521-335-1785

email or Fax#: Will@RangerEnv.com

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

Accreditation: ☐ Az Compliance
■ **NELAC** ☐ Other

■ **EDD** (Type) Excel

Turn-Around Time: Eog, 5 day TAT
☑ Standard ☐ Rush

Project Name: Roy SWD #3

Project #: 5375

Project Manager: W. Kierdorf

Sampler: J. Martinez
On Ice: ☐ Yes ☐ No
# of Coolers: 1
Cooler Temp (including CF): 1.6+0=1.6

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. 2208E19	BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride (EPA 300)
8-22-22	0948	soil	RTP-2/1	1x4oz Jar	ICE	-001	X	X	X
	1000		RTP-2/6			-002			
	1020		RTP-2/9			-003			
	1026		RTP-2/11			-004			
	1042		RTP-1/1			-005			
	1056		RTP-1/6			006			
	1202		RTP-3/1			-007			
	1330		RTP-3/4			008			
	1336		RTP-3/6			-009			
	1410		RTP-4/1			-010			
	1430		RTP-4/6			-011			
	1432		RTP-5/1			-012			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
8-23-22	0730	J. Martinez			8/23/22	730
8/23/22	1900			courier	8/24/22	7:15

Remarks: Bill to EOG Artesia

Chain-of-Custody Record

Client: EOG-Artesia / Ranger Env.

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

Ranger: PO Box 201179, Austin TX 78720

Phone #: 521-335-1785

email or Fax#: Will@RangerEnv.com

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

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

Turn-Around Time: EOG 5 day TAT
☑ Standard ☐ **Rush**

Project Name: Roy SWD #3

Project #: 5375

Project Manager: W. Kierdorf

Sampler: J. Martinez
On Ice: ☐ Yes ☐ No
# of Coolers: 1
Cooler Temp(including CF): 1.6+0=1.6

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. 2208E19	BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride (EPA 300)
8-22-22	1445	soil	RTP-5/6	1x 4oz Jar	ICE	-013	X	X	X
	1502		RTP-6/1			-014			
	1520		RTP-6/6			-015			
	1524		RTP-6/7			-016			

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
8-23-22	0730	J. Martinez				
8/23/22	1900				8/23/22	730
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
				Courier	8/24/22	7:15

Remarks: Bill to EOG Artesia

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

October 13, 2022

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

RE: Roy SWD 3 OrderNo.: 2209E05

Dear Will Kierdorf:

Hall Environmental Analysis Laboratory received 32 sample(s) on 9/27/2022 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued October 07, 2022.

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.

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2209E05**
Date Reported: **10/13/2022**

CLIENT: EOG
Client Sample ID: B-1
Project: Roy SWD 3
Collection Date: 9/23/2022 2:00:00 PM
Lab ID: 2209E05-001 **Matrix:** SOIL **Received Date:** 9/27/2022 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CAS**
Chloride	390	60		mg/Kg	20	10/1/2022 2:10:43 PM	70532
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**DGH**
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	9/30/2022 3:42:34 AM	70443
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/30/2022 3:42:34 AM	70443
Surr: DNOP	107	21-129		%Rec	1	9/30/2022 3:42:34 AM	70443
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**RAA**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/28/2022 8:13:32 PM	70438
Surr: BFB	94.1	37.7-212		%Rec	1	9/28/2022 8:13:32 PM	70438
EPA METHOD 8021B: VOLATILES						Analyst:	**RAA**
Benzene	ND	0.025		mg/Kg	1	9/28/2022 8:13:32 PM	70438
Toluene	ND	0.049		mg/Kg	1	9/28/2022 8:13:32 PM	70438
Ethylbenzene	ND	0.049		mg/Kg	1	9/28/2022 8:13:32 PM	70438
Xylenes, Total	ND	0.099		mg/Kg	1	9/28/2022 8:13:32 PM	70438
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	9/28/2022 8:13:32 PM	70438

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

Qualifiers:

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

Analytical Report
Lab Order **2209E05**
Date Reported: **10/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: B-2
Project: Roy SWD 3
Collection Date: 9/23/2022 2:02:00 PM
Lab ID: 2209E05-002 **Matrix:** SOIL **Received Date:** 9/27/2022 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CAS**
Chloride	1000	61		mg/Kg	20	10/1/2022 2:47:56 PM	70532
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**DGH**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/30/2022 3:53:15 AM	70443
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/30/2022 3:53:15 AM	70443
Surr: DNOP	95.6	21-129		%Rec	1	9/30/2022 3:53:15 AM	70443
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**RAA**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/28/2022 8:36:52 PM	70438
Surr: BFB	93.3	37.7-212		%Rec	1	9/28/2022 8:36:52 PM	70438
EPA METHOD 8021B: VOLATILES						Analyst:	**RAA**
Benzene	ND	0.025		mg/Kg	1	9/28/2022 8:36:52 PM	70438
Toluene	ND	0.050		mg/Kg	1	9/28/2022 8:36:52 PM	70438
Ethylbenzene	ND	0.050		mg/Kg	1	9/28/2022 8:36:52 PM	70438
Xylenes, Total	ND	0.10		mg/Kg	1	9/28/2022 8:36:52 PM	70438
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	9/28/2022 8:36:52 PM	70438

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

Qualifiers:

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

Analytical Report
Lab Order **2209E05**
Date Reported: **10/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: B-3
Project: Roy SWD 3
Collection Date: 9/23/2022 2:04:00 PM
Lab ID: 2209E05-003 **Matrix:** SOIL **Received Date:** 9/27/2022 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CAS**
Chloride	1200	60		mg/Kg	20	10/1/2022 3:00:21 PM	70532
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**DGH**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/30/2022 4:03:53 AM	70443
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/30/2022 4:03:53 AM	70443
Surr: DNOP	91.8	21-129		%Rec	1	9/30/2022 4:03:53 AM	70443
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**RAA**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/28/2022 9:00:20 PM	70438
Surr: BFB	94.2	37.7-212		%Rec	1	9/28/2022 9:00:20 PM	70438
EPA METHOD 8021B: VOLATILES						Analyst:	**RAA**
Benzene	ND	0.025		mg/Kg	1	9/28/2022 9:00:20 PM	70438
Toluene	ND	0.050		mg/Kg	1	9/28/2022 9:00:20 PM	70438
Ethylbenzene	ND	0.050		mg/Kg	1	9/28/2022 9:00:20 PM	70438
Xylenes, Total	ND	0.10		mg/Kg	1	9/28/2022 9:00:20 PM	70438
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	9/28/2022 9:00:20 PM	70438

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

Qualifiers:

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

Analytical Report
Lab Order **2209E05**
Date Reported: **10/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: B-4
Project: Roy SWD 3
Collection Date: 9/23/2022 2:06:00 PM
Lab ID: 2209E05-004 **Matrix:** SOIL **Received Date:** 9/27/2022 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CAS**
Chloride	1200	60		mg/Kg	20	10/1/2022 3:12:46 PM	70532
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**DGH**
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	9/30/2022 4:14:31 AM	70443
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/30/2022 4:14:31 AM	70443
Surr: DNOP	87.6	21-129		%Rec	1	9/30/2022 4:14:31 AM	70443
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**RAA**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/28/2022 9:23:45 PM	70438
Surr: BFB	92.6	37.7-212		%Rec	1	9/28/2022 9:23:45 PM	70438
EPA METHOD 8021B: VOLATILES						Analyst:	**RAA**
Benzene	ND	0.024		mg/Kg	1	9/28/2022 9:23:45 PM	70438
Toluene	ND	0.048		mg/Kg	1	9/28/2022 9:23:45 PM	70438
Ethylbenzene	ND	0.048		mg/Kg	1	9/28/2022 9:23:45 PM	70438
Xylenes, Total	ND	0.097		mg/Kg	1	9/28/2022 9:23:45 PM	70438
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	9/28/2022 9:23:45 PM	70438

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

Qualifiers:

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

Analytical Report
Lab Order **2209E05**
Date Reported: **10/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: B-5
Project: Roy SWD 3
Collection Date: 9/23/2022 2:08:00 PM
Lab ID: 2209E05-005 **Matrix:** SOIL **Received Date:** 9/27/2022 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CAS**
Chloride	1000	60		mg/Kg	20	10/1/2022 3:25:11 PM	70532
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**DGH**
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	9/30/2022 4:25:09 AM	70443
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/30/2022 4:25:09 AM	70443
Surr: DNOP	87.8	21-129		%Rec	1	9/30/2022 4:25:09 AM	70443
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**RAA**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/28/2022 9:47:18 PM	70438
Surr: BFB	91.3	37.7-212		%Rec	1	9/28/2022 9:47:18 PM	70438
EPA METHOD 8021B: VOLATILES						Analyst:	**RAA**
Benzene	ND	0.025		mg/Kg	1	9/28/2022 9:47:18 PM	70438
Toluene	ND	0.049		mg/Kg	1	9/28/2022 9:47:18 PM	70438
Ethylbenzene	ND	0.049		mg/Kg	1	9/28/2022 9:47:18 PM	70438
Xylenes, Total	ND	0.099		mg/Kg	1	9/28/2022 9:47:18 PM	70438
Surr: 4-Bromofluorobenzene	98.5	70-130		%Rec	1	9/28/2022 9:47:18 PM	70438

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

Qualifiers:

