

### 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

1.0	INTRODUCTION1
2.0	SITE CHARACTERIZATION
2.1	Depth-to-Groundwater
2.2	Wellhead Protection Area4
2.3	Distance to Nearest Significant Watercourse4
2.4	Closure Criteria4
3.0	MAY 18, 2022 VERTICAL SOIL DELINEATION ACTIVITIES
3.1	Assessment Methodologies4
3.2	Assessment Results6
4.0	AUGUST AND SEPTEMBER, 2022 HORIZONTAL SOIL DELINEATION ACTIVITIES7
5.0	REMEDIATION PLAN
6.0	REPORTING

### **FORM C-141**

### FIGURES

- Topographic Map
- Area Map
- National Wetland Inventory Map
- FEMA Floodplain Map
- Karst Topography Map
- Sample Location Map
- Proposed Remediation Map

### TABLES

• Soil BTEX, TPH & Chloride Analytical Data

### ATTACHMENTS

- Attachment 1 USGS and NMOSE Water Well Data
- Attachment 2 NM Energy, Minerals and Natural Resources Department Active Mines
  Map
- Attachment 3 Photographic Documentation
- Attachment 4 Laboratory Analytical Reports
- Attachment 5 NMOCD Correspondence
- Attachment 6 Historic Field Screening Results Tables
- Attachment 7 Soil Boring Logs (May 2022 Soil Borings 1 to 3)



### 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 aforementioned excavation was conducted.

STATE OF TEXAS PROFESSIONAL GEOSCIENTIST FIRM NO. 50140 • STATE OF TEXAS PROFESSIONAL ENGINEERING FIRM NO. F-6160

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 <u>Depth-to-Groundwater</u>

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 <u>Wellhead Protection Area</u>

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 <u>Closure Criteria</u>

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:

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

### **PROPOSED SITE CLOSURE CRITERIA**

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.



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**

District I 1625 N. French Dr., Hobbs, NM 88240

1000 Rio Brazos Road, Aztec, NM 87410

811 S. First St., Artesia, NM 88210

District II

District III

### NM OIL CONSERVATION

ARTESIA DISTRICT

JAN 19 2018

Form C-141 Revised April 3, 2017

**Oil Conservation Division** 1220 South St. Fr .: D

State of New Mexico

Energy Minerals and Natural Resources

Submit 1 Copy to appropriat	e District Office in
Submit 1 Copy to appropriat <b>RECEIVED</b> cordance with	19.15.29 NMAC.
t difficult in the last line.	

	cis Di., Sana	a Fe, NM 87505	•	Sa	nta Fe	e, NM 875	05				
			Releas	·····	atior	and Co	orrective A	ction			_
NAB18	nina	1.1.60			OPE	RATOR			<b>V L</b> . 141	-1 D	
Name of Co	<u>DIG SL</u>	14:55				Contact			🛛 Initia	al Report	Final I
EOG Y Res		3.		25575		Contact Chase Settle					
Address					Telephone 1						
104 S. 4 <sup>th</sup> Street Artesia NM 88210					575-748-14						
Facility Nan						Facility Typ	e				
Roy #3 SWI	D					SWD					
Surface Own	ner			Mineral O	wner				API No		
Private				Private	which				30-015-		
				LOCA	TIO	N OF RE	LEASE				
Jnit Letter	Section	Township	Range F	eet from the		South Line	Feet from the	East/W	est Line	County	·
<u>Р</u>	7	195	25E	810	South		660	Eas	st	Eddy	· · · · · · · · · · · · · · · · · · ·
			Latit	ude <u>32,67059</u>	<u>33</u> Lo	ngitude <u>-10</u>	<u>4.5177307</u> NA	D83			
				NAT	URE	OF REL	EASE				
ype of Relea						Volume of	Release			Recovered	
roduced Wa						6 B/PW			5 B/PW		
ource of Rel peline	ease					Date and F	lour of Occurren			Hour of Dis	covery
Vas Immedia	te Notice (	liven?				I/4/2018; 6			1/4/2018;	; 8:00 AM	·
			Yes 🗌 N	lo 🛛 Not Re	quired		, in month.				
By Whom?						Date and F	lour				
Was a Watero	course Read		Yes 🛛 N	ío		If YES, Vo	olume Impacting	the Water	course.		
		pacted, Descr		N/A							
Describe Cau There was a f	se of Proble ailure in the	em and Reme	dial Action Tag line that con	aken.* nects the gunb	arrel to	the water tan	k. A vacuum truc	ck was cal	led to col	lect all free s	standing fluids
Describe Cau There was a f backhoe cont	se of Proble ailure in the racted to re	em and Reme e pvc waterleg	dial Action Tag Ine that con ally impacted	aken.* nects the gunb soils.	arrel to	the water tan	k. A vacuum truc	ck was cal	led to col	lect all free s	standing fluids
Describe Cau There was a f backhoe contr Describe Area The impacte	se of Proble ailure in the racted to re a Affected a ed area was	em and Reme e pvc waterleg move all visus and Cleanup A s approxima	dial Action Ta g line that con ally impacted Action Taken. tely 90 feet l	aken.* nects the gunb soils. * by 20 feet ins	ide of 1	the battery b	erm to the nort	h of the p	produced	water tank	s. Vertical and
Describe Cau There was a f ackhoe contr Describe Area The impacte orizontal del	se of Proble ailure in the racted to re a Affected a ed area was lineation sa	em and Reme e pvc waterleg move all visus and Cleanup / s approxima mples will be	dial Action Ta g line that con ally impacted Action Taken. tely 90 feet l taken and and	aken.* nects the gunb soils. * by 20 feet ins alysis ran for T	ide of 1 PH, BT	the battery b EX and chlo	erm to the nort rides. If initial ar	h of the p	produced esults for	water tank	s. Vertical and X are under
Describe Cau There was a f ackhoe contr Describe Area The impacted orizontal del RAL's (site	se of Proble ailure in the racted to re a Affected a ed area was lineation sa ranking is	em and Reme e pvc waterleg move all visu and Cleanup / s <b>approxima</b> mples will be 10) a Final Re	dial Action Ta g line that con ally impacted Action Taken. tely 90 feet l taken and an eport, C-141 M	aken.* nects the gunb soils. * by 20 feet ins alysis ran for T vill be submitte	ide of t PH, BT	the battery b EX and chlo e OCD reque	perm to the nort rides. If initial ar sting closure. If	h of the p nalytical re	produced esults for ical results	water tank TPH & BTE s are above t	S. Vertical and X are under the RRAL's a v
Describe Cau 'here was a f backhoe contri- Describe Area 'he impacte orizontal del RRAL's (site blan will be s	se of Proble ailure in the racted to re a Affected a ed area wa lineation sa ranking is ubmitted to	em and Reme e pvc waterleg move all visua and Cleanup A s approxima mples will be 10) a Final Re o the OCD. De	dial Action Ta g line that con ally impacted Action Taken. tely 90 feet l taken and an eport, C-141 w epth to Grou	aken.* nects the gunb soils. * by 20 feet ins alysis ran for T will be submitte nd Water: <10	ide of 1 PH, BI ed to the <b>0' (90'</b>	the battery b EX and chlo e OCD reque , Section 7,	erm to the nort rides. If initial ar	h of the p nalytical re	produced esults for ical results	water tank TPH & BTE s are above t	S. Vertical and X are under the RRAL's a v
Describe Cau There was a f packhoe contr Describe Area The impacte torizontal del RRAL's (site plan will be s Area: No, Di hereby certi	se of Proble ailure in the racted to re a Affected a ed area wa lineation sa ranking is ubmitted to istance to S fy that the i	em and Reme e pvc waterleg move all visu and Cleanup A s approxima mples will be 10) a Final Re the OCD. De Surface Wate information gi	dial Action Ta g line that con ally impacted Action Taken. tely 90 feet l taken and and eport, C-141 v epth to Group r Body: >100 ven above is	aken.* nects the gunb soils. * by 20 feet ins alysis ran for T will be submitte nd Water: <10 0', SITE RAN true and compl	ide of t PH, BT ed to the <b>0' (90'</b> (KING ete to tl	the battery b EX and chlo e OCD reque , Section 7, IS 10. the best of my	perm to the nort rides. If initial ar sting closure. If T19S, R25E, p knowledge and	h of the p nalytical re the analyti per NMO understand	produced esults for ical result: <b>DSE, US</b>	water tank TPH & BTE s are above t GS), Wellho suant to NM	ts. Vertical and X are under the RRAL's a v ead Protection OCD rules and
Describe Cau 'here was a f backhoe contr Describe Area 'he impacte orizontal del RRAL's (site blan will be s Area: No, Di hereby certi egulations al	se of Proble ailure in the racted to re a Affected a ed area was lineation sa ranking is ubmitted to stance to S fy that the i l operators	em and Reme e pvc waterleg move all visus and Cleanup A s approxima mples will be 10) a Final Re the OCD. De Surface Wate information gi are required t	dial Action Ta g line that con ally impacted Action Taken. tely 90 feet l taken and an eport, C-141 v epth to Groun r Body: >100 ven above is o report and/c	aken.* nects the gunb soils. * by 20 feet ins alysis ran for T will be submitte nd Water: <10 0', SITE RAN true and complor of file certain re	ide of f PH, BT ed to the <b>10' (90'</b> <b>KING</b> ete to the elease n	the battery b EX and chlo e OCD reque , Section 7, IS 10. he best of my otifications a	perm to the nort rides. If initial ar sting closure. If T19S, R25E, p knowledge and nd perform corre	h of the p nalytical re the analyti oer NMO understance ctive actio	oroduced esults for ical result OSE, USO d that purs ons for rel	water tank TPH & BTE s are above t GS), Wellho suant to NM eases which	ts. Vertical and X are under the RRAL's a v ead Protection OCD rules and may endanger
Describe Cau There was a f ackhoe contr Describe Area The impacte orizontal del RAL's (site lan will be s <b>Area: No, Di</b> hereby certi egulations al ublic health	se of Proble ailure in the racted to re a Affected a ed area was lineation sa ranking is ubmitted to <b>stance to S</b> fy that the i I operators or the envir	em and Reme e pvc waterleg move all visus and Cleanup A s approxima mples will be 10) a Final Re the OCD. De Surface Wate information gi are required to ronment. The	dial Action Ta g line that con ally impacted Action Taken. tely 90 feet l taken and and eport, C-141 v epth to Groun r Body: >100 ven above is o report and/c acceptance o	aken.* nects the gunb soils. * by 20 feet ins alysis ran for T will be submitte nd Water: <10 10', SITE RAN true and complor file certain ref f a C-141 repo	ide of t PH, BT ed to the <b>0' (90'</b> <b>KING</b> ete to the ete to the ete so the the set of the set of t	the battery b EX and chlo e OCD reque , Section 7, IS 10. he best of my otifications a e NMOCD m	perm to the nort rides. If initial ar sting closure. If T19S, R25E, p knowledge and nd perform corre arked as "Final F	h of the p nalytical re the analyti ber NMO understand ctive actio Report" do	produced esults for ical result <b>OSE, USO</b> d that purs ons for rel- es not reli	water tank TPH & BTE s are above to GS), Wellho suant to NM eases which ieve the oper	ts. Vertical and EX are under the RRAL's a v ead Protection OCD rules and may endanger rator of liability
Describe Cau There was a f ackhoe contr Describe Area The impacte orizontal del RAL's (site lan will be s <b>Area: No, Di</b> hereby certi egulations al ublic health hould their o	se of Proble ailure in the racted to re a Affected a ed area was lineation sa ranking is ubmitted to stance to S fy that the i I operators or the enviro operations h	em and Reme e pvc waterleg move all visus and Cleanup A s approxima mples will be 10) a Final Re the OCD. De surface Wate information gi are required to ronment. The mave failed to a	dial Action Ta g line that con ally impacted Action Taken. tely 90 feet l taken and an eport, C-141 v epth to Groun r Body: >100 ven above is o report and/c acceptance o adequately inv	aken.* inects the gunb soils. * by 20 feet ins alysis ran for T will be submitte nd Water: <10 0', SITE RAN true and compl or file certain re f a C-141 repo vestigate and re	ide of t PH, BT ed to the <b>0' (90'</b> <b>KING</b> ete to the ete to the ete to the ete as the e	the battery b EX and chlo e OCD reque , Section 7, IS 10. the best of my otifications a e NMOCD m e contaminati	perm to the nort rides. If initial ar sting closure. If T19S, R25E, p knowledge and nd perform corre arked as "Final F on that pose a th	h of the p nalytical re the analyti per NMO understand ctive actio Report" do reat to gro	produced esults for ical result OSE, USO d that purs ons for rel- es not reli- ound water	water tank TPH & BTE s are above to GS), Wellho suant to NM eases which ieve the oper r, surface wa	ks. Vertical and EX are under the RRAL's a v ead Protection OCD rules and may endanger rator of liability ater, human hea
Describe Cau here was a f ackhoe contr Describe Area 'he impacte orizontal del RAL's (site lan will be s Area: No, Di hereby certi egulations al ublic health hould their or r the enviror	se of Proble ailure in the racted to re a Affected a ed area was lineation sa ranking is ubmitted to <b>istance to S</b> fy that the i I operators or the envir operations h mment. In a	em and Reme e pvc waterleg move all visus and Cleanup A s approxima mples will be 10) a Final Re the OCD. De surface Wate information gi are required to ronment. The mave failed to a	dial Action Ta g line that con ally impacted Action Taken. tely 90 feet l taken and and eport, C-141 v epth to Group r Body: >100 ven above is o report and/c acceptance o adequately inv OCD acceptan	aken.* inects the gunb soils. * by 20 feet ins alysis ran for T will be submitte nd Water: <10 0', SITE RAN true and compl or file certain re f a C-141 repo vestigate and re	ide of t PH, BT ed to the <b>0' (90'</b> <b>KING</b> ete to the ete to the ete to the ete as the e	the battery b EX and chlo e OCD reque , Section 7, IS 10. the best of my otifications a e NMOCD m e contaminati	perm to the nort rides. If initial ar sting closure. If T19S, R25E, p knowledge and nd perform corre arked as "Final F	h of the p nalytical re the analyti per NMO understand ctive actio Report" do reat to gro	produced esults for ical result OSE, USO d that purs ons for rel- es not reli- ound water	water tank TPH & BTE s are above to GS), Wellho suant to NM eases which ieve the oper r, surface wa	ks. Vertical and EX are under the RRAL's a v ead Protection OCD rules and may endanger rator of liability ater, human hea
Describe Cau There was a f packhoe contr Describe Area The impacte torizontal del RRAL's (site blan will be s Area: No, Di hereby certi egulations al public health hould their o or the enviror ederal, state,	se of Proble ailure in the racted to re a Affected a ed area was lineation sa ranking is ubmitted to <b>stance to S</b> fy that the i I operators or the envir operations h ment. In a or local law	em and Reme e pvc waterleg move all visus and Cleanup A s approxima mples will be 10) a Final Re the OCD. De surface Wate information gi are required to ronment. The wave failed to a ddition, NMC	dial Action Ta g line that con ally impacted Action Taken. tely 90 feet l taken and and eport, C-141 v epth to Group r Body: >100 ven above is o report and/c acceptance o adequately inv OCD acceptan	aken.* inects the gunb soils. * by 20 feet ins alysis ran for T will be submitte nd Water: <10 0', SITE RAN true and compl or file certain re f a C-141 repo vestigate and re	ide of t PH, BT ed to the <b>0' (90'</b> <b>KING</b> ete to the clease n rt by the mediate	the battery b EX and chlo e OCD reque , Section 7, IS 10. the best of my otifications a e NMOCD m e contaminati	perm to the nort rides. If initial ar sting closure. If T19S, R25E, p knowledge and nd perform corre arked as "Final F ton that pose a th re the operator of OIL CON	h of the p nalytical re the analyti oer NMO understand ctive actio Report" do reat to gro responsib	produced esults for ical result OSE, USO d that purs ons for rel- es not relives ound water builty for c	water tank TPH & BTE s are above to GS), Wellho suant to NM eases which ieve the oper r, surface wa compliance v	ks. Vertical and EX are under the RRAL's a v ead Protection OCD rules and may endanger rator of liability ater, human hea with any other
Describe Cau There was a f backhoe contr Describe Area The impacte torizontal del RRAL's (site blan will be s Area: No, Di hereby certi egulations al public health hould their o or the enviror ederal, state,	se of Proble ailure in the racted to re a Affected a ed area was lineation sa ranking is ubmitted to <b>istance to S</b> fy that the i I operators or the envir operations h mment. In a	em and Reme e pvc waterleg move all visus and Cleanup A s approxima mples will be 10) a Final Re the OCD. De surface Wate information gi are required to ronment. The wave failed to a ddition, NMC	dial Action Ta g line that con ally impacted Action Taken. tely 90 feet l taken and and eport, C-141 v epth to Group r Body: >100 ven above is o report and/c acceptance o adequately inv OCD acceptan	aken.* inects the gunb soils. * by 20 feet ins alysis ran for T will be submitte nd Water: <10 0', SITE RAN true and compl or file certain re f a C-141 repo vestigate and re	ide of t PH, BT ed to the <b>0' (90'</b> <b>KING</b> ete to the clease n rt by the mediate	the battery b EX and chlo e OCD reque , Section 7, IS 10. the best of my otifications a e NMOCD m e contaminati	perm to the nort rides. If initial ar sting closure. If T19S, R25E, p knowledge and nd perform corre arked as "Final F ton that pose a th re the operator of OIL CON	h of the p nalytical re the analyti oer NMO understand ctive actio Report" do reat to gro responsib	produced esults for ical result OSE, USO d that purs ons for rel- es not relives ound water builty for c	water tank TPH & BTE s are above to GS), Wellho suant to NM eases which ieve the oper r, surface wa compliance v	ks. Vertical and EX are under the RRAL's a v ead Protection OCD rules and may endanger rator of liability ater, human hea with any other
Describe Cau There was a f backhoe contribution Describe Area The impacte torizontal del RRAL's (site blan will be s Area: No, Di hereby certi egulations al bublic health hould their o bor the enviror ederal, state, Signature:	se of Proble ailure in the racted to re a Affected a ed area was lineation sa ranking is ubmitted to stance to S fy that the i Il operators or the envir operations h ment. In a or local law	em and Reme e pvc waterleg move all visus and Cleanup / s approxima mples will be 10) a Final Re the OCD. De surface Water information gi are required to ronment. The vare failed to a ddition, NMC ws and/or regu	dial Action Ta g line that con ally impacted Action Taken. tely 90 feet l taken and and eport, C-141 v epth to Group r Body: >100 ven above is o report and/c acceptance o adequately inv OCD acceptan	aken.* inects the gunb soils. * by 20 feet ins alysis ran for T will be submitte nd Water: <10 0', SITE RAN true and compl or file certain re f a C-141 repo vestigate and re	ide of f PH, BT ed to the <b>10' (90'</b> <b>KING</b> ete to the ete to the	the battery b EX and chlo e OCD reque , Section 7, IS 10. he best of my otifications a e NMOCD m e contaminations of the the the the oes not relieve	perm to the nort rides. If initial ar sting closure. If <b>T19S</b> , <b>R25E</b> , p knowledge and o nd perform corre arked as "Final F on that pose a th re the operator of <u>OIL CON</u> Sign	h of the p nalytical ro the analytic er NMO understand ctive actio Report" do responsib SERVA	oroduced esults for ical results OSE, USO d that purs ons for rel- ican or rel- ison or rel- iso	water tank TPH & BTE s are above to GS), Wellho suant to NM eases which ieve the oper r, surface wa compliance v	ks. Vertical and EX are under the RRAL's a v ead Protection OCD rules and may endanger rator of liability ater, human hea with any other
Describe Cau There was a f backhoe contribution Describe Area The impacte torizontal del RRAL's (site blan will be s Area: No, Di hereby certi egulations al public health hould their o or the enviror ederal, state, Signature:	se of Proble ailure in the racted to re a Affected a ed area was lineation sa ranking is ubmitted to stance to S fy that the i I operators or the envir operations h ment. In a or local law	em and Reme e pvc waterleg move all visus and Cleanup A s approximal mples will be 10) a Final Re to the OCD. De furface Wate information gi are required to ronment. The lave failed to a ddition, NMC ws and/or regu	dial Action Ta g line that con ally impacted Action Taken. tely 90 feet l taken and an eport, C-141 v epth to Group r Body: >100 ven above is o report and/c acceptance o adequately inv OCD acceptan llations.	aken.* inects the gunb soils. * by 20 feet ins alysis ran for T will be submitte nd Water: <10 0', SITE RAN true and compl or file certain re f a C-141 repo vestigate and re	ide of f PH, BT ed to the <b>10' (90'</b> <b>(KING</b> ete to the	the battery b EX and chlo e OCD reque , Section 7, IS 10. The best of my otifications a e NMOCD m e contaminations of the the oes not reliev	perm to the nort rides. If initial ar sting closure. If T19S, R25E, p knowledge and p nd perform corre arked as "Final F on that pose a th re the operator of <u>OIL CON</u> Sign Environmental S	h of the p nalytical ro the analytic er NMO understand ctive actio responsib responsib SERVA ed By	oroduced esults for ical results OSE, USO d that purs ons for rel- bound water oility for c ATION	water tank TPH & BTF s are above to GS), Wellho suant to NM eases which ieve the oper r, surface was compliance v DIVISIC	ks. Vertical and EX are under the RRAL's a v ead Protection OCD rules and may endanger rator of liability ater, human hea with any other
Describe Cau There was a f backhoe contr Describe Area The impacter horizontal del RRAL's (siter blan will be s Area: No, Di hereby certi- regulations al bublic health should their of or the environ rederal, state, Signature:	se of Proble ailure in the racted to re a Affected a ed area was lineation sa ranking is ubmitted to stance to S fy that the i I operators or the envir operations h ment. In a or local law	em and Reme e pvc waterleg move all visus and Cleanup / s approxima mples will be 10) a Final Re the OCD. De surface Water information gi are required to ronment. The vare failed to a ddition, NMC ws and/or regu	dial Action Ta g line that con ally impacted Action Taken. tely 90 feet l taken and an eport, C-141 v epth to Group r Body: >100 ven above is o report and/c acceptance o adequately inv OCD acceptan llations.	aken.* inects the gunb soils. * by 20 feet ins alysis ran for T will be submitte nd Water: <10 0', SITE RAN true and compl or file certain re f a C-141 repo vestigate and re	ide of f PH, BT ed to the <b>10' (90'</b> <b>KING</b> ete to the ete to the	the battery b EX and chlo e OCD reque , Section 7, IS 10. he best of my otifications a e NMOCD m e contaminations of the the oes not reliev Approved by Approval Da	term to the nort rides. If initial ar sting closure. If <b>T19S</b> , <b>R25E</b> , p knowledge and to nd perform corre arked as "Final F on that pose a th re the operator of <u>OIL CON</u> Sign Environmental S te: <u>VIAUS</u>	h of the p nalytical ro the analytic er NMO understand ctive actio responsib responsib SERVA ed By	oroduced esults for ical results OSE, USO d that purs ons for rel- ican or rel- ison or rel- iso	water tank TPH & BTF s are above to GS), Wellho suant to NM eases which ieve the oper r, surface was compliance v DIVISIC	ks. Vertical and EX are under the RRAL's a v ead Protection OCD rules and may endanger rator of liability ater, human hea with any other
Describe Cau There was a f backhoe contr Describe Area The impacter horizontal del RRAL's (siter blan will be s Area: No, Di hereby certi- regulations al bublic health should their of or the environ rederal, state, Signature: Printed Name Title: Rep Sa	se of Proble ailure in the racted to re a Affected a ed area was lineation sa ranking is ubmitted to stance to S fy that the i Il operators or the envir operations h ment. In a or local law created area e: Chase Se	em and Reme e pvc waterleg move all visus and Cleanup A s approximal mples will be 10) a Final Re to the OCD. De furface Wate information gi are required to ronment. The lave failed to a ddition, NMC ws and/or regu	dial Action Ta g line that con ally impacted Action Taken. tely 90 feet l taken and an eport, C-141 v epth to Group r Body: >100 ven above is o report and/c acceptance o adequately inv OCD acceptan ilations.	aken.* inects the gunb soils. * by 20 feet ins alysis ran for T will be submitte nd Water: <10 0', SITE RAN true and compl or file certain re f a C-141 repo vestigate and re	ide of f PH, BT ed to the <b>10' (90'</b> <b>KING</b> ete to the ete to the	the battery b EX and chlo e OCD reque , Section 7, IS 10. The best of my otifications a e NMOCD m e contaminations of the the oes not reliev	term to the nort rides. If initial ar sting closure. If the T19S, R25E, p knowledge and the nd perform corre arked as "Final F on that pose a the re the operator of <u>OIL CON</u> Signe Environmental S te: <b>1/16/18</b> f Approval:	h of the p halytical re- the analytic er NMO understand ctive actio Report" do responsib SERV/ ed By Specialist: E	oroduced esults for ical results OSE, USO d that purs ons for rel- bound water oility for c ATION	water tank TPH & BTE s are above f GS), Wellhe suant to NM eases which ieve the oper r, surface wa compliance v DIVISIC	As. Vertical and EX are under the RRAL's a vertice and Protection OCD rules and may endanger rator of liability ater, human hea with any other DN
Describe Cau There was a f backhoe contr Describe Area The impacter horizontal del RRAL's (siter blan will be s Area: No, Di hereby certi- regulations al bublic health should their of or the environ rederal, state, Signature: Printed Name Title: Rep Sa	se of Proble ailure in the racted to re a Affected a ed area was lineation sa ranking is ubmitted to stance to S fy that the i Il operators or the envir operations h ment. In a or local law c. Chase Se afety & Enve	em and Reme e pvc waterleg move all visua and Cleanup A s approximal mples will be 10) a Final Re to the OCD. De Surface Wate information gi are required to ronment. The lave failed to a ddition, NMC ws and/or regu	dial Action Ta g line that con ally impacted Action Taken. tely 90 feet l taken and an eport, C-141 v epth to Group r Body: >100 ven above is o report and/c acceptance o adequately inv )CD acceptan lations.	aken.* inects the gunb soils. * by 20 feet ins alysis ran for T will be submitte nd Water: <10 0', SITE RAN true and compl or file certain re f a C-141 repo vestigate and re	ide of f PH, BT ed to the <b>10' (90'</b> <b>KING</b> ete to the ete to the	the battery b EX and chlo e OCD reque , Section 7, IS 10. he best of my otifications a e NMOCD m e contaminations of the the oes not reliev Approved by Approval Da	term to the nort rides. If initial ar sting closure. If <b>T19S</b> , <b>R25E</b> , p knowledge and to nd perform corre arked as "Final F on that pose a th re the operator of <u>OIL CON</u> Sign Environmental S te: <u>VIAUS</u>	h of the p halytical re- the analytic er NMO understand ctive actio Report" do responsib SERV/ ed By Specialist: E	oroduced esults for ical results OSE, USO d that purs ons for rel- bound water oility for c ATION	water tank TPH & BTF s are above to GS), Wellho suant to NM eases which ieve the oper r, surface was compliance v DIVISIC	As. Vertical and EX are under the RRAL's a vertice and Protection OCD rules and may endanger rator of liability ater, human hea with any other DN

