EOG Resources, Inc.
Artesia Division Office
104 S. 4th Street
Artesia, N. M. 88210

February 28, 2022

NMOCD District II
811 S. First St.
Artesia, NM 88210

Re: Hooper Battery
M-21-19S-25E
Eddy County, NM
Inc# NRM2000240058
Inc# NCS2003542654

EOG Resources, Inc. is submitting the enclosed Closure Report for the above referenced site. The report is being submitted in response to the denied Closure Report originally submitted on March 5, 2020. The report includes the C-141 Closure for both incidents.

EOG Resources Inc. hereby requests closure.

If you have any questions, feel free to call me at (575) 748-1471.

Respectfully,

Chase Settle

Chase Settle
Rep Safety & Environmental Sr.
EOG Resources, Inc.

EOG Resources, Inc.

Hooper Battery

Closure Report

M-21-19S-25E

Eddy County, NM

NRM2000240058

NCS2003542654

February 28, 2022

Table of Contents

I. Location

From the intersection of US Hwy 285 and Rocking R Red Road (CR 21), head west for 5.3 miles, then turn south for 1 mile before turning west onto the lease road for a half mile to the location.

II. Background

On November 4, 2019, EOG Resources, Inc. submitted to the NMOCD District II office a Form C-141 for the release of 70 B/PW with 45 B/PW recovered which occurred on October 30, 2019. The release occurred during maintenance activities on a two-inch poly to steel transition coupling. The affected area impacted by the release was contained within the battery berm. A vacuum truck was called to location to recover the standing fluid and a backhoe crew was contracted to excavate visually impacted soils. Initial excavation depths were from eight inches to 4 feet below grade surface (bgs), with soil sampling being conducted on December 11, 2019, after providing notice of sampling to NMOCD on December 9, 2019.

On December 18, 2019, freezing temperatures caused a three-inch ball valve to separate on a load line causing a release of 88 B/O with 33 B/O recovered. The release re-impacted areas previously excavated due to the October 30, 2019 release, and an area around the oil tank that was connected to the load line. EOG submitted the C-141 Initial for this release on January 6, 2020. EOG had the contractor working on the original release area begin excavating visually impacted soils and hauling those soils to an NMOCD approved disposal facility. Those activities took the excavation to a depth of six feet across most of the release area, except for the area around the tank battery that was not impacted by the release on October 30, 2019. Soil sampling was conducted on January 9, 2020, after notification was provided to NMOCD on January 6, 2020. These results indicated further excavation and sampling needed in a couple areas, so on January 20, 2020, these areas were sampled further along with the initial horizontal confirmation sampling. Notification for this sampling event was provided to NMOCD on January 15, 2020. Based on these results, further excavation was conducted in the V10 area as well as increasing the sidewall excavations at the H1, H10, and H11 areas. Further confirmation sampling was conducted on January 28, 2020, with notification of sampling provided to NMOCD on January 23, 2020. During the compilation of sample results, EOG realized 2 horizontal areas and one vertical area still required further excavation to meet the guidelines of NMAC 19.15.29.13. Sampling of these areas was conducted on February 12 and 26, 2020, with notifications provided to NMOCD on February 10 and 24, 2020.

III. Surface and Ground Water

Area geology is Cenozoic Quaternary. Based on information from the United States Geological Survey National Water Information System (USGS) and New Mexico Office of the State Engineer (NMOSE) regarding this location (Section 21, T19S-R25E), depth to groundwater is approximately 127 feet. NMOSE well log information is from the 1950s and 60s when those wells were initially drilled, but USGS has measurement data from 2012 for the well nearest to the location, being to the northwest (0.75 mile) with water located at a depth of 125 feet bgs by the last recorded measurement. Taking that data into consideration along with the NMOSE data of a well drilled on a similar latitude with a depth of 130 feet to groundwater, it is reasonably deduced that the depth to groundwater beneath the site would be approximately 127 feet bgs. Watercourses in the area are dry except for infrequent flows in response to major precipitation

events, with the nearest body of surface water being Brantley Lake at approximately 6.65 miles away. The site is located outside of a 100 year flood plain and outside of any high or critical karst areas.

IV. NMOCD Assessment Criteria

The site assessment criteria is as follows:

Depth to ground water	> 100'
Wellhead Protection Area	> 1000'
Distance to surface water body	> 1000'

Based on the assessment criteria, the NMOCD established RRALs for this site are:

Benzene	10 mg/kg
BTEX	50 mg/kg
TPH	1,500 mg/kg
DRO + GRO	1,000 mg/kg
Chlorides	20,000 mg/kg

V. Soils

USDA Natural Resources Conservation Service (NRCS) classifies soil in the area as Reagan loam, with 0-3% slopes.