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

Analytical Report
Lab Order **2209E05**
Date Reported: **10/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: B-6
Project: Roy SWD 3
Collection Date: 9/23/2022 2:10:00 PM
Lab ID: 2209E05-006 **Matrix:** SOIL **Received Date:** 9/27/2022 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CAS**
Chloride	950	60		mg/Kg	20	10/1/2022 3:37:36 PM	70532
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**mb**
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	9/30/2022 12:43:05 AM	70446
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/30/2022 12:43:05 AM	70446
Surr: DNOP	112	21-129		%Rec	1	9/30/2022 12:43:05 AM	70446
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**BRM**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/28/2022 10:41:00 PM	70439
Surr: BFB	104	37.7-212		%Rec	1	9/28/2022 10:41:00 PM	70439
EPA METHOD 8021B: VOLATILES						Analyst:	**BRM**
Benzene	ND	0.024		mg/Kg	1	9/28/2022 10:41:00 PM	70439
Toluene	ND	0.049		mg/Kg	1	9/28/2022 10:41:00 PM	70439
Ethylbenzene	ND	0.049		mg/Kg	1	9/28/2022 10:41:00 PM	70439
Xylenes, Total	ND	0.097		mg/Kg	1	9/28/2022 10:41:00 PM	70439
Surr: 4-Bromofluorobenzene	93.6	70-130		%Rec	1	9/28/2022 10:41:00 PM	70439

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

Qualifiers:

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

Analytical Report
Lab Order **2209E05**
Date Reported: **10/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: B-7
Project: Roy SWD 3
Collection Date: 9/23/2022 2:12:00 PM
Lab ID: 2209E05-007 **Matrix:** SOIL **Received Date:** 9/27/2022 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CAS**
Chloride	470	60		mg/Kg	20	10/1/2022 3:50:01 PM	70532
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**mb**
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	9/30/2022 1:26:49 AM	70446
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/30/2022 1:26:49 AM	70446
Surr: DNOP	105	21-129		%Rec	1	9/30/2022 1:26:49 AM	70446
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**BRM**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/28/2022 11:40:00 PM	70439
Surr: BFB	111	37.7-212		%Rec	1	9/28/2022 11:40:00 PM	70439
EPA METHOD 8021B: VOLATILES						Analyst:	**BRM**
Benzene	ND	0.024		mg/Kg	1	9/28/2022 11:40:00 PM	70439
Toluene	ND	0.049		mg/Kg	1	9/28/2022 11:40:00 PM	70439
Ethylbenzene	ND	0.049		mg/Kg	1	9/28/2022 11:40:00 PM	70439
Xylenes, Total	ND	0.098		mg/Kg	1	9/28/2022 11:40:00 PM	70439
Surr: 4-Bromofluorobenzene	96.4	70-130		%Rec	1	9/28/2022 11:40:00 PM	70439

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

Qualifiers:

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

Analytical Report
Lab Order **2209E05**
Date Reported: **10/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: B-8
Project: Roy SWD 3
Collection Date: 9/23/2022 2:14:00 PM
Lab ID: 2209E05-008 **Matrix:** SOIL **Received Date:** 9/27/2022 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CAS**
Chloride	1000	60		mg/Kg	20	10/1/2022 4:27:14 PM	70532
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**mb**
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	9/30/2022 1:41:15 AM	70446
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/30/2022 1:41:15 AM	70446
Surr: DNOP	107	21-129		%Rec	1	9/30/2022 1:41:15 AM	70446
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**BRM**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/29/2022 12:39:00 AM	70439
Surr: BFB	106	37.7-212		%Rec	1	9/29/2022 12:39:00 AM	70439
EPA METHOD 8021B: VOLATILES						Analyst:	**BRM**
Benzene	ND	0.025		mg/Kg	1	9/29/2022 12:39:00 AM	70439
Toluene	ND	0.049		mg/Kg	1	9/29/2022 12:39:00 AM	70439
Ethylbenzene	ND	0.049		mg/Kg	1	9/29/2022 12:39:00 AM	70439
Xylenes, Total	ND	0.098		mg/Kg	1	9/29/2022 12:39:00 AM	70439
Surr: 4-Bromofluorobenzene	94.2	70-130		%Rec	1	9/29/2022 12:39:00 AM	70439

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

Qualifiers:

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

Analytical Report
Lab Order **2209E05**
Date Reported: **10/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: B-9
Project: Roy SWD 3
Collection Date: 9/23/2022 2:16:00 PM
Lab ID: 2209E05-009 **Matrix:** SOIL **Received Date:** 9/27/2022 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CAS**
Chloride	1200	60		mg/Kg	20	10/1/2022 4:39:38 PM	70532
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**mb**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/30/2022 1:55:41 AM	70446
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/30/2022 1:55:41 AM	70446
Surr: DNOP	75.5	21-129		%Rec	1	9/30/2022 1:55:41 AM	70446
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**BRM**
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/29/2022 12:59:00 AM	70439
Surr: BFB	101	37.7-212		%Rec	1	9/29/2022 12:59:00 AM	70439
EPA METHOD 8021B: VOLATILES						Analyst:	**BRM**
Benzene	ND	0.023		mg/Kg	1	9/29/2022 12:59:00 AM	70439
Toluene	ND	0.046		mg/Kg	1	9/29/2022 12:59:00 AM	70439
Ethylbenzene	ND	0.046		mg/Kg	1	9/29/2022 12:59:00 AM	70439
Xylenes, Total	ND	0.093		mg/Kg	1	9/29/2022 12:59:00 AM	70439
Surr: 4-Bromofluorobenzene	92.6	70-130		%Rec	1	9/29/2022 12:59:00 AM	70439

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

Qualifiers:

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

Analytical Report
Lab Order **2209E05**
Date Reported: **10/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: B-10
Project: Roy SWD 3
Collection Date: 9/23/2022 2:18:00 PM
Lab ID: 2209E05-010 **Matrix:** SOIL **Received Date:** 9/27/2022 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CAS**
Chloride	1000	60		mg/Kg	20	10/1/2022 4:52:03 PM	70532
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**mb**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/30/2022 2:10:07 AM	70446
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/30/2022 2:10:07 AM	70446
Surr: DNOP	85.9	21-129		%Rec	1	9/30/2022 2:10:07 AM	70446
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**BRM**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/29/2022 1:18:00 AM	70439
Surr: BFB	103	37.7-212		%Rec	1	9/29/2022 1:18:00 AM	70439
EPA METHOD 8021B: VOLATILES						Analyst:	**BRM**
Benzene	ND	0.024		mg/Kg	1	9/29/2022 1:18:00 AM	70439
Toluene	ND	0.048		mg/Kg	1	9/29/2022 1:18:00 AM	70439
Ethylbenzene	ND	0.048		mg/Kg	1	9/29/2022 1:18:00 AM	70439
Xylenes, Total	ND	0.095		mg/Kg	1	9/29/2022 1:18:00 AM	70439
Surr: 4-Bromofluorobenzene	94.8	70-130		%Rec	1	9/29/2022 1:18:00 AM	70439

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

Qualifiers:

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

Analytical Report
Lab Order **2209E05**
Date Reported: **10/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: B-11
Project: Roy SWD 3
Collection Date: 9/23/2022 2:20:00 PM
Lab ID: 2209E05-011 **Matrix:** SOIL **Received Date:** 9/27/2022 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CAS**
Chloride	680	60		mg/Kg	20	10/1/2022 5:04:28 PM	70532
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**mb**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/30/2022 2:24:31 AM	70446
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/30/2022 2:24:31 AM	70446
Surr: DNOP	99.0	21-129		%Rec	1	9/30/2022 2:24:31 AM	70446
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**BRM**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/29/2022 1:38:00 AM	70439
Surr: BFB	100	37.7-212		%Rec	1	9/29/2022 1:38:00 AM	70439
EPA METHOD 8021B: VOLATILES						Analyst:	**BRM**
Benzene	ND	0.024		mg/Kg	1	9/29/2022 1:38:00 AM	70439
Toluene	ND	0.047		mg/Kg	1	9/29/2022 1:38:00 AM	70439
Ethylbenzene	ND	0.047		mg/Kg	1	9/29/2022 1:38:00 AM	70439
Xylenes, Total	ND	0.095		mg/Kg	1	9/29/2022 1:38:00 AM	70439
Surr: 4-Bromofluorobenzene	94.1	70-130		%Rec	1	9/29/2022 1:38:00 AM	70439

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

Qualifiers:

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

Analytical Report
Lab Order **2209E05**
Date Reported: **10/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: B-12
Project: Roy SWD 3
Collection Date: 9/23/2022 2:22:00 PM
Lab ID: 2209E05-012 **Matrix:** SOIL **Received Date:** 9/27/2022 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CAS**
Chloride	860	60		mg/Kg	20	10/1/2022 5:16:53 PM	70532
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**mb**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/30/2022 2:38:51 AM	70446
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/30/2022 2:38:51 AM	70446
Surr: DNOP	70.8	21-129		%Rec	1	9/30/2022 2:38:51 AM	70446
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**BRM**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/29/2022 1:57:00 AM	70439
Surr: BFB	103	37.7-212		%Rec	1	9/29/2022 1:57:00 AM	70439
EPA METHOD 8021B: VOLATILES						Analyst:	**BRM**
Benzene	ND	0.025		mg/Kg	1	9/29/2022 1:57:00 AM	70439
Toluene	ND	0.050		mg/Kg	1	9/29/2022 1:57:00 AM	70439
Ethylbenzene	ND	0.050		mg/Kg	1	9/29/2022 1:57:00 AM	70439
Xylenes, Total	ND	0.099		mg/Kg	1	9/29/2022 1:57:00 AM	70439
Surr: 4-Bromofluorobenzene	95.7	70-130		%Rec	1	9/29/2022 1:57:00 AM	70439

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

Qualifiers:

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

Analytical Report
Lab Order **2209E05**
Date Reported: **10/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: B-13
Project: Roy SWD 3
Collection Date: 9/23/2022 2:24:00 PM
Lab ID: 2209E05-013 **Matrix:** SOIL **Received Date:** 9/27/2022 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CAS**
Chloride	630	60		mg/Kg	20	10/1/2022 5:29:18 PM	70532
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**mb**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/30/2022 2:53:15 AM	70446
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/30/2022 2:53:15 AM	70446
Surr: DNOP	87.9	21-129		%Rec	1	9/30/2022 2:53:15 AM	70446
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**BRM**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/29/2022 2:17:00 AM	70439
Surr: BFB	107	37.7-212		%Rec	1	9/29/2022 2:17:00 AM	70439
EPA METHOD 8021B: VOLATILES						Analyst:	**BRM**
Benzene	ND	0.025		mg/Kg	1	9/29/2022 2:17:00 AM	70439
Toluene	ND	0.050		mg/Kg	1	9/29/2022 2:17:00 AM	70439
Ethylbenzene	ND	0.050		mg/Kg	1	9/29/2022 2:17:00 AM	70439
Xylenes, Total	ND	0.099		mg/Kg	1	9/29/2022 2:17:00 AM	70439
Surr: 4-Bromofluorobenzene	95.7	70-130		%Rec	1	9/29/2022 2:17:00 AM	70439

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

Qualifiers:

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

Analytical Report
Lab Order **2209E05**
Date Reported: **10/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: B-14
Project: Roy SWD 3
Collection Date: 9/23/2022 2:26:00 PM
Lab ID: 2209E05-014 **Matrix:** SOIL **Received Date:** 9/27/2022 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**JTT**
Chloride	650	60		mg/Kg	20	10/3/2022 9:25:41 AM	70539
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**mb**
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	9/30/2022 3:07:32 AM	70446
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/30/2022 3:07:32 AM	70446
Surr: DNOP	80.3	21-129		%Rec	1	9/30/2022 3:07:32 AM	70446
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**BRM**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/29/2022 2:37:00 AM	70439
Surr: BFB	108	37.7-212		%Rec	1	9/29/2022 2:37:00 AM	70439
EPA METHOD 8021B: VOLATILES						Analyst:	**BRM**
Benzene	ND	0.024		mg/Kg	1	9/29/2022 2:37:00 AM	70439
Toluene	ND	0.048		mg/Kg	1	9/29/2022 2:37:00 AM	70439
Ethylbenzene	ND	0.048		mg/Kg	1	9/29/2022 2:37:00 AM	70439
Xylenes, Total	ND	0.096		mg/Kg	1	9/29/2022 2:37:00 AM	70439
Surr: 4-Bromofluorobenzene	95.9	70-130		%Rec	1	9/29/2022 2:37:00 AM	70439

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

Qualifiers:

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

Analytical Report
Lab Order **2209E05**
Date Reported: **10/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: B-15
Project: Roy SWD 3
Collection Date: 9/23/2022 2:28:00 PM
Lab ID: 2209E05-015 **Matrix:** SOIL **Received Date:** 9/27/2022 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**JTT**
Chloride	1000	61		mg/Kg	20	10/3/2022 10:02:55 AM	70539
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**mb**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/30/2022 3:21:42 AM	70446
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/30/2022 3:21:42 AM	70446
Surr: DNOP	80.3	21-129		%Rec	1	9/30/2022 3:21:42 AM	70446
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**BRM**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/29/2022 2:56:00 AM	70439
Surr: BFB	108	37.7-212		%Rec	1	9/29/2022 2:56:00 AM	70439
EPA METHOD 8021B: VOLATILES						Analyst:	**BRM**
Benzene	ND	0.025		mg/Kg	1	9/29/2022 2:56:00 AM	70439
Toluene	ND	0.050		mg/Kg	1	9/29/2022 2:56:00 AM	70439
Ethylbenzene	ND	0.050		mg/Kg	1	9/29/2022 2:56:00 AM	70439
Xylenes, Total	ND	0.10		mg/Kg	1	9/29/2022 2:56:00 AM	70439
Surr: 4-Bromofluorobenzene	94.0	70-130		%Rec	1	9/29/2022 2:56:00 AM	70439

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

Qualifiers:

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

Analytical Report
Lab Order **2209E05**
Date Reported: **10/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: B-16
Project: Roy SWD 3
Collection Date: 9/23/2022 2:30:00 PM
Lab ID: 2209E05-016 **Matrix:** SOIL **Received Date:** 9/27/2022 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**JTT**
Chloride	570	60		mg/Kg	20	10/3/2022 10:15:19 AM	70539
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**mb**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/30/2022 3:35:59 AM	70446
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/30/2022 3:35:59 AM	70446
Surr: DNOP	75.9	21-129		%Rec	1	9/30/2022 3:35:59 AM	70446
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**BRM**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/29/2022 3:36:00 AM	70439
Surr: BFB	104	37.7-212		%Rec	1	9/29/2022 3:36:00 AM	70439
EPA METHOD 8021B: VOLATILES						Analyst:	**BRM**
Benzene	ND	0.024		mg/Kg	1	9/29/2022 3:36:00 AM	70439
Toluene	ND	0.048		mg/Kg	1	9/29/2022 3:36:00 AM	70439
Ethylbenzene	ND	0.048		mg/Kg	1	9/29/2022 3:36:00 AM	70439
Xylenes, Total	ND	0.097		mg/Kg	1	9/29/2022 3:36:00 AM	70439
Surr: 4-Bromofluorobenzene	95.2	70-130		%Rec	1	9/29/2022 3:36:00 AM	70439

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

Qualifiers:

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

Analytical Report
Lab Order **2209E05**
Date Reported: **10/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: B-17
Project: Roy SWD 3
Collection Date: 9/23/2022 2:32:00 PM
Lab ID: 2209E05-017 **Matrix:** SOIL **Received Date:** 9/27/2022 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**JTT**
Chloride	1000	59		mg/Kg	20	10/3/2022 10:27:44 AM	70539
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**mb**
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	9/30/2022 3:50:04 AM	70446
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/30/2022 3:50:04 AM	70446
Surr: DNOP	79.9	21-129		%Rec	1	9/30/2022 3:50:04 AM	70446
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**BRM**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/29/2022 3:55:00 AM	70439
Surr: BFB	100	37.7-212		%Rec	1	9/29/2022 3:55:00 AM	70439
EPA METHOD 8021B: VOLATILES						Analyst:	**BRM**
Benzene	ND	0.024		mg/Kg	1	9/29/2022 3:55:00 AM	70439
Toluene	ND	0.048		mg/Kg	1	9/29/2022 3:55:00 AM	70439
Ethylbenzene	ND	0.048		mg/Kg	1	9/29/2022 3:55:00 AM	70439
Xylenes, Total	ND	0.095		mg/Kg	1	9/29/2022 3:55:00 AM	70439
Surr: 4-Bromofluorobenzene	92.7	70-130		%Rec	1	9/29/2022 3:55:00 AM	70439

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

Qualifiers:

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

Analytical Report
Lab Order **2209E05**
Date Reported: **10/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: B-18
Project: Roy SWD 3
Collection Date: 9/23/2022 2:34:00 PM
Lab ID: 2209E05-018 **Matrix:** SOIL **Received Date:** 9/27/2022 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**JTT**
Chloride	1300	60		mg/Kg	20	10/3/2022 10:40:09 AM	70539
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**mb**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/30/2022 4:04:08 AM	70446
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/30/2022 4:04:08 AM	70446
Surr: DNOP	89.9	21-129		%Rec	1	9/30/2022 4:04:08 AM	70446
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**BRM**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/29/2022 4:15:00 AM	70439
Surr: BFB	106	37.7-212		%Rec	1	9/29/2022 4:15:00 AM	70439
EPA METHOD 8021B: VOLATILES						Analyst:	**BRM**
Benzene	ND	0.024		mg/Kg	1	9/29/2022 4:15:00 AM	70439
Toluene	ND	0.047		mg/Kg	1	9/29/2022 4:15:00 AM	70439
Ethylbenzene	ND	0.047		mg/Kg	1	9/29/2022 4:15:00 AM	70439
Xylenes, Total	ND	0.095		mg/Kg	1	9/29/2022 4:15:00 AM	70439
Surr: 4-Bromofluorobenzene	95.9	70-130		%Rec	1	9/29/2022 4:15:00 AM	70439

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

Qualifiers:

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

Analytical Report
Lab Order **2209E05**
Date Reported: **10/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: B-19
Project: Roy SWD 3
Collection Date: 9/23/2022 2:36:00 PM
Lab ID: 2209E05-019 **Matrix:** SOIL **Received Date:** 9/27/2022 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**JTT**
Chloride	900	60		mg/Kg	20	10/3/2022 11:42:14 AM	70539
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**mb**
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	9/30/2022 4:18:20 AM	70446
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/30/2022 4:18:20 AM	70446
Surr: DNOP	79.9	21-129		%Rec	1	9/30/2022 4:18:20 AM	70446
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**BRM**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/29/2022 4:35:00 AM	70439
Surr: BFB	104	37.7-212		%Rec	1	9/29/2022 4:35:00 AM	70439
EPA METHOD 8021B: VOLATILES						Analyst:	**BRM**
Benzene	ND	0.024		mg/Kg	1	9/29/2022 4:35:00 AM	70439
Toluene	ND	0.048		mg/Kg	1	9/29/2022 4:35:00 AM	70439
Ethylbenzene	ND	0.048		mg/Kg	1	9/29/2022 4:35:00 AM	70439
Xylenes, Total	ND	0.097		mg/Kg	1	9/29/2022 4:35:00 AM	70439
Surr: 4-Bromofluorobenzene	95.1	70-130		%Rec	1	9/29/2022 4:35:00 AM	70439

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

Qualifiers:

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

Analytical Report
Lab Order **2209E05**
Date Reported: **10/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: W-1
Project: Roy SWD 3
Collection Date: 9/23/2022 2:38:00 PM
Lab ID: 2209E05-020 **Matrix:** SOIL **Received Date:** 9/27/2022 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**JTT**
Chloride	450	60		mg/Kg	20	10/3/2022 11:54:38 AM	70539
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**mb**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/30/2022 4:32:16 AM	70446
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/30/2022 4:32:16 AM	70446
Surr: DNOP	76.3	21-129		%Rec	1	9/30/2022 4:32:16 AM	70446
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**BRM**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/29/2022 4:54:00 AM	70439
Surr: BFB	105	37.7-212		%Rec	1	9/29/2022 4:54:00 AM	70439
EPA METHOD 8021B: VOLATILES						Analyst:	**BRM**
Benzene	ND	0.024		mg/Kg	1	9/29/2022 4:54:00 AM	70439
Toluene	ND	0.048		mg/Kg	1	9/29/2022 4:54:00 AM	70439
Ethylbenzene	ND	0.048		mg/Kg	1	9/29/2022 4:54:00 AM	70439
Xylenes, Total	ND	0.095		mg/Kg	1	9/29/2022 4:54:00 AM	70439
Surr: 4-Bromofluorobenzene	97.3	70-130		%Rec	1	9/29/2022 4:54:00 AM	70439

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

Qualifiers:

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

Analytical Report
Lab Order **2209E05**
Date Reported: **10/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: W-2
Project: Roy SWD 3
Collection Date: 9/23/2022 2:40:00 PM
Lab ID: 2209E05-021 **Matrix:** SOIL **Received Date:** 9/27/2022 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	850	60		mg/Kg	20	10/3/2022 12:07:02 PM	70539
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	9/30/2022 4:46:15 AM	70446
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/30/2022 4:46:15 AM	70446
Surr: DNOP	79.7	21-129		%Rec	1	9/30/2022 4:46:15 AM	70446
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/29/2022 5:14:00 AM	70439
Surr: BFB	102	37.7-212		%Rec	1	9/29/2022 5:14:00 AM	70439
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.024		mg/Kg	1	9/29/2022 5:14:00 AM	70439
Toluene	ND	0.048		mg/Kg	1	9/29/2022 5:14:00 AM	70439
Ethylbenzene	ND	0.048		mg/Kg	1	9/29/2022 5:14:00 AM	70439
Xylenes, Total	ND	0.096		mg/Kg	1	9/29/2022 5:14:00 AM	70439
Surr: 4-Bromofluorobenzene	94.8	70-130		%Rec	1	9/29/2022 5:14:00 AM	70439

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

Qualifiers:

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

Analytical Report
Lab Order **2209E05**
Date Reported: **10/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: W-3
Project: Roy SWD 3
Collection Date: 9/23/2022 2:42:00 PM
Lab ID: 2209E05-022 **Matrix:** SOIL **Received Date:** 9/27/2022 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**JTT**
Chloride	480	60		mg/Kg	20	10/3/2022 12:19:26 PM	70539
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**mb**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/30/2022 4:59:59 AM	70446
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/30/2022 4:59:59 AM	70446
Surr: DNOP	91.2	21-129		%Rec	1	9/30/2022 4:59:59 AM	70446
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**BRM**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/29/2022 5:34:00 AM	70439
Surr: BFB	98.8	37.7-212		%Rec	1	9/29/2022 5:34:00 AM	70439
EPA METHOD 8021B: VOLATILES						Analyst:	**BRM**
Benzene	ND	0.023		mg/Kg	1	9/29/2022 5:34:00 AM	70439
Toluene	ND	0.047		mg/Kg	1	9/29/2022 5:34:00 AM	70439
Ethylbenzene	ND	0.047		mg/Kg	1	9/29/2022 5:34:00 AM	70439
Xylenes, Total	ND	0.094		mg/Kg	1	9/29/2022 5:34:00 AM	70439
Surr: 4-Bromofluorobenzene	93.8	70-130		%Rec	1	9/29/2022 5:34:00 AM	70439

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

Qualifiers:

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

Analytical Report
Lab Order **2209E05**
Date Reported: **10/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: W-4
Project: Roy SWD 3
Collection Date: 9/23/2022 2:44:00 PM
Lab ID: 2209E05-023 **Matrix:** SOIL **Received Date:** 9/27/2022 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	1500	60		mg/Kg	20	10/3/2022 12:31:51 PM	70539
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/30/2022 5:13:51 AM	70446
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/30/2022 5:13:51 AM	70446
Surr: DNOP	82.8	21-129		%Rec	1	9/30/2022 5:13:51 AM	70446
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/29/2022 5:53:00 AM	70439
Surr: BFB	105	37.7-212		%Rec	1	9/29/2022 5:53:00 AM	70439
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.025		mg/Kg	1	9/29/2022 5:53:00 AM	70439
Toluene	ND	0.049		mg/Kg	1	9/29/2022 5:53:00 AM	70439
Ethylbenzene	ND	0.049		mg/Kg	1	9/29/2022 5:53:00 AM	70439
Xylenes, Total	ND	0.099		mg/Kg	1	9/29/2022 5:53:00 AM	70439
Surr: 4-Bromofluorobenzene	95.5	70-130		%Rec	1	9/29/2022 5:53:00 AM	70439

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

Qualifiers:

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

Analytical Report
Lab Order **2209E05**
Date Reported: **10/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: W-5
Project: Roy SWD 3
Collection Date: 9/23/2022 2:46:00 PM
Lab ID: 2209E05-024 **Matrix:** SOIL **Received Date:** 9/27/2022 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	890	60		mg/Kg	20	10/3/2022 12:44:16 PM	70539
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/30/2022 5:27:22 AM	70446
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/30/2022 5:27:22 AM	70446
Surr: DNOP	55.0	21-129		%Rec	1	9/30/2022 5:27:22 AM	70446
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/29/2022 4:49:01 AM	70439
Surr: BFB	93.4	37.7-212		%Rec	1	9/29/2022 4:49:01 AM	70439
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.023		mg/Kg	1	9/29/2022 4:49:01 AM	70439
Toluene	ND	0.046		mg/Kg	1	9/29/2022 4:49:01 AM	70439
Ethylbenzene	ND	0.046		mg/Kg	1	9/29/2022 4:49:01 AM	70439
Xylenes, Total	ND	0.092		mg/Kg	1	9/29/2022 4:49:01 AM	70439
Surr: 4-Bromofluorobenzene	99.6	70-130		%Rec	1	9/29/2022 4:49:01 AM	70439

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

Qualifiers:

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

Analytical Report
Lab Order **2209E05**
Date Reported: **10/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: W-6
Project: Roy SWD 3
Collection Date: 9/23/2022 2:46:00 PM
Lab ID: 2209E05-025 **Matrix:** SOIL **Received Date:** 9/27/2022 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	2000	60		mg/Kg	20	10/3/2022 12:56:41 PM	70539
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	9/30/2022 5:40:57 AM	70446
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	9/30/2022 5:40:57 AM	70446
Surr: DNOP	77.4	21-129		%Rec	1	9/30/2022 5:40:57 AM	70446
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/29/2022 5:36:15 AM	70439
Surr: BFB	93.6	37.7-212		%Rec	1	9/29/2022 5:36:15 AM	70439
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg	1	9/29/2022 5:36:15 AM	70439
Toluene	ND	0.048		mg/Kg	1	9/29/2022 5:36:15 AM	70439
Ethylbenzene	ND	0.048		mg/Kg	1	9/29/2022 5:36:15 AM	70439
Xylenes, Total	ND	0.096		mg/Kg	1	9/29/2022 5:36:15 AM	70439
Surr: 4-Bromofluorobenzene	99.0	70-130		%Rec	1	9/29/2022 5:36:15 AM	70439

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

Qualifiers:

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

Analytical Report
Lab Order **2209E05**
Date Reported: **10/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: W-7
Project: Roy SWD 3
Collection Date: 9/23/2022 2:48:00 PM
Lab ID: 2209E05-026 **Matrix:** SOIL **Received Date:** 9/27/2022 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**JTT**
Chloride	1700	60		mg/Kg	20	10/3/2022 1:09:05 PM	70539
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**mb**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/29/2022 11:13:27 AM	70465
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/29/2022 11:13:27 AM	70465
Surr: DNOP	101	21-129		%Rec	1	9/29/2022 11:13:27 AM	70465
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**BRM**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/29/2022 12:48:00 PM	70460
Surr: BFB	106	37.7-212		%Rec	1	9/29/2022 12:48:00 PM	70460
EPA METHOD 8021B: VOLATILES						Analyst:	**BRM**
Benzene	ND	0.025		mg/Kg	1	9/29/2022 12:48:00 PM	70460
Toluene	ND	0.050		mg/Kg	1	9/29/2022 12:48:00 PM	70460
Ethylbenzene	ND	0.050		mg/Kg	1	9/29/2022 12:48:00 PM	70460
Xylenes, Total	ND	0.10		mg/Kg	1	9/29/2022 12:48:00 PM	70460
Surr: 4-Bromofluorobenzene	93.8	70-130		%Rec	1	9/29/2022 12:48:00 PM	70460

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

Qualifiers:

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

Analytical Report
Lab Order **2209E05**
Date Reported: **10/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: RTP-2W/2
Project: Roy SWD 3
Collection Date: 9/23/2022 11:50:00 AM
Lab ID: 2209E05-027
Matrix: SOIL
Received Date: 9/27/2022 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**JTT**
Chloride	160	60		mg/Kg	20	10/3/2022 1:46:19 PM	70539
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**mb**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/29/2022 11:53:53 AM	70465
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/29/2022 11:53:53 AM	70465
Surr: DNOP	106	21-129		%Rec	1	9/29/2022 11:53:53 AM	70465
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**BRM**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/29/2022 2:07:00 PM	70460
Surr: BFB	105	37.7-212		%Rec	1	9/29/2022 2:07:00 PM	70460
EPA METHOD 8021B: VOLATILES						Analyst:	**BRM**
Benzene	ND	0.025		mg/Kg	1	9/29/2022 2:07:00 PM	70460
Toluene	ND	0.050		mg/Kg	1	9/29/2022 2:07:00 PM	70460
Ethylbenzene	ND	0.050		mg/Kg	1	9/29/2022 2:07:00 PM	70460
Xylenes, Total	ND	0.099		mg/Kg	1	9/29/2022 2:07:00 PM	70460
Surr: 4-Bromofluorobenzene	95.3	70-130		%Rec	1	9/29/2022 2:07:00 PM	70460

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

Qualifiers:

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

Analytical Report
Lab Order **2209E05**
Date Reported: **10/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: RTP-2W/4
Project: Roy SWD 3
Collection Date: 9/23/2022 12:00:00 PM
Lab ID: 2209E05-028 **Matrix:** SOIL **Received Date:** 9/27/2022 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**JTT**
Chloride	590	60		mg/Kg	20	10/3/2022 1:58:44 PM	70539
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**mb**
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	9/29/2022 12:07:30 PM	70465
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/29/2022 12:07:30 PM	70465
Surr: DNOP	101	21-129		%Rec	1	9/29/2022 12:07:30 PM	70465
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**BRM**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/29/2022 3:05:00 PM	70460
Surr: BFB	105	37.7-212		%Rec	1	9/29/2022 3:05:00 PM	70460
EPA METHOD 8021B: VOLATILES						Analyst:	**BRM**
Benzene	ND	0.024		mg/Kg	1	9/29/2022 3:05:00 PM	70460
Toluene	ND	0.047		mg/Kg	1	9/29/2022 3:05:00 PM	70460
Ethylbenzene	ND	0.047		mg/Kg	1	9/29/2022 3:05:00 PM	70460
Xylenes, Total	ND	0.094		mg/Kg	1	9/29/2022 3:05:00 PM	70460
Surr: 4-Bromofluorobenzene	92.8	70-130		%Rec	1	9/29/2022 3:05:00 PM	70460

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

Qualifiers:

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

Analytical Report
Lab Order **2209E05**
Date Reported: **10/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: RTP-2N/1
Project: Roy SWD 3
Collection Date: 9/23/2022 1:07:00 PM
Lab ID: 2209E05-029 **Matrix:** SOIL **Received Date:** 9/27/2022 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	ND	60		mg/Kg	20	10/3/2022 2:11:10 PM	70539
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/29/2022 12:21:03 PM	70465
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/29/2022 12:21:03 PM	70465
Surr: DNOP	115	21-129		%Rec	1	9/29/2022 12:21:03 PM	70465
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/29/2022 3:25:00 PM	70460
Surr: BFB	103	37.7-212		%Rec	1	9/29/2022 3:25:00 PM	70460
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.024		mg/Kg	1	9/29/2022 3:25:00 PM	70460
Toluene	ND	0.047		mg/Kg	1	9/29/2022 3:25:00 PM	70460
Ethylbenzene	ND	0.047		mg/Kg	1	9/29/2022 3:25:00 PM	70460
Xylenes, Total	ND	0.094		mg/Kg	1	9/29/2022 3:25:00 PM	70460
Surr: 4-Bromofluorobenzene	92.8	70-130		%Rec	1	9/29/2022 3:25:00 PM	70460

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

Qualifiers:

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

Analytical Report
Lab Order **2209E05**
Date Reported: **10/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: RTP-2N/4
Project: Roy SWD 3
Collection Date: 9/23/2022 1:22:00 PM
Lab ID: 2209E05-030 **Matrix:** SOIL **Received Date:** 9/27/2022 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**JTT**
Chloride	95	60		mg/Kg	20	10/3/2022 2:23:35 PM	70539
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**mb**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/29/2022 12:34:33 PM	70465
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/29/2022 12:34:33 PM	70465
Surr: DNOP	89.0	21-129		%Rec	1	9/29/2022 12:34:33 PM	70465
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**BRM**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/29/2022 3:45:00 PM	70460
Surr: BFB	107	37.7-212		%Rec	1	9/29/2022 3:45:00 PM	70460
EPA METHOD 8021B: VOLATILES						Analyst:	**BRM**
Benzene	ND	0.024		mg/Kg	1	9/29/2022 3:45:00 PM	70460
Toluene	ND	0.049		mg/Kg	1	9/29/2022 3:45:00 PM	70460
Ethylbenzene	ND	0.049		mg/Kg	1	9/29/2022 3:45:00 PM	70460
Xylenes, Total	ND	0.097		mg/Kg	1	9/29/2022 3:45:00 PM	70460
Surr: 4-Bromofluorobenzene	93.8	70-130		%Rec	1	9/29/2022 3:45:00 PM	70460

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

Qualifiers:

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

Analytical Report
Lab Order **2209E05**
Date Reported: **10/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: RTP-6N/1
Project: Roy SWD 3
Collection Date: 9/23/2022 2:16:00 PM
Lab ID: 2209E05-031 **Matrix:** SOIL **Received Date:** 9/27/2022 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	ND	60		mg/Kg	20	10/3/2022 2:36:00 PM	70539
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **mb**	
Diesel Range Organics (DRO)	62	14		mg/Kg	1	9/29/2022 12:48:10 PM	70465
Motor Oil Range Organics (MRO)	95	48		mg/Kg	1	9/29/2022 12:48:10 PM	70465
Surr: DNOP	110	21-129		%Rec	1	9/29/2022 12:48:10 PM	70465
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/29/2022 4:04:00 PM	70460
Surr: BFB	103	37.7-212		%Rec	1	9/29/2022 4:04:00 PM	70460
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.023		mg/Kg	1	9/29/2022 4:04:00 PM	70460
Toluene	ND	0.046		mg/Kg	1	9/29/2022 4:04:00 PM	70460
Ethylbenzene	ND	0.046		mg/Kg	1	9/29/2022 4:04:00 PM	70460
Xylenes, Total	ND	0.093		mg/Kg	1	9/29/2022 4:04:00 PM	70460
Surr: 4-Bromofluorobenzene	92.4	70-130		%Rec	1	9/29/2022 4:04:00 PM	70460

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

Qualifiers:

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

Analytical Report
Lab Order **2209E05**
Date Reported: **10/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG
Client Sample ID: RTP-6N/4
Project: Roy SWD 3
Collection Date: 9/23/2022 2:22:00 PM
Lab ID: 2209E05-032 **Matrix:** SOIL **Received Date:** 9/27/2022 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**JTT**
Chloride	ND	60		mg/Kg	20	10/3/2022 2:48:25 PM	70539
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**mb**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/29/2022 1:15:16 PM	70465
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/29/2022 1:15:16 PM	70465
Surr: DNOP	92.9	21-129		%Rec	1	9/29/2022 1:15:16 PM	70465
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**BRM**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/29/2022 4:24:00 PM	70460
Surr: BFB	102	37.7-212		%Rec	1	9/29/2022 4:24:00 PM	70460
EPA METHOD 8021B: VOLATILES						Analyst:	**BRM**
Benzene	ND	0.023		mg/Kg	1	9/29/2022 4:24:00 PM	70460
Toluene	ND	0.047		mg/Kg	1	9/29/2022 4:24:00 PM	70460
Ethylbenzene	ND	0.047		mg/Kg	1	9/29/2022 4:24:00 PM	70460
Xylenes, Total	ND	0.094		mg/Kg	1	9/29/2022 4:24:00 PM	70460
Surr: 4-Bromofluorobenzene	93.1	70-130		%Rec	1	9/29/2022 4:24:00 PM	70460

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2209E05**

13-Oct-22

Client: EOG

Project: Roy SWD 3

Sample ID: **MB-70532**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **70532**	RunNo: **91459**
Prep Date: **9/30/2022**	Analysis Date: **10/1/2022**	SeqNo: **3275048** Units: **mg/Kg**

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

Sample ID: **LCS-70532**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **70532**	RunNo: **91459**
Prep Date: **9/30/2022**	Analysis Date: **10/1/2022**	SeqNo: **3275049** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	98.4	90	110			

Sample ID: **MB-70539**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **70539**	RunNo: **91495**
Prep Date: **10/3/2022**	Analysis Date: **10/3/2022**	SeqNo: **3277087** Units: **mg/Kg**

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

Sample ID: **LCS-70539**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **70539**	RunNo: **91495**
Prep Date: **10/3/2022**	Analysis Date: **10/3/2022**	SeqNo: **3277088** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	96.9	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 interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2209E05**
13-Oct-22

Client: EOG
Project: Roy SWD 3

Sample ID: **MB-70465**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**							
Client ID: **PBS**	Batch ID: **70465**	RunNo: **91420**							
Prep Date: **9/28/2022**	Analysis Date: **9/29/2022**	SeqNo: **3273391**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		118	21	129			

Sample ID: **LCS-70465**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**							
Client ID: **LCSS**	Batch ID: **70465**	RunNo: **91420**							
Prep Date: **9/28/2022**	Analysis Date: **9/29/2022**	SeqNo: **3273393**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	15	50.00	0	89.5	64.4	127			
Surr: DNOP	4.7		5.000		95.0	21	129			

Sample ID: **MB-70446**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**							
Client ID: **PBS**	Batch ID: **70446**	RunNo: **91420**							
Prep Date: **9/27/2022**	Analysis Date: **9/30/2022**	SeqNo: **3273492**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.0		10.00		90.4	21	129			