Page 13 of 172

.

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.457Le 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 <u>division-approved corrective action</u> 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 <u>2</u> office in <u>ARTESIA</u> 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<sub>6</sub> thru C<sub>36</sub>), 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<sub>6</sub> thru C<sub>36</sub>), 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></chase_settle@eogresources.com>
Sent:	Friday, January 19, 2018 8:10 AM
То:	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. 4<sup>th</sup> Street Artesia, NM 88210 575-748-4171 (Office) 575-703-6537 (Cell)





State of New Mexico Energy Minerals and Natural **Resources** Department

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

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

# **Release Notification**

### **Responsible Party**

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

### **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
Р	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)
<u>by OCD: 2/3</u>	nipples failed on the line between gun barrel and pro	duced water tank.
Received		

IIII C-141	State of New M	exico	Transfer to the	
ne 2	Oil Conservation Division		Incident ID District RP	NAB1834454137 2RP-5094
orm C-141 age 2		and the second	Facility ID	2117-3084
			Application II	pAB1834453495
			Tippiteution in	
Was this a major release as defined by 19.15.29.7(A) NMAC? Yes \No **	If YES, for what reason(s) do			se? **
If YES, was immediate	** Operator failed to supply the a notice given to the OCD? By wh	nswer to this question rega nom? To whom? Whe	rding the major release. Y C n and by what means (phon	e, email, etc)? **
** Operator failed to su	upply the answer to these ques	tions 18		
		Initial Response		
The responsible	e party must undertake the following act			vould result in injury
M The impacted area h	as been secured to protect huma	in nearth and the enviro	innent.	
All free liquids and	nave been contained via the use o recoverable materials have been ed above have <u>not</u> been undertak	removed and managed		nent devices.
All free liquids and If all the actions describe Per 19.15.29.8 B. (4) NM	recoverable materials have been ed above have <u>not</u> been undertak MAC the responsible party may	removed and managed en, explain why: commence remediation	appropriately.	y of a release. If remediatic
All free liquids and If all the actions describe Per 19.15.29.8 B. (4) NM has begun, please attach	recoverable materials have been ed above have <u>not</u> been undertak	removed and managed en, explain why: commence remediation If remedial efforts hav	appropriately. immediately after discover e been successfully comple	y of a release. If remediatic
All free liquids and If all the actions describe Per 19.15.29.8 B. (4) NM has begun, please attach within a lined containme I hereby certify that the inf regulations all operators ar- public health or the enviror failed to adequately investi	recoverable materials have been ed above have <u>not</u> been undertak MAC the responsible party may a narrative of actions to date.	removed and managed en, explain why: commence remediation If remedial efforts hav i) NMAC), please attac mplete to the best of my k in release notifications and eport by the OCD does no nat pose a threat to ground	appropriately. immediately after discover e been successfully comple h all information needed fo nowledge and understand that I perform corrective actions fo t relieve the operator of liabili water, surface water, human h	y of a release. If remediation ted or if the release occurrent r closure evaluation. pursuant to OCD rules and r releases which may endanger ty should their operations have ealth or the environment. In
All free liquids and If all the actions describe Per 19.15.29.8 B. (4) NM has begun, please attach within a lined containme I hereby certify that the inf regulations all operators ar- public health or the enviror failed to adequately investi addition, OCD acceptance	MAC the responsible party may a narrative of actions to date. ent area (see 19.15.29.11(A)(5)(a ormation given above is true and co e required to report and/or file certai ment. The acceptance of a C-141 r gate and remediate contamination th of a C-141 report does not relieve th	removed and managed en, explain why: commence remediation If remedial efforts hav i) NMAC), please attac mplete to the best of my k in release notifications and eport by the OCD does no nat pose a threat to ground the operator of responsibili	appropriately. immediately after discover e been successfully comple h all information needed fo nowledge and understand that l perform corrective actions fo t relieve the operator of liabili water, surface water, human h ty for compliance with any oth	y of a release. If remediation ted or if the release occurrent r closure evaluation. pursuant to OCD rules and r releases which may endanger ty should their operations have ealth or the environment. In
All free liquids and If all the actions describe Per 19.15.29.8 B. (4) NM has begun, please attach within a lined containme I hereby certify that the inf regulations all operators are public health or the environ failed to adequately investi addition, OCD acceptance and/or regulations.	MAC the responsible party may a narrative of actions to date. ent area (see 19.15.29.11(A)(5)(a ormation given above is true and co e required to report and/or file certai ment. The acceptance of a C-141 r gate and remediate contamination th of a C-141 report does not relieve th	removed and managed en, explain why: commence remediation If remedial efforts hav i) NMAC), please attac mplete to the best of my k in release notifications and eport by the OCD does no nat pose a threat to ground the operator of responsibili	appropriately. immediately after discover e been successfully comple h all information needed fo nowledge and understand that I perform corrective actions fo t relieve the operator of liabili water, surface water, human h ty for compliance with any oth	y of a release. If remediation ted or if the release occurrent r closure evaluation. pursuant to OCD rules and r releases which may endanger ty should their operations have ealth or the environment. In
All free liquids and If all the actions describe Per 19.15.29.8 B. (4) NM has begun, please attach within a lined containme I hereby certify that the inf regulations all operators are public health or the environ failed to adequately investi addition, OCD acceptance and/or regulations. Printed Name: <u>Chase Set</u>	MAC the responsible party may a narrative of actions to date. ent area (see 19.15.29.11(A)(5)(a formation given above is true and co e required to report and/or file certai ument. The acceptance of a C-141 r gate and remediate contamination th of a C-141 report does not relieve the the Title: <u>Rep</u>	removed and managed een, explain why: commence remediation If remedial efforts hav b) NMAC), please attac mplete to the best of my k in release notifications and eport by the OCD does no hat pose a threat to ground te operator of responsibili Safety & Environmenta Date:	appropriately. immediately after discover e been successfully comple h all information needed fo nowledge and understand that l perform corrective actions fo t relieve the operator of liabili water, surface water, human h ty for compliance with any oth	y of a release. If remediation ted or if the release occurrent r closure evaluation. pursuant to OCD rules and r releases which may endanger ty should their operations have ealth or the environment. In
All free liquids and the actions described If all the actions described Per 19.15.29.8 B. (4) NM has begun, please attach within a lined containmed I hereby certify that the inf regulations all operators are public health or the environ failed to adequately investi addition, OCD acceptance and/or regulations. Printed Name: Chase Sett Signature:	MAC the responsible party may a narrative of actions to date. ent area (see 19.15.29.11(A)(5)(a formation given above is true and co e required to report and/or file certai ument. The acceptance of a C-141 r gate and remediate contamination th of a C-141 report does not relieve the the Title: <u>Rep</u>	removed and managed een, explain why: commence remediation If remedial efforts hav b) NMAC), please attac mplete to the best of my k in release notifications and eport by the OCD does no hat pose a threat to ground te operator of responsibili Safety & Environmenta Date:	appropriately. immediately after discover e been successfully comple h all information needed for nowledge and understand that l perform corrective actions fo t relieve the operator of liabili water, surface water, human h ty for compliance with any oth d II //-28-/8	y of a release. If remediation ted or if the release occurrent r closure evaluation. pursuant to OCD rules and r releases which may endanger ty should their operations have ealth or the environment. In

•

Oil Conservation Division

	Page 19 of 1/2	
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?	<u>&gt;75'</u> (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 <b>not</b> 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

Page 3

- Data table of soil contaminant concentration data
- $\boxtimes$  Depth to water determination
- Determination of water sources and significant watercourses within <sup>1</sup>/<sub>2</sub>-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.

	9:45:09 AM State of	Now Mariaa			Page 20 of			
				Incident ID	nAB1801936658			
age 4	Oil Conser	vation Division	1	District RP 2RP-				
				Facility ID				
				Application ID				
regulations all operators are re- public health or the environm failed to adequately investigat addition, OCD acceptance of and/or regulations.	and remediate contam a C-141 report does not	C-141 report by the nation that pose a the operator	e OCD does not relieve the nreat to groundwater, surfa of responsibility for comp	e operator of liability sh ice water, human health liance with any other fe	ould their operations have or the environment. In			
Printed Name: <u>Chase Sett</u> Signature: <u>Chase</u>			Date: 02/03/202					
Signature: <u>Chase</u>		Telephone:						

Oil Conservation Division

<u>Remediation Plan Checklist</u>: Each of the following items must be included in the plan.

I use al of 1/2	Page	21	of	1	7	2
-----------------	------	----	----	---	---	---

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

# **Remediation 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: <u>Chase</u> Settle Date: 02/03/2023 Telephone: email: Chase\_Settle@eogresources.com 575-748-1471 **OCD Only** Received by: Date: Approved Approved with Attached Conditions of Approval Denied Deferral Approved Signature: Date:

Oil Conservation Division

	Page 22 of 1	12
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?	<u>&gt;75'</u> (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 <b>not</b> 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

Page 3

- Data table of soil contaminant concentration data
- $\boxtimes$  Depth to water determination
- Determination of water sources and significant watercourses within <sup>1</sup>/<sub>2</sub>-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.

Received by OCD: 2/3/2	2023 9:45:09 AM State of New Mexico			Page 23 of 172		
			Incident ID	nAB1834454137		
Page 4	Oil Conservation Divisi	on	District RP	2RP-5094		
			Facility ID			
			Application ID			
regulations all operators public health or the envi failed to adequately inve addition, OCD acceptan and/or regulations. Printed Name: <u>Chase</u> Signature: <u>Chase</u>	se Settle	e notifications and perform co the OCD does not relieve the a threat to groundwater, surfa	prrective actions for rele coperator of liability sho ce water, human health iance with any other feo Environmental Sr	ases which may endanger ould their operations have or the environment. In		
OCD Only Received by:	Jocelyn Harimon	Date: <u>02/</u>	03/2023			

Oil Conservation Division

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

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

# **Remediation 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** Jocelyn Harimon Date: 02/03/2023 Received by: 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

Received by OCD: 2/3/2023 9:45:09 AM



Released to Imaging: 6/2/2023 11:14:34 AM

### Page 27 of 172





Released to Imaging: 6/2/2023 11:14:34 AM

### Page 29 of 172





Released to Imaging: 6/2/2023 11:14:34 AM

Received by OCD: 2/3/2023 9:45:09 AM





# 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) TPH TPH DRO DEPTH ETHYL-TOTAL TOTAL TPH GRO TPH MRO TPH SAMPLE ID DATE BENZENE TOLUENE (GRO+DRO+ CHLORIDE (FT) BENZENE XYLENES BTEX C6-C10 C10-C28 C28-C36 (GRO+DRO) MRO) April 10-11, 2019 Soil Borings L1R / 35' 4/10/2019 35 <0.025 < 0.050 < 0.050 < 0.10 <0.225 <5.0 <64.9 <9.9 <50 <14.9 3,100 L1R / 40' 4/10/2019 <0.025 <0.048 <0.225 40 < 0.048 < 0.097 <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 <13.8 410 <58.8 L2R / 0' 4/11/2019 < 0.024 < 0.048 < 0.048 < 0.097 < 0.0217 0 <4.8 <45 <13.8 <58.8 <9.0 1,700 12R/20 4/11/2019 <0.211 20 < 0.023 < 0.047 < 0.047 < 0.094 <4.7 <13.7 <58.7 1,700 <9.0 <45 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 <0.212 < 0.047 < 0.047 < 0.094 <0.212 30 <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 <13.5 <58.5 140 <8.9 <45 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' <0.225 9/3/2019 12 <0.025 < 0.050 < 0.050 <0.100 <5.0 <9.3 <46 <9.3 <60.3 2.900 <0.217 TP-1-16 9/3/2019 <0.024 <0.048 <0.048 < 0.097 16 <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 <44 <8.8 <57.7 <8.8 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 <0.025 < 0.050 < 0.050 < 0.099 <0.224 16 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 <9.6 <62.5 12,000 <48 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 < 0.024 < 0.047 < 0.047 <0.213 400 5 <0.095 <4.7 <8.7 <44 <8.7 <57.4 TP-4-12 9/4/2019 12 <0.023 < 0.047 <0.047 < 0.093 <0.210 300 <4.7 <9.6 <48 <9.6 <62.3 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 6,317 350 4.200 2,100 4,217 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 <60

Released

to

Imaging:

6/2/2023

11:14:34

AM

Page 34 of 172

<10

<50

<10

<64.9

				R									
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)	CHLORI
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	5 12	<0.024	<0.048	<0.048	<0.090	<0.210	<4.6	<0.5 <10	<42	<0.5	<00.3	430
	0, 1/2010	12	101020	4010 10	401010	101000	10.200		10				400
/ 18, 2022 Soil Borings	<b>!</b>	Į		ļ	Į			ļ	Į	Į			
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
		1	1	1	1	1		1	1	1		1	
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
		1			1								
ust 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
	8/00/0000	41	-0.000	-0.047	-0.047	-0.000	-0.00	. 4 7	.4 E	-40	,4 E	-40	-00
RTP-3/1 RTP-3/4	8/22/2022 8/22/2022	1' 4'	<0.023 <0.024	<0.047 <0.049	<0.047 <0.049	<0.093 <0.097	<0.09 <0.10	<4.7	<15 <14	<49 <47	<15 <14	<49 <47	<60 440
RTP-3/4 RTP-3/6	8/22/2022	4 6'	<0.024	<0.049	<0.049	<0.097	<0.10	<4.9 <4.9	<14	<47 <45	<14 <13	<47 <45	440
111-0/0	0/22/2022	0	NU.023	<b>NO.049</b>	NU.UT3	<0.000	NO. 10	<b>N4.3</b>	×13	<b>N40</b>	×13	N#J	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	<0.000	<0.098	<0.10	<4.9	<14	<46	<14	<46	<00 80
			1										50
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

Released to Imaging: 6/2/2023 11:14:34 AM

.

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 by a Release (G		s Impacted	10				50					100	600
19.15.29.13 NMAC Recla (0'-4' Soils O			10 <sup>3</sup>				<b>50</b> <sup>3</sup>					100 <sup>3</sup>	600
Notes:													
1. Results exceeding the Table 1 Closu	Results exceeding the Table 1 Closure Criteria are presented in bold type and are highlighted yellow.												