VI. Work Completed

Initial soil excavation activities for the October release removed eight (8) inches to four (4) feet of impacted soils from the release area and hauled that impacted soil to a NMOCD approved disposal facility. At that time the second release occurred on December 30, 2019, re-impacting that excavated area and a portion of new area around the oil tank. The excavated area was advanced from four (4) feet to six (6) feet in the re-impacted area, and the area around the tank battery was excavated eight (8) inches to two (2) feet around the oil tank. All excavated soils were hauled to an NMOCD approved facility for disposal. Confirmation soil sample analysis was first conducted on December 11, 2019, for the October release, but the only viable sample results after the December release were the V1 and V6 areas that were not re-impacted by that release. Confirmation soil sampling activities for the December release began on January 9, with further confirmation sampling occurring on January 28, February 12, and February 26, 2020. Soil sampling was conducted by way of 5-point composite samples, with no one sample representing greater than 200 square feet. With final confirmation results being under the required thresholds of Table 1 closure requirements and under the requirements of NMAC 19.15.29.13, the site was backfilled with non-waste containing, uncontaminated caliche to grade.

VII. Initial Closure Report Denial

The initial closure reports for the 2 releases were submitted on March 5, 2020, however the Closure Reports were denied by NMOCD on April 13, 2020 (Appendix E). NMOCD denied the Closure Reports for the stated reasoning that a water well existed within a half mile of the site to the east with groundwater less than 50 feet. The record of this well appears on the USGS well system, with an initial depth to water measurement greater than 100 feet in 1946, and a second measurement in 1955 with a depth less than 50 feet.

Since denial of the Closure Reports revolved strictly around the depth to groundwater determination, as the only stated cause for denial by NMOCD in the April 13th email, EOG began researching the well referenced for denial. A site visit was planned to locate the well to determine if a new measurement could be attained since the last measurement of the well had been completed 65 years prior to the releases, however this well was unable to be located at the site depicted by USGS data and maps.

NMOCD provided an alternative method to determine groundwater at the site in the denial email, by installing a boring to 105 feet, and determining after a wait period of 72 hours if there was groundwater present within the boring column. EOG contracted Talon LPE (Talon) to install an exploratory boring at the site to a depth of 105 feet, and also tasked Talon LPE with gauging the boring for the presence/depth of groundwater 72 hours after completion. On June 25, 2021, Talon completed the boring with gauging that followed the 72 hours wait period. No groundwater was encountered, and the boring was plugged, the bore log is attached as Appendix F.

Based on the confirmation of depth to groundwater greater than 100 feet, EOG Resources, Inc. requests closure of NRM2000240058 and NCS2003542654, the C-141s for these incidents are included with this Closure Report in Appendix G.

Table 1
Soil Analytical Data

Hooper Battery
Closure Report
NRM2000240058
NCS2003542654

February 28, 2022

Soil Analytical Data

Sample ID	Depth (ft. bgs)	Date	Benzene	Toluene	Ethylbenzene	Xylenes	BTEX	TPH (GRO)	TPH (DRO)	TPH EXT DRO	Total TPH	Chlorides
NRM2000240058												
V1-4'	4	12/11/19	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	15.5	<10.0	15.5	1170
V2-4' *	4	12/11/19	<0.050	<0.050	0.232	0.632	0.864	74.2	3640	889	4603.2	1440
V3-2' *	2	12/11/19	<0.050	<0.050	0.162	0.343	0.505	58.0	1720	380	2158	560
V4-4' *	4	12/11/19	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	59.4	<10.0	59.4	1300
V5-4' *	4	12/11/19	<0.050	<0.050	0.237	0.323	0.560	<10.0	363	50.8	413.8	1120
V6-4'	4	12/11/19	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	1500
NCS2003542654												
V2-6'	6	01/09/20	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	453	91.2	544.2	352
V3-6'	6	01/09/20	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	876	236	1112	48
V4-6'	6	01/09/20	<0.200	0.271	0.785	4.35	5.41	130	5450	1010	6590	288
V4-6.5'	6.5	01/20/20	<0.050	<0.050	<0.050	0.258	<0.300	<10.0	52.2	<10.0	52.2	544
V5-6'	6	01/09/20	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	16.3	15.5	31.8	80
V7-6'	6	01/09/20	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	188	19.2	207.2	64
V8-6'	6	01/09/20	<0.050	<0.050	<0.050	0.258	<0.300	<10.0	336	22.7	358.7	32
V9-2'	2	01/09/20	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	950	124	1074	384
V9-2.5'	2.5	02/26/20	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	96
V10-6"	0.5	01/09/20	<0.050	<0.050	<0.050	<0.150	<0.300	10.4	1180	321	1511.4	2440
V10-8"	0.66	01/20/20	<0.050	<0.050	<0.050	0.239	<0.300	<10.0	161	45.2	206.2	1380
V10-1'	1	01/28/20	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	80
V11-8"	0.66	01/20/20	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	224
H1	0-4	01/20/20	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	992
H1-2	0-4	01/28/20	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	96
H2	0-0.66	01/20/20	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	32
H3	0-6	01/20/20	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	96
H4	0-6.5	01/20/20	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	128
H5	0-6	01/20/20	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	44.5	<10.0	44.5	304
H6	0-6	01/20/20	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	128
H7	0-6	01/20/20	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	218	103	321	256
H7-2	0-6	02/12/20	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	304
H8	0-6	01/20/20	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	288
H9	0-6	01/20/20	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	133	58.7	191.7	32
H9-2	0-6	02/12/20	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	256
H10	0-4	01/20/20	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	768
H10-2	0-4	01/28/20	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	128
H11	0-0.66	01/20/20	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	12.7	<10.0	12.7	608
H11-2	0-0.66	01/28/20	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	224
H12	0-0.66	01/20/20	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<16.0