Sample ID: **LCS-70446**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**							
Client ID: **LCSS**	Batch ID: **70446**	RunNo: **91420**							
Prep Date: **9/27/2022**	Analysis Date: **9/30/2022**	SeqNo: **3273494**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	15	50.00	0	93.5	64.4	127			
Surr: DNOP	4.5		5.000		90.2	21	129			

Sample ID: **LCS-70443**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**							
Client ID: **LCSS**	Batch ID: **70443**	RunNo: **91439**							
Prep Date: **9/27/2022**	Analysis Date: **9/30/2022**	SeqNo: **3274443**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	37	15	50.00	0	74.5	64.4	127			
Surr: DNOP	4.2		5.000		84.9	21	129			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2209E05**
13-Oct-22

Client: EOG
Project: Roy SWD 3

Sample ID: **MB-70443**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **70443**	RunNo: **91439**
Prep Date: **9/27/2022**	Analysis Date: **9/30/2022**	SeqNo: **3274446** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	14		10.00		137	21	129			S

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2209E05**
13-Oct-22

Client: EOG
Project: Roy SWD 3

Sample ID: **lcs-70439**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **70439**	RunNo: **91349**
Prep Date: **9/27/2022**	Analysis Date: **9/28/2022**	SeqNo: **3271475** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	100	72.3	137			
Surr: BFB	2200		1000		222	37.7	212			S

Sample ID: **mb-70439**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **70439**	RunNo: **91349**
Prep Date: **9/27/2022**	Analysis Date: **9/28/2022**	SeqNo: **3271477** 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		107	37.7	212			

Sample ID: **LCS-70438**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **70438**	RunNo: **91394**
Prep Date: **9/27/2022**	Analysis Date: **9/28/2022**	SeqNo: **3272041** 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	72.3	137			
Surr: BFB	1900		1000		191	37.7	212			

Sample ID: **mb-70438**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **70438**	RunNo: **91394**
Prep Date: **9/27/2022**	Analysis Date: **9/28/2022**	SeqNo: **3272043** 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	940		1000		93.8	37.7	212			

Sample ID: **lcs-70460**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **70460**	RunNo: **91419**
Prep Date: **9/28/2022**	Analysis Date: **9/29/2022**	SeqNo: **3272915** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	108	72.3	137			
Surr: BFB	2400		1000		237	37.7	212			S

Sample ID: **mb-70460**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **70460**	RunNo: **91419**
Prep Date: **9/28/2022**	Analysis Date: **9/29/2022**	SeqNo: **3272916** 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 interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2209E05**
13-Oct-22

Client: EOG
Project: Roy SWD 3

Sample ID: **mb-70460** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS** Batch ID: **70460** RunNo: **91419**
Prep Date: **9/28/2022** Analysis Date: **9/29/2022** SeqNo: **3272916** 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		102	37.7	212			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2209E05**
13-Oct-22

Client: EOG
Project: Roy SWD 3

Sample ID: **lcs-70439** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS** Batch ID: **70439** RunNo: **91349**
Prep Date: **9/27/2022** Analysis Date: **9/28/2022** SeqNo: **3271548** 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	92.4	80	120			
Toluene	0.95	0.050	1.000	0	94.8	80	120			
Ethylbenzene	0.98	0.050	1.000	0	98.3	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.9	80	120			
Surr: 4-Bromofluorobenzene	0.94		1.000		93.9	70	130			

Sample ID: **mb-70439** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS** Batch ID: **70439** RunNo: **91349**
Prep Date: **9/27/2022** Analysis Date: **9/28/2022** SeqNo: **3271549** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.94		1.000		94.3	70	130			

Sample ID: **lcs-70438** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS** Batch ID: **70438** RunNo: **91394**
Prep Date: **9/27/2022** Analysis Date: **9/28/2022** SeqNo: **3272469** 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	91.9	80	120			
Toluene	0.95	0.050	1.000	0	95.5	80	120			
Ethylbenzene	0.96	0.050	1.000	0	95.5	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.8	80	120			
Surr: 4-Bromofluorobenzene	0.97		1.000		97.0	70	130			

Sample ID: **mb-70438** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS** Batch ID: **70438** RunNo: **91394**
Prep Date: **9/27/2022** Analysis Date: **9/28/2022** SeqNo: **3272470** 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		100	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2209E05**

13-Oct-22

Client: EOG

Project: Roy SWD 3

Sample ID: **lcs-70460**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **70460**	RunNo: **91419**
Prep Date: **9/28/2022**	Analysis Date: **9/29/2022**	SeqNo: **3272939** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	95.4	80	120			
Toluene	0.98	0.050	1.000	0	98.5	80	120			
Ethylbenzene	1.0	0.050	1.000	0	99.7	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.4	80	120			
Surr: 4-Bromofluorobenzene	0.97		1.000		96.6	70	130			

Sample ID: **mb-70460**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **70460**	RunNo: **91419**
Prep Date: **9/28/2022**	Analysis Date: **9/29/2022**	SeqNo: **3272940** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.95		1.000		94.7	70	130			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: EOG Work Order Number: 2209E05 RcptNo: 1

Received By: **Joseph Alderette** 9/27/2022 7:25:00 AM

Completed By: **Sean Livingston** 9/27/2022 8:19:41 AM

Reviewed By: KPG 9-27-22

Chain of Custody

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

Log In

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

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

Adjusted? _____

Checked by: JN 9/27/22

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

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

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.3	Good				

Chain-of-Custody Record

Client: EOG-Artesia / Ranger Env.

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

Ranger: PO Box 201179, Austin TX 78720

Phone #: 521-335-1785

email or Fax#: Will@RangerEnv.com

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

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

Turn-Around Time: EOB 5 DAY TAT
☑ Standard ☒ Rush_____

Project Name: Roy SWD #3

Project #: 5375

Project Manager: W. Kierdorf

Sampler: J. Martinez
On Ice: ☑ Yes ☐ No
# of Coolers: 1
Cooler Temp (including CF): 5.3 - 0 = 5.3 °C

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2209E05	BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride (EPA 300)
9-23-22	1400	Soil	B-1	1x4oz Jar	ICE	001	X	X	X
	1402		B-2			002			
	1404		B-3			003			
	1406		B-4			004			
	1408		B-5			005			
	1410		B-6			006			
	1412		B-7			007			
	1414		B-8			008			
	1416		B-9			009			
	1418		B-10			010			
	1420		B-11			011			
	1422		B-12			012			

Date	Time	Relinquished by	Received by	Via	Date	Time
9/26/22	1045	J. Martinez			9/26/22	1045
9/26/22	1900			courier	9.27.22	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 repo

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: EOG 5 DAY TAT
☐ Standard ☒ **Rush**_____

Project Name: Roy SWD #3

Project #: 5375

Project Manager: W. Kierdorf

Sampler: J. Martinez
On Ice: ☒ Yes ☐ No
# of Coolers: 1
Cooler Temp (including CF): 5.3-0=5.3°C

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

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride (EPA 300)
9-23-22	1424	soil	B-13	1x4oz jar	ICE	013	X	X	X
	1426		B-14			014			
	1428		B-15			015			
	1430		B-16			016			
	1432		B-17			~~9/27/22 00~~ 017			
	1434		B-18			018			
	1436		B-19			019			
	1438		W-1			020			
	1440		W-2			021			
	1442		W-3			022			
	1444		W-4			023			
↓	1446	↓	W-5	↓	↓	024	↓	↓	↓

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
9/26/22	1105	J. Martinez			9/26/22	1105
9/26/22	1900			Courier	9.27.22	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 repo

EOG 5 DAY TAT

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

☑ Standard ☐ **Rush**_____

Project Name: Roy SWD #3

Project #: 5375

Project Manager: W. Kierdorf

Sampler: J. Martinez
On Ice: ☑ Yes ☐ No
# of Coolers: 1
Cooler Temp(including CF): 5.3 - 0 = 5.3°C

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2209E085	BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride (EPA 300)
9-23-22	~~1446~~ 1446	Soil	W-6	1/x 4oz Jar	ICE	025 001	X	X	X
	1448		W-7			026 002			
	1150		RTP-2W/2			027 003			
	1200		RTP-2W/4			028 004			
	1307		RTP-2N/1			029 005			
	1322		RTP-2N/4			030 006			
	1416		RTP-6N/1			031 007			
	1422		RTP-6N/4			032 008			

Sch 9/27/22

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
9/26/22	1045	J. Martinez			9/26/22	1045
9/26/22	1900			courier	9.27.22	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 repo

ATTACHMENT 5 – NMOCD CORRESPONDENCE

From: Miriam Morales <Miriam_Morales@eogresources.com>
Sent: Thursday, May 12, 2022 10:00 AM
To: Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>; ahowell@pvtn.net; austin@atkinseng.com
Cc: Artesia Regulatory <Artesia_Regulatory@eogresources.com>; Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>
Subject: [EXTERNAL] Roy SWD 3 (nAPP2123047534) Sampling Notification

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Good morning,

EOG Resources, Inc. respectfully submits notification of sampling to be conducted at the below location.

Roy SWD #3
7-19S-25E; Eddy County, NM
2RP-4576, 2RP-5094, nAPP2123047534, nAPP2111046250

Sampling will begin at 07:00 a.m. on Monday, May 16, 2022 and will continue through Friday, May 20, 2022.