Released to Imaging: 6/2/2023 11:14:34 AM

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

Esri HERE iPC

### New Mexico Office of the State Engineer Point of Diversion Summary

		· .	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)			,	NAD83 U		
	Number	Q64 Q	16 Q4			0	Х	Y	
RA	06418	1	2 3	17 19	S	25E 5	45925	3613710*	
Driller License:	406	Driller C	Company	y: 1	[ID]	WELL, CL	YDE J.		
Driller Name:									
Drill Start Date:	12/11/1978	Drill Fin	ish Date	e:	12	/18/1978	Ph	ug Date:	
Log File Date:	12/26/1978	PCW Ro	v Date:				So	urce:	Shallow
Pump Type:		Pipe Dis	charge S	Size:			Es	timated Yield	:
Casing Size:	7.00	Depth W	ell:		12	0 feet	De	pth Water:	72 feet
Wate	er Bearing Strati	fications:	Тор	Bott	om	Descripti	on		
			72	2	75	Shallow A	Alluviun	n/Basin Fill	
			106	5 1	12	Shallow A	Alluviun	n/Basin Fill	
	Casing Per	forations:	Тор	Bott	om				
			51	. 1	09				

\*UTM location was derived from PLSS - see Help

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

10/8/21 12:23 PM

POINT OF DIVERSION SUMMARY

#### New Mexico Office of the State Engineer **Point of Diversion Summary** (quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) (NAD83 UTM in meters) Well Tag **POD** Number Q64 Q16 Q4 Sec Tws Rng Х 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:**

715 feet

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

7.00

**Casing Size:** 

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

Depth Well:

10/8/21 1:05 PM

POINT OF DIVERSION SUMMARY

**Depth Water:** 





Click to hideNews Bulletins

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

Groundwater levels for the Nation

Important: <u>Next Generation Monitoring Location Page</u>

#### 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 V 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**

<u>Table of data</u>

Tab-separated data

<u>Graph of data</u>

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

#### Accessibility FOIA Privacy Policies and Notices

U.S. Department of the Interior | U.S. Geological Survey Title: Groundwater for USA: Water Levels URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team Page Last Modified: 2021-10-08 15:51:31 EDT 0.61 0.53 nadww02





Click to hideNews Bulletins

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

Groundwater levels for the Nation

Important: <u>Next Generation Monitoring Location Page</u>

#### 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 V 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	

Output formats



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

#### Accessibility FOIA Privacy Policies and Notices

U.S. Department of the Interior | U.S. Geological Survey Title: Groundwater for USA: Water Levels URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team Page Last Modified: 2021-10-08 15:49:26 EDT 0.55 0.48 nadww02





Click to hideNews Bulletins

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

Groundwater levels for the Nation

Important: <u>Next Generation Monitoring Location Page</u>

#### 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 V 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**

<u>Table of data</u>

Tab-separated data

<u>Graph of data</u>

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

#### Accessibility FOIA Privacy Policies and Notices

U.S. Department of the Interior | U.S. Geological Survey Title: Groundwater for USA: Water Levels URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: <u>USGS Water Data Support Team</u> Page Last Modified: 2021-10-08 15:55:24 EDT 0.59 0.5 nadww02





Click to hideNews Bulletins

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

0

Groundwater levels for the Nation

Important: <u>Next Generation Monitoring Location Page</u>

#### 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 V 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.





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

#### Accessibility FOIA Privacy Policies and Notices

U.S. Department of the Interior | U.S. Geological Survey Title: Groundwater for USA: Water Levels URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: <u>USGS Water Data Support Team</u> Page Last Modified: 2021-10-08 15:22:52 EDT 0.71 0.63 nadww02





Click to hideNews Bulletins

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

Groundwater levels for the Nation

Important: <u>Next Generation Monitoring Location Page</u>

#### 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 V 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.





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

Accessibility FOIA Privacy Policies and Notices

U.S. Department of the Interior | U.S. Geological Survey Title: Groundwater for USA: Water Levels URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: <u>USGS Water Data Support Team</u> 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



 $\times$ 

Aggregate, Stone etc.

#### **Released to Imaging: 6/2/2023 11:14:34 AM**

Department of Defense

## 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**



June 02, 2022

Will Kierdorf EOG 105 South Fourth Street Artesia, NM 88210 TEL: FAX: Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

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,

Ander

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

### Hall Environmental Analysis Laboratory, Inc.

Lab Order 2205923

Date Reported: 6/2/2022

CLIENT: EOG		Cl	ient Sample II	D: SB	1-23	
<b>Project:</b> Roy SWD 3	Collection Date: 5/18/2022 8:37:00 AM					
Lab ID: 2205923-001	Matrix: SOIL		<b>Received Dat</b>	<b>e:</b> 5/2	20/2022 7:05:00 AM	
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: NAI
Chloride	1400	60	mg/Kg	20	5/25/2022 7:29:55 PM	67690
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analys	t: <b>SB</b>
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	E				Analys	t: 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					Analys	t: 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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 1 of 27

### Hall Environmental Analysis Laboratory, Inc.

Lab Order 2205923

Date Reported: 6/2/2022

CLIENT: EOG	Client Sample ID: SB1-38					
<b>Project:</b> Roy SWD 3	Collection Date: 5/18/2022 9:35:00 AM					
Lab ID: 2205923-002	Matrix: SOIL	I	Received Dat	e: 5/2	20/2022 7:05:00 AM	
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	: NAI
Chloride	670	60	mg/Kg	20	5/25/2022 7:42:16 PM	67690
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS				Analys	: 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 RANG	θE				Analys	: 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					Analys	: 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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank В
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 2 of 27

Hall Environmental Analysis Laboratory, Inc.	Hall	<b>Environmental</b>	Analysis	Laboratory.	Inc.
--	------	----------------------	----------	-------------	------

Lab Order 2205923

Date Reported: 6/2/2022

CLIENT: EOG Project: Roy SWD 3	Client Sample ID: SB1-39 Collection Date: 5/18/2022 9:36:00 AM						
Lab ID: 2205923-003	Matrix: SOIL				20/2022 7:05:00 AM		
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS					Analys	t: NAI	
Chloride	590	60	mg/Kg	20	5/25/2022 7:54:37 PM	67690	
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS				Analys	t: <b>SB</b>	
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 RANG	ЭЕ				Analys	t: 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					Analys	t: 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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 3 of 27

### Hall Environmental Analysis Laboratory, Inc.

Lab Order 2205923

Date Reported: 6/2/2022

CLIENT: EOG		Cli	ent Sample II	): SE	31-40	
Project: Roy SWD 3		C	Collection Date	e: 5/1	18/2022 9:37:00 AM	
Lab ID: 2205923-004	Matrix: SOIL		Received Date	e: 5/2	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	E				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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 4 of 27

Hall Environmental Analysis Laboratory, Inc.	Hall	<b>Environmental</b>	Analysis	Laboratory.	Inc.
--	------	----------------------	----------	-------------	------

Lab Order 2205923

Date Reported: 6/2/2022

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		<b>Received Dat</b>	e: 5/2	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	0 5/26/2022 10:36:38 AM	67690	
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS				Analyst	:: <b>SB</b>	
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 RANG	<b>BE</b>				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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank В
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 5 of 27

### Hall Environmental Analysis Laboratory, Inc.

Lab Order 2205923

Date Reported: 6/2/2022

CLIENT: EOG		Cli	ient Sample II	D: SE	32-47	
Project: Roy SWD 3		(	Collection Dat	<b>e:</b> 5/	18/2022 11:57:00 AM	
Lab ID: 2205923-006	Matrix: SOIL		<b>Received Dat</b>	<b>e:</b> 5/2	20/2022 7:05:00 AM	
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: NAI
Chloride	750	60	mg/Kg	20	5/25/2022 8:56:19 PM	67690
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analys	t: <b>SB</b>
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 RANG	E				Analys	t: 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					Analys	t: 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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 6 of 27

### Hall Environmental Analysis Laboratory, Inc.

Lab Order 2205923

Date Reported: 6/2/2022

CLIENT: EOG		Cli	ient Sample II	D: SE	32-48	
Project: Roy SWD 3		(	Collection Dat	<b>e:</b> 5/2	18/2022 11:58:00 AM	
Lab ID: 2205923-007	Matrix: SOIL		<b>Received Dat</b>	<b>e:</b> 5/2	20/2022 7:05:00 AM	
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: NAI
Chloride	310	60	mg/Kg	20	5/25/2022 9:08:40 PM	67690
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS				Analys	t: <b>SB</b>
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 RAN	GE				Analys	t: 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					Analys	t: 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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank В
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 7 of 27

### Hall Environmental Analysis Laboratory, Inc.

Lab Order 2205923

Date Reported: 6/2/2022

CLIENT: EOG		Cli	ent Sample II	)• SF	37_49	
Project: Roy SWD 3			_		18/2022 11:59:00 AM	
Lab ID: 2205923-008	Matrix: SOIL		Received Dat	e: 5/2	20/2022 7:05:00 AM	
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: NAI
Chloride	300	60	mg/Kg	20	5/25/2022 9:21:00 PM	67690
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS				Analys	t: <b>SB</b>
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 RANG	<b>BE</b>				Analys	t: 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					Analys	t: 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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 8 of 27

Hall Environmental Analys	sis Laboratory,	Inc.
---------------------------	-----------------	------

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		<b>Received Dat</b>	<b>e:</b> 5/2	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 RANG	E ORGANICS				Analyst	: <b>SB</b>	
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 RANG	<b>BE</b>				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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank В
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 9 of 27

### Hall Environmental Analysis Laboratory, Inc.

Lab Order 2205923

Date Reported: 6/2/2022

CLIENT: EOG	Client Sample ID: SB3-4							
<b>Project:</b> Roy SWD 3	Collection Date: 5/18/2022 1:04:00 PM							
Lab ID: 2205923-010	Matrix: SOIL		Received Date	e: 5/2	20/2022 7:05:00 AM			
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch		
EPA METHOD 300.0: ANIONS					Analys	: NAI		
Chloride	130	60	mg/Kg	20	5/25/2022 10:35:03 PM	67699		
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analys	: 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	E				Analys	: 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					Analys	: 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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 10 of 27

### Hall Environmental Analysis Laboratory, Inc.

Lab Order 2205923

Date Reported: 6/2/2022

CLIENT: EOG		Client Sample ID: SB3-14				
Project: Roy SWD 3   Lab ID: 2205923-011	Collection Date: 5/18/2022 1:14:00 PM   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 RANG	E				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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank В
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 11 of 27

### Hall Environmental Analysis Laboratory, Inc.

Lab Order 2205923

Date Reported: 6/2/2022

CLIENT: EOG	Client Sample ID: SB3-29					
Project: Roy SWD 3		(	Collection Dat	e: 5/	18/2022 1:31:00 PM	
Lab ID: 2205923-012	Matrix: SOIL		<b>Received Dat</b>	e: 5/2	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 RANG	E 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 RANG	<b>GE</b>				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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank В
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 12 of 27

Hall Environmental Analys	sis Laboratory,	Inc.
---------------------------	-----------------	------

Lab Order 2205923

Date Reported: 6/2/2022

CLIENT: EOG	Client Sample ID: SB3-30					
<b>Project:</b> Roy SWD 3		(	Collection Dat	e: 5/	18/2022 1:32:00 PM	
Lab ID: 2205923-013	Matrix: SOIL		<b>Received Dat</b>	<b>e:</b> 5/2	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 RANG	<b>GE ORGANICS</b>				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 RAN	GE				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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank В
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 13 of 27

Hall Environmental Analys	sis Laboratory,	Inc.
---------------------------	-----------------	------

Lab Order 2205923

Date Reported: 6/2/2022

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		<b>Received Dat</b>	<b>e:</b> 5/2	20/2022 7:05:00 AM		
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS					Analys	: NAI	
Chloride	1300	59	mg/Kg	20	5/25/2022 11:49:07 PM	67699	
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS				Analys	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 RAN	IGE				Analys	: 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					Analys	: 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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank В
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 14 of 27
## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2205923

Date Reported: 6/2/2022

CLIENT: EOG Project: Roy SWD 3	Client Sample ID: SB4-15 Collection Date: 5/19/2022 7:45:00 AM					
Lab ID: 2205923-015	Matrix: SOIL		Received Date	e: 5/2	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	E 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 RANG	ε				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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank В
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 15 of 27

Hall Environmental Analysis Laboratory, Inc.	Hall	<b>Environmental</b>	Analysis	Laboratory.	Inc.
--	------	----------------------	----------	-------------	------

Lab Order 2205923

Date Reported: 6/2/2022

CLIENT: EOG		Cl	ient Sample II	D: SB	34-20	
<b>Project:</b> Roy SWD 3	Collection Date: 5/19/2022 7:50:00 AM					
Lab ID: 2205923-016	Matrix: SOIL		<b>Received Dat</b>	<b>e:</b> 5/2	20/2022 7:05:00 AM	
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: NAI
Chloride	250	59	mg/Kg	20	5/26/2022 12:13:48 AM	67699
EPA METHOD 8015M/D: DIESEL RANGI	E ORGANICS				Analys	t: 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 RANG	θE				Analys	t: 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					Analys	t: 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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank В
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 16 of 27

Hall Environmental Analysis Laboratory, Inc.	Hall	<b>Environmental</b>	Analysis	Laboratory.	Inc.
--	------	----------------------	----------	-------------	------

Lab Order 2205923

Date Reported: 6/2/2022

CLIENT: EOG		Cli	ient Sample II	D: SB	4-30	
Project: Roy SWD 3	<b>Collection Date:</b> 5/19/2022 8:00:00					
Lab ID: 2205923-017	Matrix: SOIL		<b>Received Dat</b>	<b>e:</b> 5/2	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 RAN	GE 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 RAI	NGE				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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 17 of 27

Hall Environmental Analysis Laboratory, Inc.	Hall	<b>Environmental</b>	Analysis	Laboratory.	Inc.
--	------	----------------------	----------	-------------	------

Lab Order 2205923

Date Reported: 6/2/2022

CLIENT: EOG			ient Sample II			
<b>Project:</b> Roy SWD 3	Collection Date: 5/19/2022 8:46:00 AM					
Lab ID: 2205923-018	Matrix: SOIL		<b>Received Dat</b>	<b>e:</b> 5/2	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 RANG	E				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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank В
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 18 of 27

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2205923

Date Reported: 6/2/2022

CLIENT: EOG		Cl	ient Sample II	D: SE	35-38	
<b>Project:</b> Roy SWD 3		(	Collection Dat	<b>e:</b> 5/	19/2022 9:20:00 AM	
Lab ID: 2205923-019	Matrix: SOIL		<b>Received Dat</b>	<b>e:</b> 5/2	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 RANG	E 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 RANG	GE				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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 19 of 27

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2205923

Date Reported: 6/2/2022

CLIENT: EOG		Cli	ent Sample II	): SE	35-39	
<b>Project:</b> Roy SWD 3	Collection Date: 5/19/2022 9:21:00 AM					
Lab ID: 2205923-020	Matrix: SOIL		Received Date	e: 5/2	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 RANG	E				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. 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
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank В
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 20 of 27

Hall Environmental Analys	sis Laboratory,	Inc.
---------------------------	-----------------	------

Lab Order 2205923

Date Reported: 6/2/2022

CLIENT: EOG		Cl	ient Sample II	D: SE	35-40	
Project: Roy SWD 3		(	Collection Dat	<b>e:</b> 5/2	19/2022 9:22:00 AM	
Lab ID: 2205923-021	Matrix: SOIL		<b>Received Dat</b>	<b>e:</b> 5/2	20/2022 7:05:00 AM	
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: NAI
Chloride	380	60	mg/Kg	20	5/26/2022 1:15:33 AM	67699
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS				Analys	t: 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 RAI	NGE				Analys	t: 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					Analys	t: 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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- ND PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits Sample pH Not In Range
- Р
- RL Reporting Limit

Page 21 of 27

# QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Page 22 of 27

Analyte detected in the associated Method Blank

Analyte detected below quantitation limits

В

Е

J

Р

RL

Estimated value

Reporting Limit

Sample pH Not In Range

WO#:	2205923
	00 T 00

02-Jun-22

Client: Project:	EOG Roy SWD	3									
Sample ID:	MB-67690	SampType	mh	lk	Tes	stCode: FI	PA Method	300.0: Anions			
Client ID:	PBS	Batch ID				RunNo: 8			-		
Prep Date:	5/25/2022	Analysis Date				SeqNo: 3		Units: mg/K	a		
	00							•	•	RPDLimit	Qual
Analyte Chloride		Result P	QL 1.5	SPK value	SPK Ref Val	%REU	LowLimit	HighLimit	%RPD	RPDLIMI	Qual
			_								
Sample ID:	LCS-67690	SampType	: Ics		Tes	stCode: El	PA Method	300.0: Anions	6		
Client ID:	LCSS	Batch ID	: 676	90	F	RunNo: 8	8285				
Prep Date:	5/25/2022	Analysis Date	: 5/2	25/2022	\$	SeqNo: 3	130982	Units: mg/K	g		
Analyte		Result P	QL	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	: Ics		Tes	tCode: El	PA Method	300.0: Anions	6		
Client ID:	LCSS	Batch ID	: 676	99	F	RunNo: 8	8285				
Prep Date:	5/25/2022	Analysis Date	: 5/2	25/2022	Ş	SeqNo: 3	131011	Units: mg/K	g		
Analyte		Result P	QL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	- %RPD	RPDLimit	Qual
Chloride		14	1.5	15.00	0	94.0	90	110			Quai
Comple ID:	ND 07000	Comp			Tee						
Sample ID:		SampType						300.0: Anions	5		
Client ID:	PBS	Batch ID	: 676	99	F	RunNo: 8	8285				
Prep Date:	5/25/2022	Analysis Date	: 5/2	25/2022	\$	SeqNo: 3	131012	Units: mg/K	g		
Analyte		Result P	QL	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

# QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

WO#:	2205923

02-Jun-22

			•						
Client: EOG Project: Roy SW	D 3								
Sample ID: LCS-67607	SampType: LC	S	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics	
Client ID: LCSS	Batch ID: 67	607		unNo: 88			U	0	
Prep Date: 5/20/2022	Analysis Date: 5/	23/2022	S	SeqNo: 31	27567	Units: mg/K	g		
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: MI	BLK	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics	
Client ID: PBS	Batch ID: 67	607	F	unNo: <b>88</b>	3200				
Prep Date: 5/20/2022	Analysis Date: 5/	/23/2022	5	SeqNo: 31	27570	Units: mg/K	g		
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: MI	BLK	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics	
Client ID: PBS	Batch ID: 67	669	F	unNo: <b>88</b>	3246				
Prep Date: 5/24/2022	Analysis Date: 5/	26/2022	S	SeqNo: 31	31392	Units: mg/K	g		
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: LC	s	Tes	tCode: EF	A Method	8015M/D: Die	sel Range	Organics	
	Datab ID: 07	~~~	-						

Client ID: LCSS	Batch ID:	67669	RunNo: 88246						
Prep Date: 5/24/2022	Analysis Date:	5/26/2022	S	SeqNo: 31	31393	Units: mg/Kg	g		
Analyte	Result P	QL 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	BLK	Tes	tCode: EF	PA Method	8015M/D: Dies	sel Range	Organics	
Sample ID: MB-67666 Client ID: PBS	SampType Batch ID:			stCode: EF		8015M/D: Dies	sel Range	Organics	
		67666	F		3263	8015M/D: Dies Units: %Rec	Ū	Organics	
Client ID: PBS	Batch ID: Analysis Date:	67666 5/26/2022	F	RunNo: <b>88</b>	3263		Ū	Organics 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

EOG

Roy SWD 3

**Client:** 

**Project:** 

# QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

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

Page 24 of 27

# WO#: 2205923

02-Jun-22

# QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

WO#:	2	2059	923
	02	T	22

02-Jun-22

Client:	EOG										
Project:	Roy SWD	3									
Sample ID:	mb-67605	SampTy	/pe: ME	BLK	Tes	stCode: EF	PA Method	8015D: Gasoli	ne Range		
Client ID:	PBS	Batch	ID: 67	605	F	RunNo: <b>88</b>	3206				
Prep Date:	5/20/2022	Analysis Da	ate: <b>5/</b>	24/2022	S	SeqNo: 31	126958	Units: mg/Kg	9		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Surr: BFB	e Organics (GRO)	ND 920	5.0	1000		91.8	37.7	212			
Sample ID:	lcs-67605	SampTy	/pe: <b>LC</b>	S	Tes	stCode: EF	PA Method	8015D: Gasoli	ne Range		
Client ID:	LCSS	Batch	ID: 67	605	F	RunNo: <b>88</b>	3206				
Prep Date:	5/20/2022	Analysis Da	ate: <b>5/</b>	23/2022	S	SeqNo: 31	26959	Units: mg/Kg	9		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
-	e Organics (GRO)	25	5.0	25.00	0	102	72.3	137			
Surr: BFB		2000		1000		200	37.7	212			
Sample ID:	lcs-67603	SampTy	/pe: LC	S	Tes	stCode: EF	PA Method	8015D: Gasoli	ne Range		
Client ID:	LCSS	Batch	ID: 67	603	F	RunNo: <b>88</b>	3207				
Prep Date:	5/20/2022	Analysis Da	ate: <b>5/</b>	23/2022	Ś	SeqNo: 31	127053	Units: mg/Kg	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
-	e 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	SampTy	/pe: <b>ME</b>	BLK	Tes	stCode: EF	PA Method	8015D: Gasoli	ne Range		
Client ID:	PBS	Batch	ID: 67	603	F	RunNo: <b>88</b>	3207				
Prep Date:	5/20/2022	Analysis Da	ate: <b>5/</b>	23/2022	S	SeqNo: 31	127054	Units: mg/Kg	9		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang Surr: BFB	e Organics (GRO)	ND 850	5.0	1000		85.5	37.7	212			
Sample ID:	lcs-67637	SampTy	/pe: LC	S	Tes	stCode: EF	PA Method	8015D: Gasoli	ne Range		
Client ID:	LCSS	Batch	ID: 67	637	F	RunNo: <b>88</b>	3236				
Prep Date:	5/23/2022	Analysis Da	ate: <b>5/</b>	24/2022	S	SeqNo: 31	128820	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	SampTy	/pe: ME	BLK	Tes	stCode: EF	PA Method	8015D: Gasoli	ne Range		
Client ID:	PBS	Batch	ID: 67	637	F	RunNo: <b>88</b>	3236		5		
Prep Date:	5/23/2022	Analysis D	ate: 5/	24/2022	S	SeqNo: 31	128821	Units: %Rec			
	J/2J/2022										
Analyte	JIZJIZUZZ	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

Page 25 of 27

## QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

WO#: 2205923

02-Jun-22

Client:	EOG										
Project:	Roy SWI	D 3									
Sample ID:	mb-67605	Samp	Туре: <b>МЕ</b>	BLK	Tes	tCode: EF	PA Method	8021B: Volati	iles		
Client ID:	PBS	Batc	h ID: 676	605	F	RunNo: <b>88</b>	3206				
Prep Date:	5/20/2022	Analysis I	Date: 5/2	24/2022	S	SeqNo: 31	27001	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		ND	0.025					0			
Toluene		ND	0.050								
Ethylbenzene		ND	0.050								
Xylenes, Total	l	ND	0.10								
Surr: 4-Bror	mofluorobenzene	0.95		1.000		95.4	70	130			
Sample ID:	LCS-67605	Samp	Type: LC	s	Tes	tCode: EF	A Method	8021B: Volati	iles		
Client ID:	LCSS	Batc	h ID: 676	605	F	RunNo: <b>88</b>	3206				
Prep Date:	5/20/2022	Analysis I	Date: 5/2	23/2022	Ş	SeqNo: 31	27002	Units: mg/K	ſg		
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	l	2.8	0.10	3.000	0	92.6	80	120			
Surr: 4-Bror	mofluorobenzene	0.99		1.000		98.8	70	130			
Sample ID:	lcs-67603	Samp	Туре: <b>LC</b>	s	Tes	tCode: EF	PA Method	8021B: Volati	iles		
Client ID:	LCSS	Batc	h ID: 676	603	F	RunNo: <b>88</b>	3207				
Prep Date:	5/20/2022	Analysis I	Date: 5/2	23/2022	S	SeqNo: 31	27099	Units: mg/K	(g		
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-Bror	mofluorobenzene	0.90		1.000		90.4	70	130			
Sample ID:	mb-67603	Samp	Туре: <b>МЕ</b>	BLK	Tes	tCode: EF	PA Method	8021B: Volati	iles		
Client ID:	PBS	Batc	h ID: 676	603	F	RunNo: <b>88</b>	3207				
Prep Date:	5/20/2022	Analysis I	Date: 5/2	23/2022	5	SeqNo: 31	27100	Units: <b>mg/K</b>	(g		
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-Bror	mofluorobenzene	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

Page 26 of 27

2205923	WO#:
02-Jun-22	

# Client: EOG Project: Roy SWD 3 Sample ID: Ics-67637 SampType: LCS Client ID: LCSS Batch ID: 67637

Sample ID. ICS-6/63/	Gampiy	ype. LC3	5	resicode. EPA method 8021B: volatiles						
Client ID: LCSS	Batch	ID: 676	37	F	RunNo: <b>88</b>	3236				
Prep Date: 5/23/2022	Analysis Da	ate: 5/2	4/2022	S	SeqNo: 31	128876	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			
			be: MBLK TestCode: EPA Method 8021B: Volatiles							
Sample ID: mb-67637	SampTy	pe: MBI	LK	Tes	tCode: EF	PA Method	8021B: Volati	les		
Sample ID: mb-67637 Client ID: PBS		/pe: <b>MBI</b> ID: <b>676</b>			tCode: EF		8021B: Volati	les		
		ID: 676	37	F		3236	8021B: Volati Units: %Rec			
Client ID: PBS	Batch	ID: <b>676</b> ate: <b>5/2</b>	37 4/2022	F	RunNo: 88	3236			RPDLimit	Qual

TestCode: EPA Mothod 8021B: Valatilas

#### 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

Page 27 of 27

HALL ENVIRONMENTAL ANALYSIS LABORATORY	Hall Environmental Albu TEL: 505-345-3975 Website: www.ha	490 Iquero FAX:	01 Hawkins que, NM 87 505-345-4	NE 109 107	San	nple Log-In Check List
Client Name: EOG	Work Order Number:	220	5923			RcptNo: 1
Received By: Juan Rojas 5/	20/2022 7:05:00 AM			Glean	ay	
Completed By: Juan Rojas 5/	20/2022 7:36:50 AM			Glean Glean	29	
Reviewed By: Sec 5/20/22						
Chain of Custody						
1. Is Chain of Custody complete?		Yes		No		Not Present
2. How was the sample delivered?		Cou	rier			
Log In						
3. Was an attempt made to cool the samples?		Yes		No		
4. Were all samples received at a temperature of >	⊳0° C to 6.0°C	Yes	•	No		
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 pro	eserved?	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		# of processed
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes	<b>V</b>	No		# of preserved bottles checked for pH: (<2 or >12 unless-noted)
2, Are matrices correctly identified on Chain of Cust	odv?	Yes	~	No		Adjusted?
3. Is it clear what analyses were requested?		Yes				
4. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes		No		effecked by: JN 5/20/22
Special Handling (if applicable)					1	
15. Was client notified of all discrepancies with this of	order?	Yes		No		
Person Notified:		Tes		NO		
By Whom:	Date Via:	eMa	ail 🗔 Dh	one 🗔	Fax	In Person
Regarding:	¥ 10.	_ CIVI			i ax	
Client Instructions:			_			
16. Additional remarks:						
17. <u>Cooler Information</u> Cooler No Temp <sup>o</sup> C Condition Seal Ir	ntact Seal No Se	eal Da	ate S	ligned E	Зу	
1 1.5 Good						

Page 1 of 1

Kecord     Turn-Around Til       Mrtesia NM, 88210     Roject Name.       Mrtesia NM, 88210     Project Name.       Mrtesia NM, 88210     Project Manage       Mrtesia NM, 88210     Roject #: 5375       Sizo     Project Manage       Dim     Project Manage		ANALYSIS LABORATORY	www.hallenvironmental.com	4901 Hawkins NE - Albuquerque, NM 87109	Tel. 505-345-3975 Fax 505-345-4107	Anal		оям /	080		ิย	)DS1	BTEX (													Remarks: Bill to EOG Artesia	24		ton -
ain-of-Custody Record         0G-Artesia / Ranger Env.         0Box 201179, Austin TX 78720         0Box 201179, Austin TX 78720         521-335-1785         521-335-1785         521-335-1785         iax#: Will@RangerEnv.com         okage:         ckage:         chill@RangerEnv.com         okage:         chill@RangerEnv.com         okage:         Inn:         Az Compliance         ckage:         Inne         Matrix         Sample Name         83.7         93.5         93.5         93.5         93.7         58.1 - 23         93.5	Turn-Around Time:	Standard X Rush		# OMS	Project #: 5375		Project Manager: W. Kierdorf		111	. w. nemeery	# of Coolers: )	Cooler Temp(Including cF): 1.6-0.(1=1.)	Constrainty Section 4	Tie	200-	-03	-004	-005-	700-	F00-	-008	-003	2010	110-	10-	Via: Date	MUUNY 3/19	) Exi	1021- CCINCISVANIA AC
Client: EO Mailing Add Ranger: PC Ranger: PC Client: EO Client: EO	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	· □ Az Cor		EDD (Type) Excel		Time Matrix Sample Name	0837 50:1 581-2	581-3	-182	l	582-2	1	2 - 4	1	ſ	1	563-	1 - 583-	Time: Relinquished by:	12/15		11/100 100h/hb

Received by OCD: 2/3/2023 9:45:09 AM

	ANALYSTS LAPODATODY		4901 Hawkins NE - Albuquerque, NM 87109		Analysis	() 04	S '*C SW S,8C	, 05 120 120 120	10 <sup>2;</sup> 10 <sup>2;</sup>	8/8 504 504 3 504 3 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		15D estic 1etho 8 Me 8 Me 8 Me 8 Me 8 Me	ВТЕХ / ТРН:80 8081 Р РАН5 Р КСКА 6 СІ, Е, Е 8220 (у 8220 (у 8270 (б 7 6 / у											Remarks: Bill to EOG-ANTESia		Plo Cultury 23/ 1 Uniter 5/20/22 7:057
Turn-Around Time:	Carl Rush 5 DAUX		Roy SWD # 3	Project #:	5375	Project Manager:	W. Kierdont		Sampler: W. Kennedy	On Ice: H-Yes DNo	# of Coolers: \	Cooler Temp(Including CF): 1-6-6-1=(.C (°C)	Container Preservative HEAL No. Type and # Type	Lçe	-014	- 012	-016	410-	\$10-	10- 10-	-20-020	120- T T		Received by: Via: Date Time	L L Tir	24/10 Under 5 /20/24 7:05
Chain-of-Custody Record	16 - Artesia / Romaer Env		Mailing Address: E06-1055 4th St. Artesia.	210 / Runger: PO Box	-1785 74.	ax#: Will @ranger Env. com		d Level 4 (Full Validation)	Az Compliance	Other	pe)		Time Matrix Sample Name	50% SB3-30	0740 584-10	0745 584-15	0750 584-20	0800 584=30	0846 585-26	0920 565-38	0921 585-39	0922 - 585-40		Relinquished by:	Relinquished by:	10 CUCLUSS 1
Charles	Client: EC	Ima	Mailing Ad	S NM, 88210	202	email or Fa	A/QC Package:	Standar	Accreditation:	樹 NELAC	EDD (Type)		Date Tin	5/2/221332	51/2207	10	10	08	08	60	00	60 T.		Clubra Date: Time:	1	5/4/m 1900

1



September 02, 2022

Will Kierdorf EOG 105 South Fourth Street Artesia, NM 88210 TEL: FAX: Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2208E19

Date Reported: 9/2/2022

CLIENT: EOG		Cl	ient Sample I	<b>D:</b> R7	ГР-2/1	
<b>Project:</b> Roy SWD 3		(	Collection Da	<b>te:</b> 8/2	22/2022 9:48:00 AM	
Lab ID: 2208E19-001	Matrix: SOIL		Received Da	<b>te:</b> 8/2	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. D Sample Diluted Due to Matrix
- Н 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
- в Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 1 of 21

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2208E19

Date Reported: 9/2/2022

CLIENT: EOG		Cl	ient Sample II	<b>D:</b> RT	ГР-2/6	
<b>Project:</b> Roy SWD 3		(	Collection Dat	<b>e:</b> 8/2	22/2022 10:00:00 AM	
Lab ID: 2208E19-002	Matrix: SOIL		<b>Received Dat</b>	<b>e:</b> 8/2	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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- в Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range RL Reporting Limit
- Page 2 of 21

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2208E19

Date Reported: 9/2/2022

CLIENT: EOG		Cl	ient Sample II	<b>D:</b> R7	TP-2/9	
<b>Project:</b> Roy SWD 3		(	Collection Dat	<b>e:</b> 8/2	22/2022 10:20:00 AM	
Lab ID: 2208E19-003	Matrix: SOIL		<b>Received Dat</b>	<b>e:</b> 8/2	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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 3 of 21

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2208E19

Date Reported: 9/2/2022

CLIENT: EOG Project: Roy SWD 3			ient Sample II Collection Dat		FP-2/11 22/2022 10:26:00 AM	
Lab ID: 2208E19-004	Matrix: SOIL		<b>Received Dat</b>	<b>e:</b> 8/2	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. D Sample Diluted Due to Matrix
- Н 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
- в Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 4 of 21

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2208E19

Date Reported: 9/2/2022

CLIENT: EOG		Cl	ient Sa	mple II	<b>D:</b> RT	<b>P-1/1</b>	
Project: Roy SWD 3		(	Collecti	ion Dat	<b>e:</b> 8/2	2/2022 10:42:00 AM	
Lab ID: 2208E19-005	Matrix: SOIL		Receiv	ed Dat	<b>e:</b> 8/2	24/2022 7:15:00 AM	
Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: ЈМТ
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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- в Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 5 of 21

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2208E19

Date Reported: 9/2/2022

CLIENT: EOG			ient Sample I			
<b>Project:</b> Roy SWD 3			Collection Dat	te: 8/2	22/2022 10:56:00 AM	
Lab ID: 2208E19-006	Matrix: SOIL		Received Dat	t <b>e:</b> 8/2	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	E				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. D Sample Diluted Due to Matrix
- Н 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
- в Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 6 of 21

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2208E19

Date Reported: 9/2/2022

CLIENT: EOG		Cl	ient Sample I	D: RT	°P-3/1	
Project: Roy SWD 3			Collection Dat	<b>:e:</b> 8/2	2/2022 12:02:00 PM	
Lab ID: 2208E19-007	Matrix: SOIL		Received Dat	e: 8/2	4/2022 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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 7 of 21

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2208E19

Date Reported: 9/2/2022

CLIENT: EOG		Cl	ient Sample I	<b>D:</b> R7	<b>FP-3/4</b>	
<b>Project:</b> Roy SWD 3		(	Collection Dat	e: 8/2	22/2022 1:30:00 PM	
Lab ID: 2208E19-008	Matrix: SOIL		<b>Received Dat</b>	e: 8/2	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	ссм:
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/26/2022 10:31:00 AN	69768
Surr: BFB	103	37.7-212	%Rec	1	8/26/2022 10:31:00 AN	69768
EPA METHOD 8021B: VOLATILES					Analyst	: CCM
Benzene	ND	0.024	mg/Kg	1	8/26/2022 10:31:00 AN	69768
Toluene	ND	0.049	mg/Kg	1	8/26/2022 10:31:00 AN	69768
Ethylbenzene	ND	0.049	mg/Kg	1	8/26/2022 10:31:00 AN	69768
Xylenes, Total	ND	0.097	mg/Kg	1	8/26/2022 10:31:00 AN	69768
Surr: 4-Bromofluorobenzene	97.8	70-130	%Rec	1	8/26/2022 10:31:00 AN	69768

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- в Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 8 of 21

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2208E19

Date Reported: 9/2/2022

CLIENT: EOG			ient Sample I			
<b>Project:</b> Roy SWD 3					22/2022 1:36:00 PM	
Lab ID: 2208E19-009	Matrix: SOIL		Received Dat	<b>:e:</b> 8/2	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	E				Analyst	ССМ
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	ССМ
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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- в Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 9 of 21

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2208E19

Date Reported: 9/2/2022

CLIENT: EOG			ient Sample I			
Project:         Roy SWD 3           Lab ID:         2208E19-010	Matrix: SOIL	·			22/2022 2:10:00 PM 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	E				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. D Sample Diluted Due to Matrix
- Н 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
- в Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 10 of 21

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2208E19

Date Reported: 9/2/2022

CLIENT: EOG		Cl	ient Sample I	<b>D:</b> R7	ГР-4/6			
<b>Project:</b> Roy SWD 3	Collection Date: 8/22/2022 2:30:00 PM							
Lab ID: 2208E19-011	Matrix: SOIL		Received Dat	t <b>e:</b> 8/2	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:	ССМ		
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:	ССМ		
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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- в Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 11 of 21

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2208E19

Date Reported: 9/2/2022

CLIENT: EOG			ient Sample II			
Project:         Roy SWD 3           Lab ID:         2208E19-012	Matrix: SOIL	·			22/2022 2:35:00 PM 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	E				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. D Sample Diluted Due to Matrix
- Н 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
- в Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 12 of 21

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2208E19

Date Reported: 9/2/2022

CLIENT: EOG Project: Roy SWD 3			ient Sample II		ГР-5/6 22/2022 2:45:00 РМ	
Project:         Roy SWD 3           Lab ID:         2208E19-013	Matrix: SOIL				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	E				Analyst	ССМ
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	ССМ
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. D Sample Diluted Due to Matrix
- Н 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
- в Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 13 of 21

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2208E19

Date Reported: 9/2/2022

CLIENT: EOG Project: Roy SWD 3			ient Sample II Collection Dat		P-6/1 2/2022 3:02:00 PM						
Lab ID: 2208E19-014	Matrix: SOIL		<b>Received Dat</b>	<b>e:</b> 8/2	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	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	E				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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- в Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 14 of 21

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2208E19

Date Reported: 9/2/2022

CLIENT: EOG		Cl	ient Sample II	<b>D:</b> R7	ГР-6/6	
Project: Roy SWD 3		(	Collection Dat	e: 8/2	22/2022 3:20:00 PM	
Lab ID: 2208E19-015	Matrix: SOIL		<b>Received Dat</b>	<b>e:</b> 8/2	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	E				Analyst:	ССМ
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:	ССМ
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. D Sample Diluted Due to Matrix
- Н 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
- в Analyte detected in the associated Method Blank

- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 15 of 21

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2208E19

Date Reported: 9/2/2022

CLIENT: EOG			ient Sample				
<b>Project:</b> Roy SWD 3			Collection Da	te: 8/2	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	Ξ				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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- в Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 16 of 21

WO#:	2208E19
	02-Sep-22

Client:	EOG	_								
Project:	Roy SWD	03								
Sample ID:	MB-69853	SampType: <b>m</b>	blk	Tes	tCode: EP	PA Method	300.0: Anions	S		
Client ID:	PBS	Batch ID: 69	853	F	RunNo: <b>90</b>	679				
Prep Date:	8/30/2022	Analysis Date: 8	/30/2022	5	SeqNo: 32	240572	Units: mg/K	g		
Analyte Chloride		Result PQL ND 1.5	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sample ID:	LCS-69853	SampType: Ic	S	Tes	tCode: EF	PA Method	300.0: Anions	S		
Client ID:	LCSS	Batch ID: 69	853	F	RunNo: <b>90</b>	679				
Prep Date:	8/30/2022	Analysis Date: 8	/30/2022	S	SeqNo: 32	240573	Units: mg/K	g		
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: <b>m</b>	blk	Tes	tCode: EP	A Method	300.0: Anions	S		
Client ID:	PBS	Batch ID: 69	846	F	RunNo: <b>90</b>	664				
Prep Date:	8/30/2022	Analysis Date: 8	/30/2022	S	SeqNo: 32	241292	Units: mg/K	g		
Analyte Chloride		Result PQL ND 1.5	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sample ID:	LCS-69846	SampType: Ic:	S	Tes	tCode: EP	A Method	300.0: Anions	s		
			RunNo: <b>90664</b>							
Client ID:	LCSS	Batch ID: 69	846	F	RunNo: <b>90</b>	664				
Client ID: Prep Date:		Batch ID: 69 Analysis Date: 8			RunNo: 90 SeqNo: 32		Units: <b>mg/K</b>	g		
			/30/2022		SeqNo: 32		Units: <b>mg/K</b> HighLimit	g %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