Thank you,

Miriam Morales

From: Tina Huerta
Sent: Thursday, August 18, 2022 10:31 AM
To: Alan & Cheryl <ahowell@pvtn.net>; Austin Weyant <austin@atkinseng.com>; Jennifer Nobui <Jennifer.Nobui@state.nm.us>; Jocelyn Harimon <Jocelyn.Harimon@state.nm.us>; Mike Bratcher <mike.bratcher@state.nm.us>; Robert Hamlet <Robert.Hamlet@state.nm.us>
Cc: Andrea Felix <Andrea_Felix@eogresources.com>; Katie Jamison <Katie_Jamison@eogresources.com>; Michael Yemm <Michael_Yemm@eogresources.com>; BODEE EUDY <BODEE_EUDY@eogresources.com>
Subject: Roy SWD 3 (2RP-4576, 2RP-5094, nAPP2123047534, nAPP2111046250) Sampling Notification

Good Morning,

EOG Resources, Inc. respectfully submits notification of sampling to be conducted at the below location.

Roy SWD 3
7-19S-25E
Eddy County, NM
2RP-4576, 2RP-5094, nAPP2123047534, nAPP2111046250

Sampling will begin at 9:15 a.m. on Monday, August 22, 2022 and continue through Friday, August 26, 2022.

Thank you,

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

eog resources
Artesia Division

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Wednesday, September 21, 2022 10:12 AM
To: Alan & Cheryl <ahowell@pvtn.net>; Austin Weyant <austin@atkinseng.com>; Jennifer Nobui <Jennifer.Nobui@state.nm.us>; Jocelyn Harimon <Jocelyn.Harimon@state.nm.us>; Mike Bratcher <mike.bratcher@state.nm.us>; Robert Hamlet <Robert.Hamlet@state.nm.us>
Cc: Andrea Felix <Andrea_Felix@eogresources.com>; Katie Jamison <Katie_Jamison@eogresources.com>; Michael Yemm <Michael_Yemm@eogresources.com>; Terrence Gant <Terry_Gant@eogresources.com>
Subject: Roy SWD 3 (2RP-4576, 2RP-5094, nAPP2123047534, nAPP2111046250) Sampling Notification

Good Morning,

EOG Resources, Inc. respectfully submits notification of sampling to be conducted at the below location.

Roy SWD 3
P-7-19S-25E
Eddy County, NM
2RP-4576, 2RP-5094, nAPP2123047534, nAPP2111046250

Sampling will begin at 10:00 a.m. on Friday, September 23, 2022.

Thank you,

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

eog resources

Artesia Division

ATTACHMENT 6 – HISTORIC FIELD SCREENING RESULTS TABLES

Table 3:
Summary of Sample Results

EOG Resources
Roy SWD #003 (2RP-4576)

Sample ID	Sample Date	Depth (feet bgs)	BTEX mg/Kg	Benzene mg/Kg	GRO mg/Kg	DRO mg/Kg	GRO + DRO mg/Kg	MRO mg/Kg	**Total TPH** mg/Kg	Field Screens mS/cm	Cl- mg/Kg
NMOCD Closure Criteria			50	10			1000		100		600
L1R	4/10/2019	30	--	--	--	--	--	--	--	0.13	--
	4/10/2019	35	<0.225	<0.025	<5.0	<9.9	<14.9	<50	<64.9	1.02	3100
	4/10/2019	40	<0.225	<0.025	<4.8	<9.9	<14.7	<49	<63.7	0.75	530
	4/10/2019	45	--	--	--	--	--	--	--	0.09	
	4/10/2019	50	--	--	--	--	--	--	--	0.12	--
	4/10/2019	55	--	--	--	--	--	--	--	0.12	--
	4/10/2019	60	<0.210	<0.023	<4.7	<9.1	<13.8	<45	<58.8	0.59	410
	4/10/2019	65	--	--	--	--	--	--	--	0.11	
	4/10/2019	70	--	--	--	--	--	--	--	0.17	--
L2R	4/11/2019	0	<0.0217	<0.024	<4.8	<9.0	<13.8	<45	<58.8	1.00	1700
	4/11/2019	5	--	--	--	--	--	--	--	0.58	--
	4/11/2019	10	--	--	--	--	--	--	--	0.8	--
	4/11/2019	15	--	--	--	--	--	--	--	0.94	--
	4/11/2019	20	<0.211	<0.023	<4.7	<9.0	<13.7	<45	<58.7	1.39	1700
	4/11/2019	25	<0.217	<0.024	<4.8	<8.8	<13.6	<44	<57.6	2.03	10000
	4/11/2019	30	--	--	--	--	--	--	--	0.83	--
	4/11/2019	35	--	--	--	--	--	--	--	0.33	--
	4/11/2019	40	--	--	--	--	--	--	--	0.07	--
	4/11/2019	45	--	--	--	--	--	--	--	0.06	--
	4/11/2019	50	--	--	--	--	--	--	--	0.07	--
	4/11/2019	55	--	--	--	--	--	--	--	0.06	--
	4/11/2019	60	--	--	--	--	--	--	--	0.06	--
	4/11/2019	65	--	--	--	--	--	--	--	0.06	--
	4/11/2019	70	--	--	--	--	--	--	--	0.06	--
	4/11/2019	75	--	--	--	--	--	--	--	0.06	--
L3R	4/11/2019	30	<0.212	<0.024	<4.7	<8.7	<13.4	<44	<57.4	0.25	220
	4/11/2019	35	<0.208	<0.023	<4.6	<8.9	<13.5	<45	<58.5	0.20	140
	4/11/2019	40	<0.212	<0.024	<4.7	<9.8	<14.5	<49	<63.5	0.13	110
	4/11/2019	45	--	--	--	--	--	--	--	0.12	--
	4/11/2019	50	--	--	--	--	--	--	--	0.07	--
	4/11/2019	55	--	--	--	--	--	--	--	0.07	--
	4/11/2019	60	--	--	--	--	--	--	--	0.08	--
	4/11/2019	65	--	--	--	--	--	--	--	0.06	--
	4/11/2019	70	--	--	--	--	--	--	--	0.05	--
	4/11/2019	75	--	--	--	--	--	--	--	0.07	--

"--" = Not Analyzed

SMA #

Table 4
Summary of 2018 Field Screens

EOG Resources
Roy SWD #003 (2RP-4576)

Sample ID	Sample Date	Depth (feet bgs)	BTEX	Benzene	GRO	DRO	MRO	Total TPH	Petroflag Field Screens	Chloride
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	DRO mg/kg	mg/Kg
NMOCD Closure Criteria			50	10	1000			100		600
L1	1/23/2018	1	<0.23	<0.023	<4.7	200	340	**540**	--	**13000**
	1/23/2018	2	--	--	--	--	--	--	--	**4800**
	1/23/2018	3	2.46	<0.025	140	14000	6100	**20240**	--	**1900**
	1/23/2018	4	--	--	--	--	--	--	--	**1000**
L2	1/23/2018	1	--	--	--	--	--	--	--	**21000**
	1/23/2018	3	--	--	--	--	--	--	--	**1000**
	1/23/2018	4	--	--	--	--	--	--	--	--
	1/23/2018	5	8.3	<0.024	250	6000	2700	**8950**	--	**720**
	10/29/2018	10	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	--	528
	10/29/2018	12	--	--	--	--	--	--	--	340
	10/29/2018	14	--	--	--	--	--	--	--	**1100**
	10/29/2018	17	<0.300	<0.050	<10.0	11	<10.0	11	--	**1410**
North SW	10/29/2018	sidewall	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	--	48
South SW	10/29/2018	sidewall	<0.300	<0.050	<10.0	183	47.8	**230.8**	--	**1300**
L1	12/11/2018	30	--	--	--	--	--	--	--	**Cobble**
L3	12/10/2018	5	--	--	--	--	--	--	--	--
	12/10/2018	7.5	--	--	--	--	--	--	--	--
	12/10/2018	10	--	--	--	--	--	--	178	--
	12/10/2018	15	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	--	**1420**
	12/10/2018	20	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	--	**1600**
	12/10/2018	25	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	--	**2440**
	12/10/2018	27	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	--	**1800**
	12/10/2018	30	--	--	--	--	--	--	--	**Cobble**
North SW	12/11/2018	sidewall	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0		48
South SW	10/29/2018	sidewall	--	--	--	**230**	--	--		--
West SW	12/10/2018	sidewall	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0		16
East SW	12/10/2018	sidewall	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0		48
East SW -1	12/10/2018	sidewall				**73**				
BG1	12/10/2018	5	--	--	--	--	--	--	--	--
	12/10/2018	10	--	--	--	--	--	--	--	32
	12/10/2018	15	--	--	--	--	--	--	--	--
	12/10/2018	20	--	--	--	--	--	--		48
	12/10/2018	25	--	--	--	--	--	--		48
BG2	12/11/2018	10	--	--	--	--	--	--		32
	12/11/2018	15	--	--	--	--	--	--		--
	12/11/2018	20	--	--	--	--	--	--		48
	12/11/2018	25	--	--	--	--	--	--		48

"--" = Not Analyzed
* = per Reclamation Standard (19.15.29.13.D(1) NMAC)
Excavated

SMA #

ATTACHMENT 7 – SOIL BORING LOGS
(SB's 1-3)

Ranger Environmental Services, Inc.
P.O. Box 201179,
Austin, Texas 78720
Phone: (512)335-1785
Fax: (512)335-0527

BORING NUMBER SB-1

PAGE 1 OF 2

CLIENT EOG Resources, Inc.
PROJECT NAME Roy SWD #3
PROJECT NUMBER 5375
PROJECT LOCATION Eddy County, New Mexico
DATE STARTED 5/18/22 **COMPLETED** 5/18/22
GROUND WATER LEVELS:
DRILLING CONTRACTOR HCI
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 32.670981°, -104.517583°