Page 17 of 21

EOG

Roy SWD 3

**Client:** 

**Project:** 

# **QC SUMMARY REPORT** Hall Environmental Analysis Laboratory, Inc.

Comple ID: 1 00 00775										
Sample ID: LCS-69775	SampType: L	CS	TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 6	9775	RunNo: 90606							
Prep Date: 8/25/2022	Analysis Date: 8	3/26/2022	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		0	92.8	64.4	127				
Surr: DNOP	4.3	5.000		85.2	21	129				
Sample ID: MB-69775	SampType: <b>M</b>	IBLK	Test	TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 6	R	unNo: 90	606						
Prep Date: 8/25/2022	Analysis Date: 8	3/26/2022	S	eqNo: 32	38777	Units: mg/K	g			
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			04.4	04	400				
Surr: DNOP	8.4	10.00		84.1	21	129				
Sample ID: LCS-69807	SampType: L	cs	Test	Code: EP	A Method	8015M/D: Die	sel Range	e Organics		
Client ID: LCSS	Batch ID: 6	9807	RunNo: 90634							
Prep Date: 8/26/2022	Analysis Date: 8	3/29/2022	S	eqNo: 32	38841	Units: mg/K	g			
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	40 15	5 50.00	0	80.1	64.4	127				
				79.2	04					
Surr: DNOP	4.0	5.000		19.2	21	129				
Surr: DNOP Sample ID: MB-69807	4.0 SampType: M		Tesi	-		129 8015M/D: Die	sel Range	e Organics		
	-	IBLK		-	A Method	-	sel Range	e Organics		
Sample ID: MB-69807	SampType: M	IBLK 9807	R	Code: EP	A Method 634	-	Ū	e Organics		
Sample ID: MB-69807 Client ID: PBS	SampType: M Batch ID: 6	IBLK 9807 3/29/2022	R	Code: EP unNo: 90 eqNo: 32	A Method 634	8015M/D: Die	Ū	e Organics	Qual	
Sample ID: <b>MB-69807</b> Client ID: <b>PBS</b> Prep Date: <b>8/26/2022</b>	SampType: M Batch ID: 6 Analysis Date: 8	IBLK 9807 3/29/2022 SPK value	R	Code: EP unNo: 90 eqNo: 32	A Method 634 38842	8015M/D: Die Units: mg/K	g	U	Qual	
Sample ID: MB-69807 Client ID: PBS Prep Date: 8/26/2022 Analyte Diesel Range Organics (DRO) Motor Oil Range Organics (MRO)	SampType: M Batch ID: 6 Analysis Date: 8 Result PQL ND 15 ND 50	IBLK 9807 3/29/2022 SPK value	R	Code: EP unNo: 90 eqNo: 32 %REC	A Method 1634 138842 LowLimit	8015M/D: Die Units: mg/K HighLimit	g	U	Qual	
Sample ID: MB-69807 Client ID: PBS Prep Date: 8/26/2022 Analyte Diesel Range Organics (DRO)	SampType: M Batch ID: 6 Analysis Date: 8 Result PQL ND 15	IBLK 9807 8/29/2022 SPK value	R	Code: EP unNo: 90 eqNo: 32	A Method 634 38842	8015M/D: Die Units: mg/K	g	U	Qual	
Sample ID: MB-69807 Client ID: PBS Prep Date: 8/26/2022 Analyte Diesel Range Organics (DRO) Motor Oil Range Organics (MRO)	SampType: M Batch ID: 6 Analysis Date: 8 Result PQL ND 15 ND 50	IBLK 9807 3/29/2022 SPK value 5 ) 10.00	R SPK Ref Val	Code: EP unNo: 90 eqNo: 32 %REC 88.3	A Method 1634 138842 LowLimit 21	8015M/D: Die Units: mg/K HighLimit	g %RPD	RPDLimit	Qual	
Sample ID: MB-69807 Client ID: PBS Prep Date: 8/26/2022 Analyte Diesel Range Organics (DRO) Motor Oil Range Organics (MRO) Surr: DNOP	SampType: M Batch ID: 6 Analysis Date: 8 Result PQL ND 15 ND 50 8.8	IBLK 9807 3/29/2022 SPK value 5 0 10.00 CS	R SPK Ref Val Test	Code: EP unNo: 90 eqNo: 32 %REC 88.3	A Method 634 38842 LowLimit 21 A Method	8015M/D: Die Units: mg/K HighLimit 129	g %RPD	RPDLimit	Qual	
Sample ID: MB-69807 Client ID: PBS Prep Date: 8/26/2022 Analyte Diesel Range Organics (DRO) Motor Oil Range Organics (MRO) Surr: DNOP Sample ID: LCS-69837	SampType: M Batch ID: 6 Analysis Date: 6 Result PQL ND 15 ND 50 8.8 SampType: L	IBLK 9807 3/29/2022 SPK value 5 10.00 CS 9837	R SPK Ref Val Test R	Code: EP unNo: 90 eqNo: 32 %REC 88.3	A Method 634 38842 LowLimit 21 A Method 655	8015M/D: Die Units: mg/K HighLimit 129	g %RPD sel Range	RPDLimit	Qual	
Sample ID: MB-69807 Client ID: PBS Prep Date: 8/26/2022 Analyte Diesel Range Organics (DRO) Motor Oil Range Organics (MRO) Surr: DNOP Sample ID: LCS-69837 Client ID: LCSS	SampType: M Batch ID: 69 Analysis Date: 8 Result PQL ND 15 ND 50 8.8 SampType: L Batch ID: 69	IBLK 9807 3/29/2022 SPK value 5 0 10.00 CS 9837 3/30/2022	R SPK Ref Val Test R	Code: EP unNo: 90 eqNo: 32 %REC 88.3 Code: EP unNo: 90	A Method 634 38842 LowLimit 21 A Method 655	8015M/D: Die Units: mg/K HighLimit 129 8015M/D: Die	g %RPD sel Range	RPDLimit	Qual	

**Qualifiers:** 

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

Page 18 of 21

WO#: 2208E19 02-Sep-22

2208E19 02-Sep-22

QC SUMMARY REPORT	WO#:
Hall Environmental Analysis Laboratory, Inc.	

Client: Project:	EOG Roy SWI	03									
Sample ID: MB-69837         SampType: MBLK         TestCode: EPA Method 8015M/D: Diesel Range Organics											
Client ID: PBS		Batch	h ID: 69	837	F	RunNo: <b>9</b>	0655				
Prep Date: 8/29	/2022	Analysis D	Date: 8/	/30/2022	S	SeqNo: 3	239737	Units: %Red	;		
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

Page 19 of 21
EOG

Roy SWD 3

**Client:** 

**Project:** 

Sample ID: mb-69740

Client ID: PBS

# **QC SUMMARY REPORT** Hall Environmental Analysis Laboratory, Inc.

SampType: MBLK

Batch ID: 69740

R Analyte detected in the associated Method Blank

RL Reporting Limit

Б	Analyte detected in the associated Method Diank
-	

J

Р Sample pH Not In Range

Page 20 of 21

Analyte detected below quantitation limits

Е	Estimated value

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit ND

- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S

2022       SeqNo:       3235756       Units:       mg/Kg         PK value       SPK Ref Val       %REC       LowLimit       HighLimit       %RPD       RPDLimit         1000       99.6       37.7       212	Qual
	Qual
1000 99.6 37.7 212	
1000 99.6 37.7 212	
TestCode: EPA Method 8015D: Gasoline Range	
RunNo: <b>90581</b>	
2022 SeqNo: 3235757 Units: mg/Kg	
PK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit	Qual
25.00 0 99.4 72.3 137	
1000 196 37.7 212	
TestCode: EPA Method 8015D: Gasoline Range	
RunNo: <b>90614</b>	
2022 SeqNo: 3237469 Units: mg/Kg	
PK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit	Qual
25.00 0 109 72.3 137	
1000 227 37.7 212	S
TestCode: EPA Method 8015D: Gasoline Range	
RunNo: 90614	
RunNo:         90614           2022         SeqNo:         3237470         Units:         mg/Kg	
	Qual
2022 SeqNo: 3237470 Units: mg/Kg	Qual
RunNo:         90614           2022         SeqNo:         3237469         Units:         mg/Kg           PK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit           25.00         0         109         72.3         137         137	_

TestCode: EPA Method 8015D: Gasoline Range

RunNo: 90581

WO#: 2208E19 02-Sep-22

WO#:	2208	8E19
	0 <b>0</b> G	

02-Sep-22

Client: Project:	EOG Roy SWI	D 3									
Sample ID: mb	-69740	Samp	Гуре: МЕ	BLK	Tes	tCode: EF	PA Method	8021B: Vola	tiles		
Client ID: PB			h ID: 69			tunNo: 9		002121 7010			
	24/2022	Analysis E				SeqNo: 32		Units: mg/k	(a		
								•	•		
Analyte		Result ND	PQL 0.025	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene Toluene		ND	0.025								
Ethylbenzene		ND	0.050								
Xylenes, Total		ND	0.10								
Surr: 4-Bromofluo	orobenzene	0.95		1.000		94.7	70	130			
Sample ID: LCS	S-69740	SampT	Гуре: <b>LC</b>	S	Tes	tCode: EF	PA Method	8021B: Vola	tiles		
Client ID: LCS	ss	Batc	h ID: 69	740	F	lunNo: 90	0581				
Prep Date: 8/2	24/2022	Analysis E	Date: <b>8/</b>	25/2022	S	eqNo: 32	235804	Units: mg/k	٢g		
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-Bromofluo	probenzene	0.97		1.000		96.8	70	130			
Sample ID: Ics-	-69768	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCS	SS	Batc	h ID: 69	768	F	lunNo: 9	0614				
Prep Date: 8/2	25/2022	Analysis E	Date: <b>8/</b>	26/2022	S	eqNo: 3	237522	Units: mg/k	٢g		
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-Bromofluo	probenzene	1.0		1.000		99.7	70	130			
Sample ID: mb	-69768	SampT	Гуре: <b>МЕ</b>	BLK	TestCode: EPA Method 8021B: Volatiles						
Client ID: PB	S	Batc	h ID: 69	768	F	unNo: 9	0614				
Prep Date: 8/2	25/2022	Analysis E	Date: 8/	26/2022	S	SeqNo: 32	237523	Units: mg/k	(g		
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-Bromofluo	probenzene	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

Page 21 of 21

HALL ENVIRONMENTAL ANALYSIS LABORATORY	Hall Environmental Albu TEL: 505-345-3975 Website: www.ha.	490 iquerq FAX:	1 Hawkin nue, NM 8 505-345	s NE 7109 4107	San	nple Log-In Check List
Client Name: EOG	Work Order Number:	220	BE19			RcptNo: 1
Received By: Juan Rojas	8/24/2022 7:15:00 AM			Glian Glian	ay	
Completed By: Juan Rojas Reviewed By: 8-21-22	8/24/2022 7:25:37 AM			Glian	ag	
Chain of Custody						
1. Is Chain of Custody complete?		Yes	~	No		Not Present
2. How was the sample delivered?		Cou	rier			
Log In						
3. Was an attempt made to cool the samples	?	Yes		No		
4. Were all samples received at a temperatur	e of >0° C to 6.0°C	Yes		No		
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) prope	rly 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 🗹
0. Were any sample containers received brok	en?	Yes		No	✓	# of preserved
1. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes	•	No		bottles checked for pH: (<2 or >12 unless noted)
2. Are matrices correctly identified on Chain of	f Custody?	Yes	~	No		Adjusted?
3. Is it clear what analyses were requested?		Yes		No		
<ul> <li>4. Were all holding times able to be met? (If no, notify customer for authorization.)</li> </ul>		Yes		No		Checked by: JA \$/24/22
Special Handling (if applicable)						
15. Was client notified of all discrepancies with	n this order?	Yes		No		NA 🗹
Person Notified: By Whom: Regarding: Client Instructions:	Date Via:	] eM	ail 🗌 F	hone	] Fax	In Person
16. Additional remarks:						
17. <u>Cooler Information</u>						

Page 1 of 1

#### Received by OCD: 2/3/2023 9:45:09 AM

Client:	EOG-Ar	tesia / Ra	Client: EOG-Artesia / Ranger Env.	€ Standard 0		s day TAT		HALL ENVIRONMENTAL ANALYSTS LADDATODY
	Ľ.			Project Name:	e:			
Mailing	Address:	EOG - 105	Mailing Address: EOG - 105 S 4th St, Artesia NM, 88210	Roy	5mD#3		4901	www.nallenvironmental.com 4901 Hawkins NF - Alburularcula NM 87100
Ranger:	PO Box.	201179, A	Ranger: PO Box 201179, Austin TX 78720	Project #: 53	5375			
Phone	#: 521-3	Phone #: 521-335-1785						Anal
email o	r Fax#: \	Will@Ran	email or Fax#: Will@RangerEnv.com	Project Man	Project Manager: W. Kierdorf	dorf	(	
QA/QC Packag	QA/QC Package:		Level 4 (Full Validation)				оям / (	
Accreditation:	itation: AC	□ Az Co	Az Compliance     Other	Sampler: On Ice:	J. Marti	1 No		
	EDD (Type)	Excel		# of Coolers:	N		่อยอ	
				Cooler Temp(including CF):	(including CF):	0=1.6	)ası	
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX (; 7PH:80	
ee res	3460	Soil	RTP-2/2	1× 402 )ar	ICE	100 -	XXX	
-	1000	-	RTP-2/6		1	-600-		
	1000	-	RTP-2/4			-002		
	100160		RTP-2/11			-001		
	1043	-	RTP-2/2			-2000-		
	1050	_	RTP-1/6		1	200		
	1202		RTP-312		1	100-		
	1330		RTP-3/4			2002		
-	1336		RTP-316			600-		
	1410		BTP-4/1	-		-010		
	1430		RTP-416			110-		
4	1433	9	Rrp-5/1	+	4	212	1 + 1	
Date:	Time:	Relinquished by:	ed by:	Received by:	Via:	Date	Remarks: Bi	Remarks: Bill to EOG Artesia
25.50	4242		J. Martinez	( AUUUL	UNN	8/22/22 730		
Under U	Time:	Relinquished by:	ed by:	Received by:	Via:	Date Time		
TOND,	19m	NO NI	( ~ 111	All WILLIN C AND	- 11 4. And 0 - C	DITE cologo	1	

Chain-of-Custody Record	Turn-Around Time:		2/2/2/2
Client: EOG-Artesia / Ranger Env.	Standard Rush		HALL ENVIRONMENTAL
	Project Name:		ANALYSIS LABORATORY
Mailing Address: EOG - 105 S 4th St, Artesia NM, 88210	Rov SWD #3		www.hallenvironmental.com
Ranger: PO Box 201179, Austin TX 78720	Project #: 5375		A -
Phone #: 521-335-1785			1el. 505-345-3975 Fax 505-345-4107 Analysis Portrost
email or Fax#: Will@RangerEnv.com	Project Manager: W. Kierdorf		
QA/QC Package:			(OAM
: D Az Cor	Samular:		
	On Ice: D-Yes DNo		
EDD (Type) Excel	# of Coolers: 1		
	Cooler Temp(including CF): 1.6-02		
Date Time Matrix Sample Name	Container Preservative Type and # Type	HEAL No.	9binoln(
9-23-22 1445 Soil RTP-5/6	IX yozzar ICE		1
1562 RTP-6/2			
1520 RTP-6/6		-CIS-	
L 1524 1 RTP-6/7	-1	-016 1 1	
Date: Time: Relinquished by:	: Via:	Time	Remarks: Bill to EOG Artesia
	Received by: Via: Date	2 720 Time	
Mapping aller aller	Acounter alay	Site 24	Ma allue - Arowier starting and
If necessary, samples submitted to Hall Environmental may be sub	bcontracted to other accredited laboratories. This so	erves as notice of this possibility	Any sub-contracted data will be clearly notated on the analytical report

**Released to Imaging: 6/2/2023 11:14:34 AM** 



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:

OrderNo.: 2209E05

Dear Will Kierdorf:

RE: Roy SWD 3

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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209E05

Date Reported: 10/13/2022

CLIENT: EOG Project: Roy SWD 3			ient Sample II Collection Dat		1 23/2022 2:00:00 PM	
Lab ID: 2209E05-001	Matrix: SOIL		<b>Received Dat</b>	e: 9/2	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	E				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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 1 of 39

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209E05

Date Reported: 10/13/2022

CLIENT: EOG			ient Sample I			
<b>Project:</b> Roy SWD 3			Collection Dat	e: 9/2	23/2022 2:02:00 PM	
Lab ID: 2209E05-002	Matrix: SOIL		Received Dat	<b>e:</b> 9/2	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	E				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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 2 of 39

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209E05

Date Reported: 10/13/2022

CLIENT: EOG		Cl	ient Sample II	<b>D:</b> B-	3	
Project: Roy SWD 3		(	Collection Dat	<b>e:</b> 9/2	23/2022 2:04:00 PM	
Lab ID: 2209E05-003	Matrix: SOIL		<b>Received Dat</b>	<b>e:</b> 9/2	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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- ND PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 3 of 39

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209E05

Date Reported: 10/13/2022

CLIENT: EOG		Cl	ient Sample I	<b>D:</b> B-	4	
Project: Roy SWD 3		(	Collection Da	<b>te:</b> 9/2	23/2022 2:06:00 PM	
Lab ID: 2209E05-004	Matrix: SOIL		<b>Received Da</b>	<b>te:</b> 9/2	27/2022 7:25:00 AM	
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	CAS
Chloride	1200	60	mg/Kg	20	10/1/2022 3:12:46 PM	70532
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analys	: 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	E				Analys	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					Analys	: 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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 4 of 39

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209E05

Date Reported: 10/13/2022

CLIENT: EOG	Client Sample ID: B-5						
<b>Project:</b> Roy SWD 3	Collection Date: 9/23/2022 2:08:00 PM						
Lab ID: 2209E05-005	Matrix: SOIL		Receiv	ed Dat	<b>e:</b> 9/2	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 RANG	E					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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 5 of 39

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209E05

Date Reported: 10/13/2022

CLIENT: EOG	Client Sample ID: B-6						
<b>Project:</b> Roy SWD 3	Collection Date: 9/23/2022 2:10:00 PM						
Lab ID: 2209E05-006	Matrix: SOIL		<b>Received Dat</b>	e: 9/2	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	E				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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 6 of 39

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209E05

Date Reported: 10/13/2022

CLIENT: EOG	Client Sample ID: B-7						
Project: Roy SWD 3		(	Collection Dat	<b>e:</b> 9/2	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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 7 of 39

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209E05

Date Reported: 10/13/2022

CLIENT: EOG	Client Sample ID: B-8						
<b>Project:</b> Roy SWD 3		(	Collection Dat	t <b>e:</b> 9/2	23/2022 2:14:00 PM		
Lab ID: 2209E05-008	Matrix: SOIL		Received Dat	t <b>e:</b> 9/2	27/2022 7:25:00 AM		
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS					Analys	t: CAS	
Chloride	1000	60	mg/Kg	20	10/1/2022 4:27:14 PM	70532	
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analys	t: 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	1				Analys	t: BRM	
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/29/2022 12:39:00 AM	1 70439	
Surr: BFB	106	37.7-212	%Rec	1	9/29/2022 12:39:00 AN	1 70439	
EPA METHOD 8021B: VOLATILES					Analys	t: BRM	
Benzene	ND	0.025	mg/Kg	1	9/29/2022 12:39:00 AM	1 70439	
Toluene	ND	0.049	mg/Kg	1	9/29/2022 12:39:00 AN	1 70439	
Ethylbenzene	ND	0.049	mg/Kg	1	9/29/2022 12:39:00 AN	1 70439	
Xylenes, Total	ND	0.098	mg/Kg	1	9/29/2022 12:39:00 AN	1 70439	
Surr: 4-Bromofluorobenzene	94.2	70-130	%Rec	1	9/29/2022 12:39:00 AN	1 70439	

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 8 of 39

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209E05

Date Reported: 10/13/2022

CLIENT: EOG	Client Sample ID: B-9						
<b>Project:</b> Roy SWD 3	<b>Collection Date:</b> 9/23/2022 2:16:00 PM						
Lab ID: 2209E05-009	Matrix: SOIL		<b>Received Dat</b>	<b>e:</b> 9/2	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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 9 of 39

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209E05

Date Reported: 10/13/2022

CLIENT: EOG	Client Sample ID: B-10						
Project: Roy SWD 3		(	Collection Da	te: 9/2	23/2022 2:18:00 PM		
Lab ID: 2209E05-010	Matrix: SOIL		Received Da	t <b>e:</b> 9/2	27/2022 7:25:00 AM		
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS					Analys	t: CAS	
Chloride	1000	60	mg/Kg	20	10/1/2022 4:52:03 PM	70532	
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analys	t: 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	E				Analys	t: 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					Analys	t: 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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits Sample pH Not In Range
- Р RL Reporting Limit

Page 10 of 39

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209E05

Date Reported: 10/13/2022

CLIENT: EOG	Client Sample ID: B-11 Collection Date: 9/23/2022 2:20:00 PM						
Project: Roy SWD 3							
Lab ID: 2209E05-011	Matrix: SOIL		<b>Received Dat</b>	<b>e:</b> 9/2	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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 11 of 39

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209E05

Date Reported: 10/13/2022

CLIENT: EOG	Client Sample ID: B-12						
<b>Project:</b> Roy SWD 3		(	Collection Dat	<b>e:</b> 9/2	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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 12 of 39

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209E05

Date Reported: 10/13/2022

CLIENT: EOG		Cl	ient Sample II	D: B-	13	
Project: Roy SWD 3		(	Collection Dat	<b>e:</b> 9/2	23/2022 2:24:00 PM	
Lab ID: 2209E05-013	Matrix: SOIL		<b>Received Dat</b>	<b>e:</b> 9/2	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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 13 of 39

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209E05

Date Reported: 10/13/2022

CLIENT: EOG		Cl	ient Sample II	<b>D:</b> B-	14	
<b>Project:</b> Roy SWD 3		(	Collection Dat	<b>e:</b> 9/2	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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 14 of 39

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209E05

Date Reported: 10/13/2022

CLIENT: EOG	Client Sample ID: B-15						
<b>Project:</b> 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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- ND PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range RL Reporting Limit
- Page 15 of 39

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209E05

Date Reported: 10/13/2022

CLIENT: EOG Project: Roy SWD 3	Client Sample ID: B-16 Collection Date: 9/23/2022 2:30:00 PM						
Lab ID: 2209E05-016	Matrix: SOIL		<b>Received Dat</b>	<b>e:</b> 9/2	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 RANG	E 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 RANG	GE				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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- в Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 16 of 39

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209E05

Date Reported: 10/13/2022

CLIENT: EOG	Client Sample ID: B-17						
<b>Project:</b> Roy SWD 3	Collection Date: 9/23/2022 2:32:00 PM						
Lab ID: 2209E05-017	Matrix: SOIL		<b>Received Dat</b>	e: 9/2	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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 17 of 39

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209E05

Date Reported: 10/13/2022

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	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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 18 of 39

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209E05

Date Reported: 10/13/2022

CLIENT: EOG	Client Sample ID: B-19						
Project: Roy SWD 3		(	Collection Dat	<b>e:</b> 9/2	23/2022 2:36:00 PM		
Lab ID: 2209E05-019	Matrix: SOIL		<b>Received Dat</b>	<b>e:</b> 9/2	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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 19 of 39

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209E05

Date Reported: 10/13/2022

CLIENT: EOG	Client Sample ID: W-1						
<b>Project:</b> Roy SWD 3		(	Collection Dat	<b>e:</b> 9/2	23/2022 2:38:00 PM		
Lab ID: 2209E05-020	Matrix: SOIL		<b>Received Dat</b>	<b>e:</b> 9/2	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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 20 of 39

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209E05

Date Reported: 10/13/2022

CLIENT: EOG	Client Sample ID: W-2						
<b>Project:</b> Roy SWD 3	Collection Date: 9/23/2022 2:40:00 PM						
Lab ID: 2209E05-021	Matrix: SOIL		<b>Received Dat</b>	<b>e:</b> 9/2	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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 21 of 39

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209E05

Date Reported: 10/13/2022

CLIENT: EOG	Client Sample ID: W-3						
<b>Project:</b> Roy SWD 3	Collection Date: 9/23/2022 2:42:00 PM						
Lab ID: 2209E05-022	Matrix: SOIL		<b>Received Dat</b>	<b>e:</b> 9/2	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 PN	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	E				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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 22 of 39

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209E05

Date Reported: 10/13/2022

CLIENT: EOG		Cl	ient Sample I	D: W	-4		
<b>Project:</b> Roy SWD 3	Collection Date: 9/23/2022 2:44:00 PM						
Lab ID: 2209E05-023	Matrix: SOIL		<b>Received Dat</b>	e: 9/2	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	1 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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 23 of 39

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209E05

Date Reported: 10/13/2022

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 Da	<b>te:</b> 9/2	27/2022 7:25:00 AM	
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: JTT
Chloride	890	60	mg/Kg	20	10/3/2022 12:44:16 PM	1 70539
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analys	t: 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	E				Analys	t: 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					Analys	t: 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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 24 of 39

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209E05

Date Reported: 10/13/2022

CLIENT: EOG	Client Sample ID: W-6						
<b>Project:</b> Roy SWD 3	<b>Collection Date:</b> 9/23/2022 2:46:00 PM						
Lab ID: 2209E05-025	Matrix: SOIL		<b>Received Dat</b>	e: 9/2	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 RANGI	E				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. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 25 of 39

Lab Order 2209E05

Date Reported: 10/13/2022

CLIENT: EOG	Client Sample ID: W-7						
Project: Roy SWD 3	<b>Collection Date:</b> 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. D Sample Diluted Due to Matrix
- Н 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
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range RL Reporting Limit
- Page 26 of 39

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209E05

Date Reported: 10/13/2022

CLIENT: EOG	Client Sample ID: RTP-2W/2 Collection Date: 9/23/2022 11:50:00 AM					
<b>Project:</b> Roy SWD 3						
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. D Sample Diluted Due to Matrix
- Н 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
- в Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits Р Sample pH Not In Range
- Reporting Limit
- RL

Page 27 of 39

Lab Order 2209E05

Date Reported: 10/13/2022

CLIENT: EOG	Client Sample ID: RTP-2W/4 Collection Date: 9/23/2022 12:00:00 PM					
<b>Project:</b> Roy SWD 3						
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 RANG	E				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. D Sample Diluted Due to Matrix
- Н 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
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 28 of 39

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209E05

Date Reported: 10/13/2022

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	<b>Received Date:</b> 9/27/2022 7:25:00 AM					
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS					Analys	t: JTT	
Chloride	ND	60	mg/Kg	20	10/3/2022 2:11:10 PM	70539	
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analys	t: mb	
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	9/29/2022 12:21:03 PM	1 70465	
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	9/29/2022 12:21:03 PM	1 70465	
Surr: DNOP	115	21-129	%Rec	1	9/29/2022 12:21:03 PM	1 70465	
EPA METHOD 8015D: GASOLINE RANG	E				Analys	t: 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					Analys	t: 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. D Sample Diluted Due to Matrix
- Н 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
- в Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 29 of 39

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209E05

Date Reported: 10/13/2022

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	E				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. D Sample Diluted Due to Matrix
- Н 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
- в Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits Р Sample pH Not In Range
- RL Reporting Limit

Page 30 of 39
**Analytical Report** 

### Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209E05

Date Reported: 10/13/2022

CLIENT: EOG		Cl	ient Sample I	<b>D:</b> R1	ГР-6N/1	
Project: Roy SWD 3		(	Collection Dat	t <b>e:</b> 9/2	23/2022 2:16:00 PM	
Lab ID: 2209E05-031	Matrix: SOIL		Received Dat	t <b>e:</b> 9/2	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	E				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. D Sample Diluted Due to Matrix
- Н 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
- в Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 31 of 39

**Analytical Report** 

### Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209E05

Date Reported: 10/13/2022

CLIENT: EOG		Cl	ient Sample II	<b>D:</b> RT	P-6N/4	
Project: Roy SWD 3		(	Collection Dat	<b>e:</b> 9/2	23/2022 2:22:00 PM	
Lab ID: 2209E05-032	Matrix: SOIL		<b>Received Dat</b>	<b>e:</b> 9/2	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 RANG	E				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. D Sample Diluted Due to Matrix
- Н 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
- в Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 32 of 39

	WO#:	2209E05
all Environmental Analysis Laboratory, Inc.		13-Oct-22

Client: Project:	EOG Roy SWI	03								
Sample ID:	MB-70532	SampType: <b>ml</b>	olk	Tes	tCode: EF	PA Method	300.0: Anion	6		
Client ID:	PBS	Batch ID: 70	532	R	lunNo: <b>9</b> 1	1459				
Prep Date:	9/30/2022	Analysis Date: 10	)/1/2022	S	eqNo: 32	275048	Units: mg/K	g		
Analyte Chloride		Result PQL ND 1.5	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sample ID:	LCS-70532	SampType: Ics	;	Tes	tCode: EF	PA Method	300.0: Anions	S		
Client ID:	LCSS	Batch ID: 70	532	R	lunNo: <b>91</b>	1459				
Prep Date:	9/30/2022	Analysis Date: 10	)/1/2022	S	eqNo: 32	275049	Units: mg/K	g		
Analyte		Result PQL		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: M	BLK	Tes	tCode: EF	PA Method	300.0: Anions	5		
Client ID:	PBS	Batch ID: 70	539	R	unNo: <b>91</b>	1495				
Prep Date:	10/3/2022	Analysis Date: 10	)/3/2022	S	eqNo: 32	277087	Units: mg/K	g		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND 1.5								
Sample ID:	LCS-70539	SampType: LC	S	Tes	tCode: EF	PA Method	300.0: Anions	5		
Client ID:	LCSS	Batch ID: 70	539	R	unNo: <b>91</b>	1495				
Prep Date:	10/3/2022	Analysis Date: 10	)/3/2022	S	eqNo: 32	277088	Units: mg/K	g		
Analyte		Result PQL		SPK Ref Val		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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 33 of 39

QC SUMMART REFORT	WO#:	2209E05
Hall Environmental Analysis Laboratory, Inc.		13-Oct-22

Client: EOG								
Project: Roy SW	/D 3							
Comple ID: MB 70465	CompTup		Taa	Codo: EDA Mothed		Denge	Organiaa	
Sample ID: MB-70465	SampType			tCode: EPA Method	SUISW/D: Diese	er Kange	organics	
Client ID: PBS		): <b>70465</b>		RunNo: <b>91420</b>				
Prep Date: 9/28/2022	Analysis Date	e: 9/29/2022	5	SeqNo: 3273391	Units: mg/Kg			
Analyte			SPK Ref Val	%REC LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15						
Motor Oil Range Organics (MRO)	ND	50		440 04	400			
Surr: DNOP	12	10.00		118 21	129			
Sample ID: LCS-70465	SampType	e: LCS	Tes	tCode: EPA Method	8015M/D: Diese	el Range	e Organics	
Client ID: LCSS	Batch ID	): <b>70465</b>	F	unNo: <b>91420</b>				
Prep Date: 9/28/2022	Analysis Date	e: 9/29/2022	S	SeqNo: <b>3273393</b>	Units: mg/Kg			
Analyte	Result F	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	e. MBI K	Tos	tCode: EPA Method	8015M/D: Diese	Dange	Organics	
Client ID: PBS		): 70446			oursiand. Diese	i italiye	organics	
				RunNo: 91420				
Prep Date: 9/27/2022	Analysis Date	e: 9/30/2022	5	SeqNo: 3273492	Units: mg/Kg			
Analyte	Result F		SPK Ref Val	%REC LowLimit	HighLimit 9	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15						
Motor Oil Range Organics (MRO)	ND	50		00.4	100			
Surr: DNOP	9.0	10.00		90.4 21	129			
Sample ID: LCS-70446	SampType	e: LCS	Tes	tCode: EPA Method	8015M/D: Diese	el Range	e Organics	
Client ID: LCSS								
	Batch ID	): <b>70446</b>	F	unNo: <b>91420</b>				
Prep Date: 9/27/2022	Batch ID Analysis Date			2unNo: <b>91420</b> SeqNo: <b>3273494</b>	Units: <b>mg/Kg</b>			
	Analysis Date	e: 9/30/2022		SeqNo: 3273494	Units: <b>mg/Kg</b>	%RPD	RPDLimit	Qual
Analyte	Analysis Date	e: 9/30/2022	SPK Ref Val	SeqNo: 3273494	Units: <b>mg/Kg</b>	%RPD	RPDLimit	Qual
Analyte	Analysis Date Result F	e: <b>9/30/2022</b> PQL SPK value	SPK Ref Val	eqNo: <b>3273494</b> %REC LowLimit	Units: <b>mg/Kg</b> HighLimit <sup>o</sup>	%RPD	RPDLimit	Qual
Analyte Diesel Range Organics (DRO) Surr: DNOP	Analysis Date Result F 47 4.5	e: <b>9/30/2022</b> PQL SPK value 15 50.00 5.000	SPK Ref Val	SeqNo:         3273494           %REC         LowLimit           93.5         64.4           90.2         21	Units: <b>mg/Kg</b> HighLimit ° 127 129			Qual
Analyte Diesel Range Organics (DRO) Surr: DNOP Sample ID: LCS-70443	Analysis Date Result F 47 4.5 SampType	e: <b>9/30/2022</b> PQL SPK value 15 50.00 5.000 e: <b>LCS</b>	SPK Ref Val 0 Tes	BeqNo:         3273494           %REC         LowLimit           93.5         64.4           90.2         21           tCode:         EPA Method	Units: <b>mg/Kg</b> HighLimit ° 127 129			Qual
Analyte Diesel Range Organics (DRO) Surr: DNOP Sample ID: LCS-70443 Client ID: LCSS	Analysis Date Result F 47 4.5 SampType Batch ID	e: 9/30/2022 PQL SPK value 15 50.00 5.000 e: LCS p: 70443	SPK Ref Val 0 Tes F	BeqNo:         3273494           %REC         LowLimit           93.5         64.4           90.2         21           tCode:         EPA Method           RunNo:         91439	Units: mg/Kg HighLimit 127 129 8015M/D: Diese			Qual
Analyte Diesel Range Organics (DRO) Surr: DNOP Sample ID: LCS-70443 Client ID: LCSS Prep Date: 9/27/2022	Analysis Date <u>Result</u> F 47 4.5 SampType Batch ID Analysis Date	e: 9/30/2022 PQL SPK value 15 50.00 5.000 e: LCS b: 70443 e: 9/30/2022	SPK Ref Val 0 Tes F	BeqNo:         3273494           %REC         LowLimit           93.5         64.4           90.2         21           tCode:         EPA Method           RunNo:         91439           SeqNo:         3274443	Units: mg/Kg HighLimit 127 129 8015M/D: Diese Units: mg/Kg	el Range	• Organics	
Analyte Diesel Range Organics (DRO) Surr: DNOP Sample ID: LCS-70443 Client ID: LCSS Prep Date: 9/27/2022 Analyte	Analysis Date <u>Result</u> F 47 4.5 SampType Batch ID Analysis Date Result F	e: 9/30/2022 PQL SPK value 15 50.00 5.000 e: LCS b: 70443 e: 9/30/2022 PQL SPK value	SPK Ref Val 0 Tes F SPK Ref Val	BeqNo:         3273494           %REC         LowLimit           93.5         64.4           90.2         21           tCode:         EPA Method           RunNo:         91439           SeqNo:         3274443           %REC         LowLimit	Units: mg/Kg HighLimit 127 129 8015M/D: Diese Units: mg/Kg HighLimit 1			Qual
Analyte Diesel Range Organics (DRO) Surr: DNOP Sample ID: LCS-70443 Client ID: LCSS Prep Date: 9/27/2022	Analysis Date <u>Result</u> F 47 4.5 SampType Batch ID Analysis Date	e: 9/30/2022 PQL SPK value 15 50.00 5.000 e: LCS b: 70443 e: 9/30/2022	SPK Ref Val 0 Tes F SPK Ref Val 0	BeqNo:         3273494           %REC         LowLimit           93.5         64.4           90.2         21           tCode:         EPA Method           RunNo:         91439           SeqNo:         3274443	Units: mg/Kg HighLimit 127 129 8015M/D: Diese Units: mg/Kg	el Range	• Organics	

#### Qualifiers:

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

C	onmental Analysis Laboratory, Inc.	WO#:	2209E05 13-Oct-22
Client:	EOG		

Project: Roy SW	7D 3									
Sample ID: MB-70443	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: PBS	Batcl	n ID: <b>70</b>	443	R	lunNo: 9	1439				
Prep Date: 9/27/2022	Analysis D	Date: 9/	30/2022	S	eqNo: 3	274446	Units: mg/K	g		
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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- в Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

### **QC SUMMARY REPORT** Ha

L.		tal Analysis Laborate		'O#:	2209E05 13-Oct-22
Client:	EOG				
Project:	Roy SV	VD 3			
Sample ID: Ic	s-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 S	PK 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: <b>mg/Kg</b>
Analyte	Result PQL SPK value S	PK 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 S	PK 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
Sample ID: mb-70438 Client ID: PBS	SampType: <b>MBLK</b> Batch ID: <b>70438</b>	TestCode: EPA Method RunNo: 91394	8015D: Gasoline Range
			8015D: Gasoline Range Units: mg/Kg
Client ID: PBS	Batch ID: <b>70438</b> Analysis Date: <b>9/28/2022</b>	RunNo: 91394	Units: <b>mg/Kg</b>
Client ID: <b>PBS</b> Prep Date: <b>9/27/2022</b> Analyte Gasoline Range Organics (GRO)	Batch ID: <b>70438</b> Analysis Date: <b>9/28/2022</b> Result PQL SPK value S ND 5.0	RunNo: <b>91394</b> SeqNo: <b>3272043</b> PK Ref Val %REC LowLimit	Units: <b>mg/Kg</b> HighLimit %RPD RPDLimit Qual
Client ID: <b>PBS</b> Prep Date: <b>9/27/2022</b> Analyte	Batch ID: <b>70438</b> Analysis Date: <b>9/28/2022</b> Result PQL SPK value S	RunNo: <b>91394</b> SeqNo: <b>3272043</b>	Units: <b>mg/Kg</b>
Client ID: <b>PBS</b> Prep Date: <b>9/27/2022</b> Analyte Gasoline Range Organics (GRO)	Batch ID: <b>70438</b> Analysis Date: <b>9/28/2022</b> Result PQL SPK value S ND 5.0	RunNo: <b>91394</b> SeqNo: <b>3272043</b> SPK Ref Val %REC LowLimit 93.8 37.7	Units: <b>mg/Kg</b> HighLimit %RPD RPDLimit Qual
Client ID: <b>PBS</b> Prep Date: <b>9/27/2022</b> Analyte Gasoline Range Organics (GRO) Surr: BFB	Batch ID:         70438           Analysis Date:         9/28/2022           Result         PQL         SPK value         S           ND         5.0         940         1000	RunNo: <b>91394</b> SeqNo: <b>3272043</b> SPK Ref Val %REC LowLimit 93.8 37.7	Units: <b>mg/Kg</b> HighLimit %RPD RPDLimit Qual
Client ID: <b>PBS</b> Prep Date: <b>9/27/2022</b> Analyte Gasoline Range Organics (GRO) Surr: BFB Sample ID: <b>Ics-70460</b>	Batch ID: 70438         Analysis Date:       9/28/2022         Result       PQL       SPK value       S         ND       5.0       1000         940       1000       SampType:       LCS	RunNo: 91394 SeqNo: 3272043 SPK Ref Val %REC LowLimit 93.8 37.7 TestCode: EPA Method	Units: <b>mg/Kg</b> HighLimit %RPD RPDLimit Qual
Client ID: PBS Prep Date: 9/27/2022 Analyte Gasoline Range Organics (GRO) Surr: BFB Sample ID: Ics-70460 Client ID: LCSS	Batch ID: <b>70438</b> Analysis Date: <b>9/28/2022</b> Result PQL SPK value S ND 5.0 940 1000 SampType: LCS Batch ID: <b>70460</b>	RunNo:       91394         SeqNo:       3272043         SPK Ref Val       %REC       LowLimit         93.8       37.7         TestCode:       EPA Method         RunNo:       91419         SeqNo:       3272915	Units: mg/Kg HighLimit %RPD RPDLimit Qual 212 8015D: Gasoline Range
Client ID: <b>PBS</b> Prep Date: <b>9/27/2022</b> Analyte Gasoline Range Organics (GRO) Surr: BFB Sample ID: <b>Ics-70460</b> Client ID: <b>LCSS</b> Prep Date: <b>9/28/2022</b>	Batch ID: <b>70438</b> Analysis Date: <b>9/28/2022</b> Result PQL SPK value S ND 5.0 940 1000 SampType: LCS Batch ID: <b>70460</b> Analysis Date: <b>9/29/2022</b>	RunNo:       91394         SeqNo:       3272043         SPK Ref Val       %REC       LowLimit         93.8       37.7         TestCode:       EPA Method         RunNo:       91419         SeqNo:       3272915	Units: mg/Kg HighLimit %RPD RPDLimit Qual 212 8015D: Gasoline Range Units: mg/Kg HighLimit %RPD RPDLimit Qual 137
Client ID: <b>PBS</b> Prep Date: <b>9/27/2022</b> Analyte Gasoline Range Organics (GRO) Surr: BFB Sample ID: <b>Ics-70460</b> Client ID: <b>LCSS</b> Prep Date: <b>9/28/2022</b> Analyte	Batch ID: <b>70438</b> Analysis Date: <b>9/28/2022</b> Result PQL SPK value S ND 5.0 940 1000 SampType: LCS Batch ID: <b>70460</b> Analysis Date: <b>9/29/2022</b> Result PQL SPK value S	RunNo: 91394 SeqNo: 3272043 SPK Ref Val %REC LowLimit 93.8 37.7 TestCode: EPA Method RunNo: 91419 SeqNo: 3272915 SPK Ref Val %REC LowLimit	Units: mg/Kg HighLimit %RPD RPDLimit Qual 212 8015D: Gasoline Range Units: mg/Kg HighLimit %RPD RPDLimit Qual
Client ID: <b>PBS</b> Prep Date: <b>9/27/2022</b> Analyte Gasoline Range Organics (GRO) Surr: BFB Sample ID: <b>Ics-70460</b> Client ID: <b>LCSS</b> Prep Date: <b>9/28/2022</b> Analyte Gasoline Range Organics (GRO)	Batch ID:       70438         Analysis Date:       9/28/2022         Result       PQL       SPK value       S         ND       5.0       1000         940       1000       1000       S         SampType:       LCS       Batch ID:       70460         Analysis Date:       9/29/2022       Result       PQL       SPK value       S         27       5.0       25.00       25.00       1000       1000	RunNo:       91394         SeqNo:       3272043         SPK Ref Val       %REC       LowLimit         93.8       37.7         TestCode: EPA Method RunNo:         91419       SeqNo:       3272915         SPK Ref Val       %REC       LowLimit         0       108       72.3         237       37.7	Units: mg/Kg HighLimit %RPD RPDLimit Qual 212 8015D: Gasoline Range Units: mg/Kg HighLimit %RPD RPDLimit Qual 137
Client ID: <b>PBS</b> Prep Date: <b>9/27/2022</b> Analyte Gasoline Range Organics (GRO) Surr: BFB Sample ID: Ics-70460 Client ID: LCSS Prep Date: <b>9/28/2022</b> Analyte Gasoline Range Organics (GRO) Surr: BFB	Batch ID: 70438         Analysis Date:       9/28/2022         Result       PQL       SPK value       S         ND       5.0       1000       1000         940       1000       1000       1000       1000         SampType:       LCS       Batch ID: 70460       1000       1000         Analysis Date:       9/29/2022       Result       PQL       SPK value       S         27       5.0       25.00       1000       1000       1000       1000	RunNo:       91394         SeqNo:       3272043         SPK Ref Val       %REC       LowLimit         93.8       37.7         TestCode: EPA Method RunNo:         91419       SeqNo:       3272915         SPK Ref Val       %REC       LowLimit         0       108       72.3         237       37.7	Units: mg/Kg HighLimit %RPD RPDLimit Qual 212 8015D: Gasoline Range Units: mg/Kg HighLimit %RPD RPDLimit Qual 137 212 S
Client ID: <b>PBS</b> Prep Date: <b>9/27/2022</b> Analyte Gasoline Range Organics (GRO) Surr: BFB Sample ID: <b>Ics-70460</b> Client ID: <b>LCSS</b> Prep Date: <b>9/28/2022</b> Analyte Gasoline Range Organics (GRO) Surr: BFB Sample ID: <b>mb-70460</b>	Batch ID: 70438         Analysis Date:       9/28/2022         Result       PQL       SPK value       S         ND       5.0         940       1000       1000         SampType:       LCS         Batch ID:       70460         Analysis Date:       9/29/2022         Result       PQL       SPK value       S         Analysis Date:       9/29/2022       1000       1000         SampType:       LS       25.00       2400       1000         SampType:       MBLK       1000       1000       1000	RunNo:       91394         SeqNo:       3272043         SPK Ref Val       %REC       LowLimit         93.8       37.7         TestCode:       EPA Method         RunNo:       91419         SeqNo:       3272915         SPK Ref Val       %REC       LowLimit         0       108       72.3         237       37.7         TestCode:         TestCode:         TestCode:	Units: mg/Kg HighLimit %RPD RPDLimit Qual 212 8015D: Gasoline Range Units: mg/Kg HighLimit %RPD RPDLimit Qual 137 212 S
Client ID: <b>PBS</b> Prep Date: <b>9/27/2022</b> Analyte Gasoline Range Organics (GRO) Surr: BFB Sample ID: <b>Ics-70460</b> Client ID: <b>LCSS</b> Prep Date: <b>9/28/2022</b> Analyte Gasoline Range Organics (GRO) Surr: BFB Sample ID: <b>mb-70460</b> Client ID: <b>PBS</b>	Batch ID: 70438         Analysis Date:       9/28/2022         Result       PQL       SPK value       S         ND       5.0       1000       1000         940       1000       1000       1000         SampType:       LCS       1000       1000         SampType:       LCS       1000       1000         Analysis Date:       9/29/2022       1000       1000         Result       PQL       SPK value       S         27       5.0       25.00       1000         2400       1000       1000       1000         SampType:       MBLK       Batch ID: 70460       1000         SampType:       Batch ID: 70460       Analysis Date:       9/29/2022	RunNo: 91394 SeqNo: 3272043 SPK Ref Val %REC LowLimit 93.8 37.7 TestCode: EPA Method RunNo: 91419 SeqNo: 3272915 SPK Ref Val %REC LowLimit 0 108 72.3 237 37.7 TestCode: EPA Method RunNo: 91419	Units: mg/Kg HighLimit %RPD RPDLimit Qual 212 8015D: Gasoline Range Units: mg/Kg HighLimit %RPD RPDLimit Qual 137 212 S 8015D: Gasoline Range