DEPTH (ft)	SOIL SAMPLE ANALYSIS	GROUNDWATER LEVELS (BTOC)	PID/FIELD CHLORIDE TITRATION (In ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
0						Casing Type: 6.25" Diameter Temp. Well
			2 / 750		(GM) Silty Gravel, brown to tan, 0.5"-1.5" diameter gravel inclusions, subrounded to subangular, medium dense	
			0.8 / 750			
			2.6 / 600		3.0	
			2.8 / 1275		(SC) Clayey Silt, brown, very fine grained, medium sorted, poorly graded, medium dense	
5			1 / 600			
			0.4 / 600			
			0.5 / 900			
			0.8 / 600			
			2.5 / 750			
10			0.6 / 750			
			1.2 / 750			
			1 / 750			
			3 / 750			
			2.1 / 750			
15			1.4 / 750			
			1.6 / 750			
			1.2 / 900			
			1.7 / 900			
			1.5 / 900			
20			1.6 / 750			Bentonite
			1 / 900			
			2 / 750			
	GB		0 / 1050			
			1.2 / 750			
25			1.8 / 750		25.0	
			2.2 / 750		(GM) Silty Gravel, white, tan, brown, poorly sorted, very well graded, 0.5"-2.5" diameter gravel inclusions, subrounded	
			3.8 / 750			
			4.5 / 750			
			9.9 / 600			
30			6.4 / 450			
			0.7 / 600			
			0.1 / 600			
			0 / 450			
			0 / 750			
35					35.0	

ENVIRONMENTAL BH - GINT STD US.GDT - 8/19/22 08:38 - R:\DRAFTING FILES\GINT LOGS\5375 - ROY SWD #3 - BORING LOGS.GPJ

(Continued Next Page)

Ranger Environmental Services, Inc.
P.O. Box 201179,
Austin, Texas 78720
Phone: (512)335-1785
Fax: (512)335-0527

BORING NUMBER SB-1

CLIENT EOG Resources, Inc. **PROJECT NAME** Roy SWD #3

PROJECT NUMBER 5375 **PROJECT LOCATION** Eddy County, New Mexico

DEPTH (ft)	SOIL SAMPLE ANALYSIS	GROUNDWATER LEVELS (BTOC)	PID/FIELD CHLORIDE TITRATION (In ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
35			0 / 750 0 / 600 0 / 600 0 / 450 0 / 450 0 / 300		(SM) Clayey Sandy Silt, reddish-brown to maroon, very well sorted, poorly graded, loose to medium dense, 0.5" diameter gravel inclusions, subrounded	
	GB					
	GB					
40	GB			40.0		

Bottom of borehole at 40.0 feet.

ENVIRONMENTAL BH - GINT STD US.GDT - 8/19/22 08:38 - R:\DRAFTING FILES\GINT LOGS\5375 - ROY SWD #3 - BORING LOGS.GPJ

RANGER ENVIRONMENTAL SERVICES, INC.
Ranger Environmental Services, Inc.
P.O. Box 201179,
Austin, Texas 78720
Phone: (512)335-1785
Fax: (512)335-0527

BORING NUMBER SB-2

CLIENT EOG Resources, Inc.
PROJECT NAME Roy SWD #3
PROJECT NUMBER 5375
PROJECT LOCATION Eddy County, New Mexico
DATE STARTED 5/18/22 **COMPLETED** 5/18/22
GROUND WATER LEVELS:
DRILLING CONTRACTOR HCI
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 32.670985°, -104.517664°

DEPTH (ft)	SOIL SAMPLE ANALYSIS	GROUNDWATER LEVELS (BTOC)	PID/FIELD CHLORIDE TITRATION (In ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
0						Casing Type: 6.25" Diameter Temp. Well
			2.8 / 3000+		(GM) Silty Gravel, brown, <0.25" diameter gravel, subangular, very fine silt	
			3.2 / 1500		2.0	
			1.1 / 2850		(GM) Gravelly Clayey Silt, brown, poorly sorted, medium graded, 0.25" diameter gravel, subrounded to subangular	
			1.6 / 2250			
5			2.7 / 2250			
			3.2 / 3000+			
			2.8 / 3000+			
			2.7 / 2100			
			5.4 / 2250			
10			1.6 / 1650			
			1.1 / 1350			
			1.4 / 1800			
			1.5 / 1500			
			0.3 / 2400			
15			0.8 / 2550		15.0	
			1.1 / 2400		(GP) Sandy Gravel, buff to tan, very fine grained sand, 0.25" diameter gravel, subangular to subrounded	
			0.7 / 3000+			
			1.9 / 2700			
			0.6 / 3000+			
20			0.1 / 3000+			
			0.9 / 3000+			
			0.7 / 3000+			
			1.4 / 3000+			
			0.5 / 3000+			
25			0.7 / 3000+			Bentonite
			0.7 / 3000+			
			0.4 / 3000+			
			0 / 3000+			
	GB		1.2 / 3000+		29.0	
30			0 / 2250		(SP) Gravelly Sand, buff to tan, very fine grained, poorly sorted, medium graded, subrounded to subangular	
			1.8			
			2.9			
			4.7			
			5			
35						

ENVIRONMENTAL BH - GINT STD US.GDT - 8/19/22 08:38 - R:\DRAFTING FILES\GINT LOGS\5375 - ROY SWD #3 - BORING LOGS.GPJ

(Continued Next Page)

RANGER
ENVIRONMENTAL SERVICES, INC.

Ranger Environmental Services, Inc.
P.O. Box 201179,
Austin, Texas 78720
Phone: (512)335-1785
Fax: (512)335-0527

BORING NUMBER SB-2

PAGE 2 OF 2

CLIENT EOG Resources, Inc. **PROJECT NAME** Roy SWD #3

PROJECT NUMBER 5375 **PROJECT LOCATION** Eddy County, New Mexico

DEPTH (ft)	SOIL SAMPLE ANALYSIS	GROUNDWATER LEVELS (BTOC)	PID/FIELD CHLORIDE TITRATION (In ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
35			2.5			
			0.8			
			0.2			
			2			
			0.4			
40			0 / 1950			
			0 / 2550			
			0 / 1650			
			0 / 600			
			0 / 300			
45			0 / 750			
			0 / 750			
	GB		0 / 600			
	GB		0 / 300			
	GB		0 / 300			
50	GB		0 / 450			

36.0

(SM) Clayey Sandy Silt, reddish-brown to maroon, very well sorted, poorly graded, loose to medium dense, 0.25" diameter gravel, subrounded

50.0

Bottom of borehole at 50.0 feet.

ENVIRONMENTAL BH - GINT STD US.GDT - 8/19/22 08:38 - R:\DRAFTING FILES\GINT LOGS\5375 - ROY SWD #3 - BORING LOGS.GPJ

Ranger Environmental Services, Inc.
P.O. Box 201179,
Austin, Texas 78720
Phone: (512)335-1785
Fax: (512)335-0527

BORING NUMBER SB-3

PAGE 1 OF 1

CLIENT EOG Resources, Inc.
PROJECT NAME Roy SWD #3
PROJECT NUMBER 5375
PROJECT LOCATION Eddy County, New Mexico
DATE STARTED 5/18/22 **COMPLETED** 5/18/22
GROUND WATER LEVELS:
DRILLING CONTRACTOR HCI
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 32.670989°, -104.517783°

DEPTH (ft)	SOIL SAMPLE ANALYSIS	GROUNDWATER LEVELS (BTOC)	PID/FIELD CHLORIDE TITRATION (In ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
0						Casing Type: 6.25" Diameter Temp. Well
			2.3 / 300		(SC) Clayey Silt, brown, very well sorted, poorly graded, 0.25" diameter gravel, subrounded	
			1.9 / 300			
			1.2 / 150			
	GB		1.5 / 300			
5			0.6 / 300			
			0.6 / 300			
			0.7 / 300			
			0.2 / 300			
			0.5 / 300			
10			0.7 / 300			
			0.4 / 300			
			0.3 / 300			
			0.5 / 300			
	GB		0.3 / 150			
15			0 / 300			Bentonite
			0.3 / 300			
			0 / 300			
			0.3 / 150			
			0.4 / 300			
20			0.1 / 150			
			0 / 150			
			0 / 150			
			0 / 150		23.0	
			0 / 300		(GP) Sandy Gravel, buff to tan, 0.25" diameter gravel, subrounded to subangular	
25			0.2 / 150			
			0 / 150			
			0 / 150			
			0 / 150			
	GB		0 / 150			
30	GB		0 / 150		30.0	
					Bottom of borehole at 30.0 feet.	

ENVIRONMENTAL BH - GINT STD US.GDT - 8/19/22 08:38 - R:\DRAFTING FILES\GINT LOGS\5375 - ROY SWD #3 - BORING LOGS.GPJ

State of New Mexico
Oil Conservation Division

Incident ID	nAB1801936658
District RP	2RP-4576
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: 02/03/2023

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

OCD Only

Received by: Jocelyn Harimon Date: 02/03/2023

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

Signature: Robert Hamlet Date: 6/1/2023

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 182384

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 182384
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	The Remediation Plan is Conditionally Approved. The variance for the geosynthetic clay liner at 6 feet below ground surface is approved under the circumstance that as much contaminated soil is safely removed as possible. The excavations should be backfilled to 6 feet below surface with clean material, liner installed, and then backfilled to surface with clean material. Since the release is within 300 feet of a significant watercourse, the release will need to meet the strictest closure criteria standards. All off pad areas must contain a minimum of 4 feet non-waste containing uncontaminated, earthen material with chloride concentrations less than 600 mg/kg and less than 100 mg/kg for TPH. Samples must be analyzed for all constituents listed in Table I of 19.15.29.12 NMAC. The variance is approved for 400 ft2 floor samples. Collect confirmation sidewall samples, representing no more than 200 ft2. A closure report will need to be completed and uploaded within 90 days.	6/2/2023