**Qualifiers:** 

- Value exceeds Maximum Contaminant Level. \*
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range

RL Reporting Limit Page 36 of 39

2209E05

13-Oct-22

WO#:

# QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client:EOGProject:Roy \$	SWD 3									
Sample ID: mb-70460	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8015D: Gaso	oline Rang	е	
Client ID: PBS	Batcl	n ID: <b>70</b> 4	460	F	RunNo: <b>9</b> 4	1419				
Prep Date: 9/28/2022	Analysis D	)ate: <b>9/</b>	29/2022	S	SeqNo: 32	272916	Units: mg/k	٢g		
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.
- 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.

2209E05	WO#:
13-Oct-22	

Project: Roy SWD 3

Sample ID: Ics-70439	SampT	Гуре: <b>LC</b>	S	Tes	tCode: EF	PA Method	8021B: Volat	iles		
Client ID: LCSS	Batch	h ID: <b>70</b> 4	439	F	unNo: <b>9</b>	1349				
Prep Date: 9/27/2022	Analysis D	Date: <b>9/</b> 3	28/2022	S	eqNo: 32	271548	Units: mg/K	g		
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	SampT	Гуре: <b>МЕ</b>	BLK	Tes	tCode: EF	PA Method	8021B: Volat	iles		
Client ID: PBS	Batch	h ID: <b>70</b> 4	439	F	unNo: <b>9</b>	1349				
Prep Date: 9/27/2022	Analysis D	Date: <b>9/</b> 2	28/2022	5	eqNo: 32	271549	Units: <b>mg/K</b>	g		
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			
	SampType: LCS			Tes						
Sample ID: Ics-70438	Sampl	Type: LC	3	100		AIMethou	8021B: Volat	lies		
Client ID: LCSS	•	h ID: <b>70</b> 4	-		lunNo: <b>9</b>		0021D. V01at	1165		
	•	h ID: 704	438	F		1394	Units: mg/K			
Client ID: LCSS	Batch	h ID: 704	438 28/2022	F	unNo: <b>9</b> ′	1394			RPDLimit	Qual
Client ID: LCSS Prep Date: 9/27/2022 Analyte	Batcl Analysis D	h ID: <b>70</b> 4 Date: <b>9</b> /2	438 28/2022	F	tunNo: 9 GeqNo: 32	1394 272469	Units: mg/K	g	RPDLimit	Qual
Client ID: LCSS Prep Date: 9/27/2022 Analyte Benzene	Batcl Analysis D Result	h ID: <b>70</b> 4 Date: <b>9</b> /2 PQL	438 28/2022 SPK value	F S SPK Ref Val	2unNo: <b>9</b> 6eqNo: <b>3</b> %REC	1394 272469 LowLimit	Units: <b>mg/K</b> HighLimit	g	RPDLimit	Qual
Client ID: LCSS Prep Date: 9/27/2022 Analyte Benzene Toluene	Batch Analysis D Result 0.92	h ID: <b>70</b> 4 Date: <b>9</b> /2 PQL 0.025	<b>438</b> <b>28/2022</b> SPK value 1.000	F S SPK Ref Val 0	2unNo: 9 SeqNo: 32 %REC 91.9	1394 272469 LowLimit 80	Units: <b>mg/K</b> HighLimit 120	g	RPDLimit	Qual
Client ID: LCSS Prep Date: 9/27/2022 Analyte Benzene Toluene Ethylbenzene	Batch Analysis D Result 0.92 0.95	h ID: <b>70</b> 4 Date: <b>9</b> /2 PQL 0.025 0.050	<b>438</b> <b>28/2022</b> SPK value 1.000 1.000	F S SPK Ref Val 0 0	2unNo: <b>9</b> SeqNo: <b>3</b> <u>%REC</u> 91.9 95.5	1394 272469 LowLimit 80 80	Units: <b>mg/K</b> HighLimit 120 120	g	RPDLimit	Qual
Client ID: LCSS Prep Date: 9/27/2022 Analyte Benzene Toluene Ethylbenzene	Batch Analysis D Result 0.92 0.95 0.96	h ID: <b>70</b> 4 Date: <b>9</b> /2 0.025 0.050 0.050	438 28/2022 SPK value 1.000 1.000 1.000	F SPK Ref Val 0 0 0	RunNo: 9 GeqNo: 32 <u>%REC</u> 91.9 95.5 95.5	1394 272469 LowLimit 80 80 80	Units: <b>mg/K</b> HighLimit 120 120 120	g	RPDLimit	Qual
Client ID: LCSS Prep Date: 9/27/2022 Analyte Benzene Toluene Ethylbenzene Xylenes, Total	Batch Analysis D Result 0.92 0.95 0.96 2.9 0.97	h ID: <b>70</b> 4 Date: <b>9</b> /2 0.025 0.050 0.050	438 28/2022 SPK value 1.000 1.000 3.000 1.000	F SPK Ref Val 0 0 0 0	RunNo: 9 SeqNo: 32 %REC 91.9 95.5 95.5 95.8 97.0	1394 272469 LowLimit 80 80 80 80 70	Units: <b>mg/K</b> HighLimit 120 120 120 120	g %RPD	RPDLimit	Qual
Client ID: LCSS Prep Date: 9/27/2022 Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene	Batch Analysis D Result 0.92 0.95 0.96 2.9 0.97 SampT	h ID: <b>70</b> Date: <b>9</b> / PQL 0.025 0.050 0.050 0.10	438 28/2022 SPK value 1.000 1.000 3.000 1.000 8LK	F SPK Ref Val 0 0 0 0 0 Tes	RunNo: 9 SeqNo: 32 %REC 91.9 95.5 95.5 95.8 97.0	1394 272469 LowLimit 80 80 80 80 80 70 24 Method	Units: mg/K HighLimit 120 120 120 120 130	g %RPD	RPDLimit	Qual
Client ID: LCSS Prep Date: 9/27/2022 Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene Sample ID: mb-70438	Batch Analysis D Result 0.92 0.95 0.96 2.9 0.97 SampT	h ID: <b>70</b> Date: <b>9</b> / Date: <b>9</b> / 0.025 0.050 0.050 0.10 Type: <b>ME</b> h ID: <b>70</b>	438 28/2022 SPK value 1.000 1.000 3.000 1.000 8LK 438	F SPK Ref Val 0 0 0 0 0 Tes F	RunNo: 9 SeqNo: 32 %REC 91.9 95.5 95.5 95.8 97.0 tCode: EF	1394 272469 2000 2000 2000 2000 2000 2000 2000 20	Units: mg/K HighLimit 120 120 120 120 130	g %RPD	RPDLimit	Qual
Client ID: LCSS Prep Date: 9/27/2022 Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene Sample ID: mb-70438 Client ID: PBS	Batch Analysis D Result 0.92 0.95 0.96 2.9 0.97 SampT Batch	h ID: <b>70</b> Date: <b>9</b> / Date: <b>9</b> / 0.025 0.050 0.050 0.10 Type: <b>ME</b> h ID: <b>70</b>	438 28/2022 SPK value 1.000 1.000 3.000 1.000 3LK 438 28/2022	F SPK Ref Val 0 0 0 0 0 Tes F	RunNo: 9 SeqNo: 32 %REC 91.9 95.5 95.5 95.8 97.0 Code: EF RunNo: 9	1394 272469 2000 2000 2000 2000 2000 2000 2000 20	Units: mg/K HighLimit 120 120 120 120 130 8021B: Volat	g %RPD	RPDLimit	Qual
Client ID: LCSS Prep Date: 9/27/2022 Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene Sample ID: mb-70438 Client ID: PBS Prep Date: 9/27/2022 Analyte	Batch Analysis D Result 0.92 0.95 0.96 2.9 0.97 SampT Batch Analysis D	h ID: 70. Date: 9/. PQL 0.025 0.050 0.050 0.10 Type: ME h ID: 70. Date: 9/.	438 28/2022 SPK value 1.000 1.000 3.000 1.000 3LK 438 28/2022	F SPK Ref Val 0 0 0 0 Tes F S	RunNo: 9 SeqNo: 32 %REC 91.9 95.5 95.5 95.8 97.0 Code: EF RunNo: 9 SeqNo: 32	1394 272469 LowLimit 80 80 80 80 70 PA Method 1394 272470	Units: mg/K HighLimit 120 120 120 120 130 8021B: Volat Units: mg/K	g %RPD illes		
Client ID: LCSS Prep Date: 9/27/2022 Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene Sample ID: mb-70438 Client ID: PBS Prep Date: 9/27/2022 Analyte Benzene	Batch Analysis D Result 0.92 0.95 0.96 2.9 0.97 SampT Batch Analysis D Result	h ID: <b>70</b> , Date: <b>9</b> , Date: <b>9</b> , Date: <b>9</b> , 0.050 0.050 0.050 0.10 Type: <b>ME</b> h ID: <b>70</b> , Date: <b>9</b> ,	438 28/2022 SPK value 1.000 1.000 3.000 1.000 3LK 438 28/2022	F SPK Ref Val 0 0 0 0 Tes F S	RunNo: 9 SeqNo: 32 %REC 91.9 95.5 95.5 95.8 97.0 Code: EF RunNo: 9 SeqNo: 32	1394 272469 LowLimit 80 80 80 80 70 PA Method 1394 272470	Units: mg/K HighLimit 120 120 120 120 130 8021B: Volat Units: mg/K	g %RPD illes		
Client ID: LCSS Prep Date: 9/27/2022 Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene Sample ID: mb-70438 Client ID: PBS Prep Date: 9/27/2022 Analyte Benzene Toluene	Batch Analysis D Result 0.92 0.95 0.96 2.9 0.97 SampT Batch Analysis D Result ND	h ID: <b>70</b> Date: <b>9</b> / 0.025 0.050 0.050 0.10 Type: <b>ME</b> h ID: <b>70</b> Date: <b>9</b> / PQL 0.025	438 28/2022 SPK value 1.000 1.000 3.000 1.000 3LK 438 28/2022	F SPK Ref Val 0 0 0 0 Tes F S	RunNo: 9 SeqNo: 32 %REC 91.9 95.5 95.5 95.8 97.0 Code: EF RunNo: 9 SeqNo: 32	1394 272469 LowLimit 80 80 80 80 70 PA Method 1394 272470	Units: mg/K HighLimit 120 120 120 120 130 8021B: Volat Units: mg/K	g %RPD illes		
Client ID: LCSS Prep Date: 9/27/2022 Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene Sample ID: mb-70438 Client ID: PBS Prep Date: 9/27/2022	Batch Analysis D Result 0.92 0.95 0.96 2.9 0.97 SampT Batch Analysis D Result ND ND	h ID: <b>70</b> Date: <b>9</b> / PQL 0.025 0.050 0.050 0.10 Type: <b>ME</b> h ID: <b>70</b> Date: <b>9</b> / PQL 0.025 0.050	438 28/2022 SPK value 1.000 1.000 3.000 1.000 3LK 438 28/2022	F SPK Ref Val 0 0 0 0 Tes F S	RunNo: 9 SeqNo: 32 %REC 91.9 95.5 95.5 95.8 97.0 Code: EF RunNo: 9 SeqNo: 32	1394 272469 LowLimit 80 80 80 80 70 PA Method 1394 272470	Units: mg/K HighLimit 120 120 120 120 130 8021B: Volat Units: mg/K	g %RPD illes		
Client ID: LCSS Prep Date: 9/27/2022 Analyte Benzene Toluene Ethylbenzene Kylenes, Total Surr: 4-Bromofluorobenzene Sample ID: mb-70438 Client ID: PBS Prep Date: 9/27/2022 Analyte Benzene Toluene Ethylbenzene	Batch Analysis D Result 0.92 0.95 0.96 2.9 0.97 SampT Batch Analysis D Result ND ND ND	h ID: <b>70</b> Date: <b>9</b> / PQL 0.025 0.050 0.050 0.10 Type: <b>ME</b> h ID: <b>70</b> Date: <b>9</b> / PQL 0.025 0.050 0.050	438 28/2022 SPK value 1.000 1.000 3.000 1.000 3LK 438 28/2022	F SPK Ref Val 0 0 0 0 Tes F S	RunNo: 9 SeqNo: 32 %REC 91.9 95.5 95.5 95.8 97.0 Code: EF RunNo: 9 SeqNo: 32	1394 272469 LowLimit 80 80 80 80 70 PA Method 1394 272470	Units: mg/K HighLimit 120 120 120 120 130 8021B: Volat Units: mg/K	g %RPD illes		

#### 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

EOG

Roy SWD 3

**Client:** 

**Project:** 

Sample ID: Ics-70460

# **QC SUMMARY REPORT** Hall Environmental Analysis

2209E05	WO#:
13-Oct-22	

#### Е Estimated value

- J Analyte detected below quantitation limits
- RL Reporting Limit
- Analyte detected in the associated Method Blank

в

- Р Sample pH Not In Range

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

Page 39 of 39

Analysis Laborat	ory, Inc.	13-Oct-22
3		
SampType: LCS	TestCode: EPA Method 8021B: Volatiles	

•										
Client ID: LCSS	Batc	h ID: <b>70</b> 4	460	F	RunNo: <b>9</b>	1419				
Prep Date: 9/28/2022	Analysis [	Date: <b>9/</b> 2	29/2022	5	SeqNo: 3	272939	Units: mg/K	g		
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			
Kylenes, Total	3.0	0.10	3.000	0	98.4	80	120			
Curry A. Danma flux and a second	0.07		1.000		96.6	70	130			
Surr: 4-Bromofluorobenzene	0.97		1.000		30.0	10	150			
Surr: 4-Bromofluorobenzene Sample ID: mb-70460		Гуре: МЕ		Tes			8021B: Volat	iles		
	Samp	Type: <b>ME</b> h ID: <b>70</b> 4	BLK			PA Method		iles		
Sample ID: mb-70460	Samp	h ID: 704	3LK 460	F	tCode: El	PA Method 1419				
Sample ID: <b>mb-70460</b> Client ID: <b>PBS</b> Prep Date: <b>9/28/2022</b>	Samp <sup>¬</sup> Batc	h ID: 704	BLK 460 29/2022	F	tCode: El	PA Method 1419	8021B: Volat		RPDLimit	Qual
Sample ID: mb-70460 Client ID: PBS	Samp Batc Analysis [	h ID: <b>70</b> 4 Date: <b>9/</b> 2	BLK 460 29/2022	F	tCode: El RunNo: 9 SeqNo: 3	PA Method 1419 272940	8021B: Volat	g	RPDLimit	Qual
Sample ID: mb-70460 Client ID: PBS Prep Date: 9/28/2022 Analyte	Samp Batc Analysis I Result	h ID: <b>70</b> 4 Date: <b>9/</b> 2 PQL	BLK 460 29/2022	F	tCode: El RunNo: 9 SeqNo: 3	PA Method 1419 272940	8021B: Volat	g	RPDLimit	Qual
Sample ID: <b>mb-70460</b> Client ID: <b>PBS</b> Prep Date: <b>9/28/2022</b> Analyte Benzene	Samp Batc Analysis I Result ND	h ID: <b>70</b> 4 Date: <b>9</b> /2 PQL 0.025	BLK 460 29/2022	F	tCode: El RunNo: 9 SeqNo: 3	PA Method 1419 272940	8021B: Volat	g	RPDLimit	Qual
Sample ID: <b>mb-70460</b> Client ID: <b>PBS</b> Prep Date: <b>9/28/2022</b> Analyte Benzene Foluene	Samp Batc Analysis I Result ND ND	h ID: <b>70</b> 4 Date: <b>9</b> /2 PQL 0.025 0.050	BLK 460 29/2022	F	tCode: El RunNo: 9 SeqNo: 3	PA Method 1419 272940	8021B: Volat	g	RPDLimit	Qual

	S seph Alderette an Livingston	Work Order Nu 9/27/2022 7:25:0	mber: 2209E05			
Completed By: Se		9/27/2022 7:25:0			RcptNo: 1	
	an Livingston	0.22022 7.20.0	0 AM	JA4		
Reviewed By:		9/27/2022 8:19:4	1 AM	S-L	not	
,	a 9.27.2	2		0,-0,-		
Chain of Custody	-		_	_	_	
1. Is Chain of Custod			Yes 🗹	No 🗌	Not Present	
2. How was the samp	le delivered?		Courier			
<u>Log In</u>						
3. Was an attempt ma	ade to cool the samples	?	Yes 🔽	No 🗌		
4. Were all samples r	eceived at a temperature	e of >0° C to 6.0°C	Yes 🔽	No 🗌	NA 🗌	
5. Sample(s) in prope	r container(s)?		Yes 🖌	No 🗌		
6. Sufficient sample v	olume for indicated test(	s)?	Yes 🖌	No 🗌		
7. Are samples (except	t VOA and ONG) prope	rly preserved?	Yes 🗹	No 🗌		
8. Was preservative a	dded 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 of	ontainers received brok	en?	Yes	No 🗹 🛛		
					# of preserved bottles checked	
11. Does paperwork ma	atch bottle labels? on chain of custody)		Yes 🗹	No 🗌	for pH: $(<2 \text{ or }>12)$	unless noted)
12. Are matrices correct		Custodv?	Yes 🔽	No 🗌	Adjusted?	unicos noted)
13. Is it clear what anal		,	Yes 🔽	No 🗌		
14. Were all holding tim			Yes 🗹	No 🗌	Checked by: JN	9/27/2
	er for authorization.)			/		
Special Handling ( 15. Was client notified	of all discrepancies with	this order?	Yes	No 🗌	NA 🔽	
Person Notifi		Dat	te <sup>.</sup>	and the second second sec		
By Whom:	1	Via		Phone 🗌 Fax	In Person	
Regarding:	Ī					
Client Instruc	tions:					
16. Additional remarks	:					
17. Cooler Information	<u>n</u>					
Cooler No Te 1 5.3	mp °C Condition S Good	Seal Intact Seal No	Seal Date	Signed By		

	ANALLENVIKONMENIAL ANALYSISIARODATODY		www.nallenvironmental.com 4901 Hawkins NF - Albuniternite NM 87109	Tel. 505-345-3975 Fax 505-345-4107	Ina				(00			hloride													Remarks: Bill to EOG Artesia		1900 adultion of the control 9:27:7 7:25
			4901	Tel		(	้อม	N / C	י ספאס ס א סאכ	วยอ	D)DS		⊥ ~											_/	emarks: I		
747						orf			167 D No			HEAL No.		1 200	<u>س</u> 3	Pac	005	у <u>с</u>	the	001	004	010	01(	710			52:2 22:22.6
Me: DE S DAY	BuRush		0 #3			er: W. Kiero			J , Martinez		Inding CF): 5.	Preservative Tvpe	ICE .	/										ł	Via:	Via:	courses
Turn-Around Time:	🖉 Standard	Project Name:	Ray Swo #3	Project #: 5375		Project Manager: W. Kierdorf			Sampler: U	# of Coolers:	Cooler Temp(including CF): 5	Container P	1											- <del>)</del>	-		J.K.
Chain-of-Custody Record	ıger Env.		Mailing Address: EOG - 105 S 4th St, Artesia NM, 88210	Ranger: PO Box 201179, Austin TX 78720		email or Fax#: Will@RangerEnv.com		Level 4 (Full Validation)	mpliance			Sample Name	8-1	B-2	6-3	B-4	6-5	3-6	8-7	0-8	8-9	B-10	6-11	8-12	by:		Churthe Churth
-of-Cu	Client: EOG-Artesia / Ranger Env.		EOG - 105	01179, AL	35-1785	Vill@Rang			<ul> <li>Az Compliance</li> <li>Other</li> </ul>	Excel		Matrix		(										1	Relinquished by:	Relinquished by:	BOULULA
hain	EOG-Art		Address: E	PO Box 2	Phone #: 521-335-1785	r Fax#: V	QA/QC Package:	Idard	itation: AC	EDD (Type)		Time	ooht	14ud	hohi	1406	1408	Qihi	CIHI	IHIH	iyile	1419	orhi	(43D	Time:	Time:	1900
	Client:		Mailing	Ranger:	Phone	email o	QA/QC	Standard	Accreditation:	EDC		Date	9-23-22											ŕ	Date: 0/10/17	Date:	ce/ng/b

0	hain	-of-CI	Chain-of-Custody Record	Turn-Around Time: そのら ぐ	Time: 06, 5 047 7 47	747			
Client:	EOG-Art	esia / Ra	Client: EOG-Artesia / Ranger Env.	Standard	Rush			AALL ENVIRONMENTAL ANALYSTS LARODATODY	
				Project Name:					<i>.</i> , .
Mailing	Address: I	EOG - 10 <del>(</del>	Mailing Address: EOG - 105 S 4th St, Artesia NM, 88210	Rey	/ SwD#3		4901 Hs	www.nailenvironmentai.com 4901 Hawkins NF - Alburuterque NM 87109	
Ranger:	PO Box 2	201179, A	Ranger: PO Box 201179, Austin TX 78720	Project #: 5375	75		Tel. 50	Tel. 505-345-3975 Fax 505-345-4107	
Phone	Phone #: 521-335-1785	35-1785						Analysis	19.000
email o	r Fax#: V	Vill@Ran	email or Fax#: Will@RangerEnv.com	Project Mana	Project Manager: W. Kierdorf	dorf	(		
QA/QC Packa	QA/QC Package:		Level 4 (Full Validation)				<u>оям (</u>		
Accreditation:	itation:	□ Az Cc	Az Compliance	Sampler:	J. Martinez	224			
IN NELAC	AC	□ Other		On Ice:	D-Yes	ON D			
EDD 🔤	EDD (Type)	Excel		# of Coolers:	- 407526		ิ่มอ		
				Cooler Temp(including CF): 5	100000	3-055.3%	9D(		
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	8) XJT8 7PH:801 Chloride		
22-82-6	hth1	501	6-13	1×402 )ar	ICE	013	XXX		T
	1426		8-14	1	1	614		9 	[
	schi		8+15			015			
	1430		6-16			olc			
	1432		0-17			41274000 (7-			
	4841		B-18			0(8			
	1436		8-19			019			
	1428		N-7			020			1
	0771		W-3			120			1
	Chnl		w-3			022			
	hhhi		w-4			023			
-1	1446		W-5	Т	ł	024	7777		
Date:	Time:	Relinquished by:	led by:	Received by:	Via:		Remarks: Bill	Remarks: Bill to EOG Artesia	
3	S	5	Nartinez	MANUL	Ş	11			
0 De De	Operates: 1 mes.	Relinquished by:	ed by:	Keceived by:	Covira -	9.27.22 7:25			
-	If necessary,	samples sul	bmitted to Hall Environmental may be subc	contracted to other a	accredited laboratori	ies. This serves as notice of th	is possibility. Any su	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 repoint for the necessary, samples submitted to Hall Environmental may be subcontracted to the analytical repoint of this possibility.	ີ້

	Droject Name:	lsh	A	ANALYSIS LABORATORY
Mailing Address: EOG - 105 S 4th St, Artesia NM, 88210	SwD	井3	www.h	www.hallenvironmental.com
Ranger: PO Box 201179, Austin TX 78720	Project #: 5375		Tel. 505-345-3975	
Phone #: 521-335-1785				Anal
email or Fax#: Will@RangerEnv.com	Project Manager: W. Kierdorf	ierdorf	(	
Level 4 (Full Validation)			оям / С	
Az Compliance	Sampler: J. Mont	23414		
Other	On Ice: 🗳 Yes	0N 🗆		
Excel	# of Coolers: /		ิษย	
	Cooler Temp(including CF):	5.3-05 5.300	)DS	
Matrix Sample Name	Container Preservative Type and # Type	Ne HEAL No.	8) X∃T8 TPH:801 Chloride	
Soil W-6	1/4 yoz )ar 16E	100 520	×	
1		320 002		
RTP-2W/2				
RTP-aw/4		228 00H		
RTP-2N/2		029 WS		
RTP-2 N/4		030 000		
RTP-6N/2		031 027		
- RIP-GN/4	4	032 201	177	
		5 dizate		
Relinquished by:	Received by: Via:	Date Time △	Remarks: Bill to EOG Artesia	Artesia
tinez	UMUUUU	2		
/	Received by: Via: V	Date Time 9.71.75 7.75		
(MILLILLAN)	M			

# **ATTACHMENT 5 – NMOCD CORRESPONDENCE**

From: Miriam Morales < Miriam Morales@eogresources.com>

Sex: 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 <<u>Artesia Regulatory@eogresources.com</u>>; Artesia S&E Spill Remediation <<u>Artesia S&E Spill Remediation@eogresources.com</u>>;

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,

Released to Imaging: 6/2/2023 11:14:34

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 <<u>ahowell@pvtn.net</u>>; Austin Weyant <<u>austin@atkinseng.com</u>>; Jennifer Nobui <<u>Jennifer.Nobui@state.nm.us</u>>; Jocelyn Harimon <<u>Jocelyn.Harimon@state.nm.us</u>>; Mike Bratcher <<u>mike.bratcher@state.nm.us</u>>; Robert Hamlet <<u>Robert.Hamlet@state.nm.us</u>>; Co: Andrea Felix <<u>Andrea\_Felix@eogresources.com</u>>; Katie Jamison <<u>Katie\_Jamison@eogresources.com</u>>; Michael Yemm <<u>Michael\_Yemm@eogresources.com</u>>; BODEE\_EUDY <<u>BODEE\_EUDY@eogresources.com</u>>; Michael Yemm Subject: Roy SWD 3 (2RP-4576, 2RP-5094, nAPP2123047534, nAPP2111048250) 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: <u>tina huerta@eogresources.com</u>

&eog resources

Artesia Division

•

From: Tina Huerta <<u>Tina\_Huerta@eogresources.com</u>> Sent: Wednesday, September 21, 2022 10:12 AM To: Alan & Cheryl <<u>ahowell@pvtn.net</u>>; Austin Weyant <<u>austin@atkinseng.com</u>>; Jennifer Nobui <<u>Jennifer.Nobui@state.nm.us</u>>; Jocelyn Harimon <<u>Jocelyn.Harimon@state.nm.us</u>>; Mike Bratcher <<u>mike.bratcher@state.nm.us</u>>; Robert Hamlet <<u>Robert.Hamlet@state.nm.us</u>>; Mike Bratcher <<u>c:</u> Andrea Felix <<u>Andrea\_Felix@eogresources.com</u>>; Katie Jamison <<u>Katie\_Jamison@eogresources.</u> com>; Michael Yemm <<u>Michael\_Yemm@eogresources.com</u>>; Terrence Gant <<u>Terry\_Gant@eogresources.com</u>> 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: <u>tina\_huerta@eogresources.com</u>



## Artesia Division

**Released to Imaging: 6/2/2023 11:14:34 AM** 

# 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	Benzen e mg/Kg	GRO mg/Kg	DRO mg/Kg	GRO + DRO mg/Kg	MRO mg/Kg	<b>Total TPH</b> mg/Kg	Field Screens mS/cm	Cl- mg/Kg
NM	OCD Closur	e Criteria	50	10			1000		100		600
	4/10/2019									0.13	
	4/10/2019		<0.225	<0.025	<5.0	<9.9	<14.9	<50	<64.9	1.02	3100
	4/10/2019		<0.225	<0.025	<4.8	<9.9	<14.7	<49	<63.7	0.75	530
	4/10/2019	45								0.09	
L1R	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	
	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	
L2R	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	
	4/11/2019		<0.212	<0.024	<4.7	<8.7	<13.4	<44	<57.4	0.25	220
	4/11/2019		<0.208	<0.023	<4.6	<8.9	<13.5	<45	<58.5	0.20	140
	4/11/2019		<0.212	<0.024	<4.7	<9.8	<14.5	<49	<63.5	0.13	110
	4/11/2019									0.12	
L3R	4/11/2019									0.07	
2013	4/11/2019									0.07	
	4/11/2019									0.08	
	4/11/2019	I								0.06	
	4/11/2019									0.05	
	4/11/2019	75								0.07	

"--" = Not Analyzed

SMA #

•

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
NMOC	CD Closure C	Criteria	50	10	10	000		100		600
	1/23/2018	1	<0.23	<0.023	<4.7	200	340	540		13000
L1	1/23/2018	2								4800
	1/23/2018	3	2.46	<0.025	140	14000	6100	20240		1900
	1/23/2018	4								1000
	1/23/2018	1								21000
	1/23/2018	3								1000
L2	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
	12/10/2018	5								
	12/10/2018	7.5								
	12/10/2018	10							178	
12	12/10/2018	15	< 0.300	<0.050	<10.0	<10.0	<10.0	<30.0		1420
L3	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	İ	48
	10/29/2018	sidewall				230				
	12/10/2018	sidewall	< 0.300	<0.050	<10.0	<10.0	<10.0	<30.0		16
	12/10/2018	sidewall	< 0.300	< 0.050	<10.0	<10.0	<10.0	<30.0		48
	12/10/2018					73				
	12/10/2018	5								
	12/10/2018	10								32
BG1	12/10/2018	15								
	12/10/2018	20								48
	12/10/2018	25								48
	12/11/2018	10								32
	12/11/2018	15								
BG2	12/11/2018	20								48
	12/11/2018	25								48

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

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

M	2	ENVIRONMEN	NGEI tal services, i	P.O. Box 2011 Austin, Texas	78720 35-1785	BORIN PAGE 1 OF 2	IG NUMBER SB-1
CLIENT	EOG R	Resources, Inc.			PROJECT NAME Roy SWD		
		<b>BER</b> 5375			PROJECT LOCATION _Eddy		exico
DATE ST	TARTED	5/18/22		<b>TED</b> 5/18/22	- GROUND WATER LEVELS:		
DRILLIN	IG CONT	RACTOR HCI			- AT TIME OF DRILLING		
					- AFTER DRILLING		
		obert Martin TES <u>32.670981</u>		BY Patrick Finn	<ul> <li>BTOC = Below Top Of</li> <li>GB = Grab Sample</li> <li>GEO = Geotech Samp</li> </ul>	•	
o DEPTH (ft)	SOIL SAMPLE ANALYSIS	GROUNDWATER LEVELS (BTOC) PID/FIELD CHLORIDE TITRATION	(In ppm) GRAPHIC LOG	Ν	IATERIAL DESCRIPTION	С	WELL DIAGRAM Casing Type: 6.25" Diameter Temp. We
		2 / 75 0.8 / 7	50	(GM) Silty Gravel, t inclusions, subroun	brown to tan, 0.5"-1.5" diameter ded to subangular, medium den	gravel ise	
	GB	2.6 / 6 2.8 / 12 1 / 60 0.4 / 6 0.5 / 9 0.8 / 6 2.5 / 7 0.6 / 7 1.2 / 7 1.2 / 7 1.4 / 7 1.6 / 7 1.2 / 9 1.7 / 9 1.5 / 9 1.6 / 7 1 / 90 2 / 75 0 / 10 1.2 / 7 3.8 / 7 2.2 / 7 3.8 / 7	275         00         00         00         00         00         00         00         00         00         00         00         00         00         00         00         50         50         50         50         50         50         50         50         50         50         50         50         50         50	poorly graded, med	own, very fine grained, medium lum dense	very well	<b>≺</b> Bentonite
		9.9 / 6 6.4 / 4 0.7 / 6 0.1 / 6 0 / 45 0 / 75					

### **Released to Imaging: 6/2/2023 11:14:34 AM**

~			RANG.	Fax: (512)335-0527	BORING NUMBER SB-1 PAGE 2 OF 2
		Resources		PROJECT NAME Roy SWD	
PROJI		BER _537	<u>′5</u>	PROJECT LOCATION _Eddy	County, New Mexico
(ft) (ft)	SOIL SAMPLE ANALYSIS	GROUNDWATER LEVELS (BTOC)	PID/FIELD CHLORIDE TITRATION (In ppm) GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
- - - 40	GB GB		0 / 750 0 / 600 0 / 600 0 / 450 0 / 450	<ul> <li>(SM) Clayey Sandy Silt, reddish-brown to maroon, v sorted, poorly graded, loose to medium dense, 0.5" gravel inclusions, subrounded</li> <li>40.0</li> </ul>	/ery well diameter
	- <u></u>			Bottom of borehole at 40.0 feet.	

1	A LA	RAN VIRONMENTAL	G	ER ES, INC.	Ranger Enviro P.O. Box 2011 Austin, Texas Phone: (512)3 Fax: (512)335-	78720 35-1785	BOR PAGE 1 C	ING NUMBER SB-2
CLIENT EC	G Resource	s, Inc.			Fax: (512)335-		/ SWD #3	
	UMBER 537							Mexico
DATE STAR	TED _5/18/22	2	COM	IPLETEI	<b>D</b> _5/18/22	- GROUND WATER LEV		
DRILLING C	ONTRACTOR	R HCI						
						AT TIME OF DRI		
					Y Patrick Finn			
GPS COORI	DINATES 32	2.670985°, -1	04.517	7664°			ple	
O DEPTH (ft) SOIL SAMPLE ANAL VSIS	GROUNDWATER LEVELS (BTOC)	PID/FIELD CHLORIDE TITRATION (In ppm)	GRAPHIC LOG		Ν	IATERIAL DESCRIPTION	I	WELL DIAGRAM Casing Type: 6.25" Diameter Temp. Well
		2.0./ 2000.	0 KG		(GM) Silty Gravel, I	prown, <0.25" diameter gra	avel, subangular,	Busing Type. 0.20 Biamotor Femp. Wei
F 1		2.8 / 3000+	V_ L		very fine silt			
		3.2 / 1500 1.1 / 2850 1.6 / 2250 3.2 / 3000+ 2.8 / 3000+ 2.8 / 3000+ 2.7 / 2100 5.4 / 2250 1.6 / 1650 1.1 / 1350 1.4 / 1800 1.5 / 1500 0.3 / 2400 0.8 / 2550 1.1 / 2400 0.7 / 3000+ 1.9 / 2700 0.6 / 3000+ 0.1 / 3000+			0.25" diameter grav	ey Silt, brown, poorly sorte rel, subrounded to subang	ular	
	В	0.9 / 3000+ 0.7 / 3000+ 1.4 / 3000+ 0.5 / 3000+ 0.7 / 3000+ 0.7 / 3000+ 0.4 / 3000+ 0 / 3000+ 1.2 / 3000+ 1.2 / 3000+ 0 / 2250 1.8 2.9 4.7 5				, buff to tan, very fine grain brounded to subangular	ned, poorly sorted,	<b>≺</b> Bentonite

**Released to Imaging: 6/2/2023 11:14:34 AM** 

Page	169	of 172

•

ROJE		esources	5		PROJECT NAME _Roy SWD #3 PROJECT LOCATION _Eddy County, New	Mexico
(ff) 35	SOIL SAMPLE ANALYSIS	GROUNDWATER LEVELS (BTOC)	PID/FIELD CHLORIDE TITRATION (In ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
	GB GB GB GB		2.5 0.8 0.2 2 0.4 0 / 1950 0 / 2550 0 / 1650 0 / 600 0 / 300 0 / 750 0 / 600 0 / 300 0 / 300 0 / 300 0 / 450	36	(SM) Clayey Sandy Silt, reddish-brown to maroon, very well sorted, poorly graded, loose to medium dense, 0.25" diameter gravel, subrounded	

		Resources				PROJECT NAME Roy SWD #3 PROJECT LOCATION Eddy Co		
						GROUND WATER LEVELS:		
RILLI	NG CON	FRACTOR	HCI			AT TIME OF DRILLING		
						AFTER DRILLING		
			tin 670989°, -1		<b>D BY</b> <u>Patrick Finn</u> °	BTOC = Below Top Of Ca GB = Grab Sample GEO = Geotech Sample	-	
(ft)	SOIL SAMPLE ANALYSIS	GROUNDWATER LEVELS (BTOC)	PID/FIELD CHLORIDE TITRATION (In ppm)	GRAPHIC LOG	Μ	ATERIAL DESCRIPTION		WELL DIAGRAM
)		0 –			(SC) Clavev Silt, bro	wn, very well sorted, poorly grade		Type: 6.25" Diameter Temp
- - - - - - - - - - - - - - - - - - -	GB		2.3 / 300 1.9 / 300 1.2 / 150 1.5 / 300 0.6 / 300 0.7 / 300 0.7 / 300 0.7 / 300 0.7 / 300 0.7 / 300 0.7 / 300 0.3 / 300 0.3 / 150 0 / 300 0.3 / 300		diameter gravel, sut			Bentonite
0			0 / 300 0 / 300 0.3 / 150 0.4 / 300 0.1 / 150 0 / 150 0 / 150 0 / 300 0.2 / 150 0 / 150		(GP) Sandy Gravel, subrounded to suba	buff to tan, 0.25" diameter gravel, ngular		
	GB		0 / 150 0 / 150 0 / 150 0 / 150					
	- <u></u>					tom of borehole at 30.0 feet.		

Received by OCD: 2/3/2023 9:45:09 AM Form C-141 State of New Mexico

Page 5

Oil Conservation Division

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

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

## **Remediation 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** Jocelyn Harimon Date: 02/03/2023 Received by: Approved X Approved with Attached Conditions of Approval Denied Deferral Approved Robert Hamlet 6/2/2023 Date: Signature:

District I 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV 1220 S. St Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3470 Fax: (505) 476-3462

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

CONDITIONS

Operator:		OGRID:	
	OG RESOURCES INC	7377	
F	.O. Box 2267	Action Number:	
Ν	lidland, TX 79702	182393	
		Action Type:	
		[C-141] Release Corrective Action (C-141)	
CONDITION	S		
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

CONDITIONS

Page 172 of 172

Action 182393