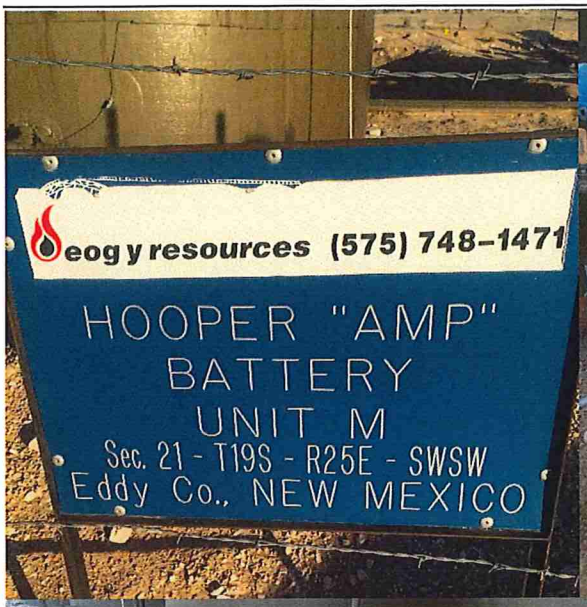
- * denotes areas re-impacted by 12/18/2019 release

Figure 1
Site Map with Sample Points

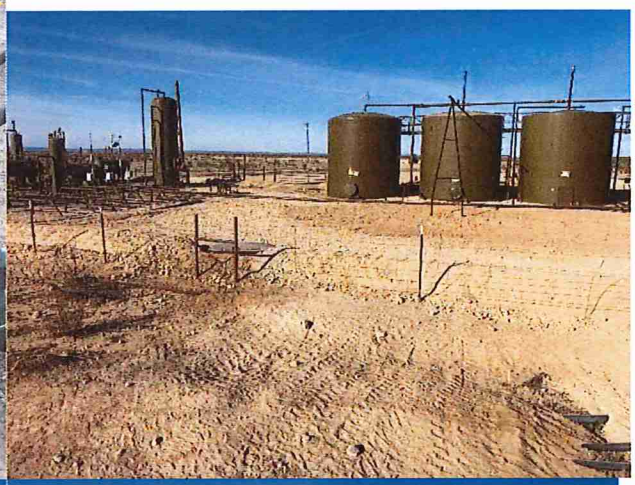
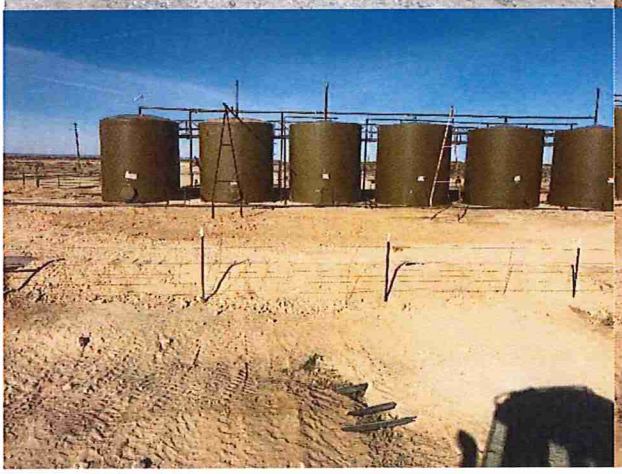
Hooper Battery
Closure Report
NRM2000240058
NCS2003542654

February 28, 2022

Photos



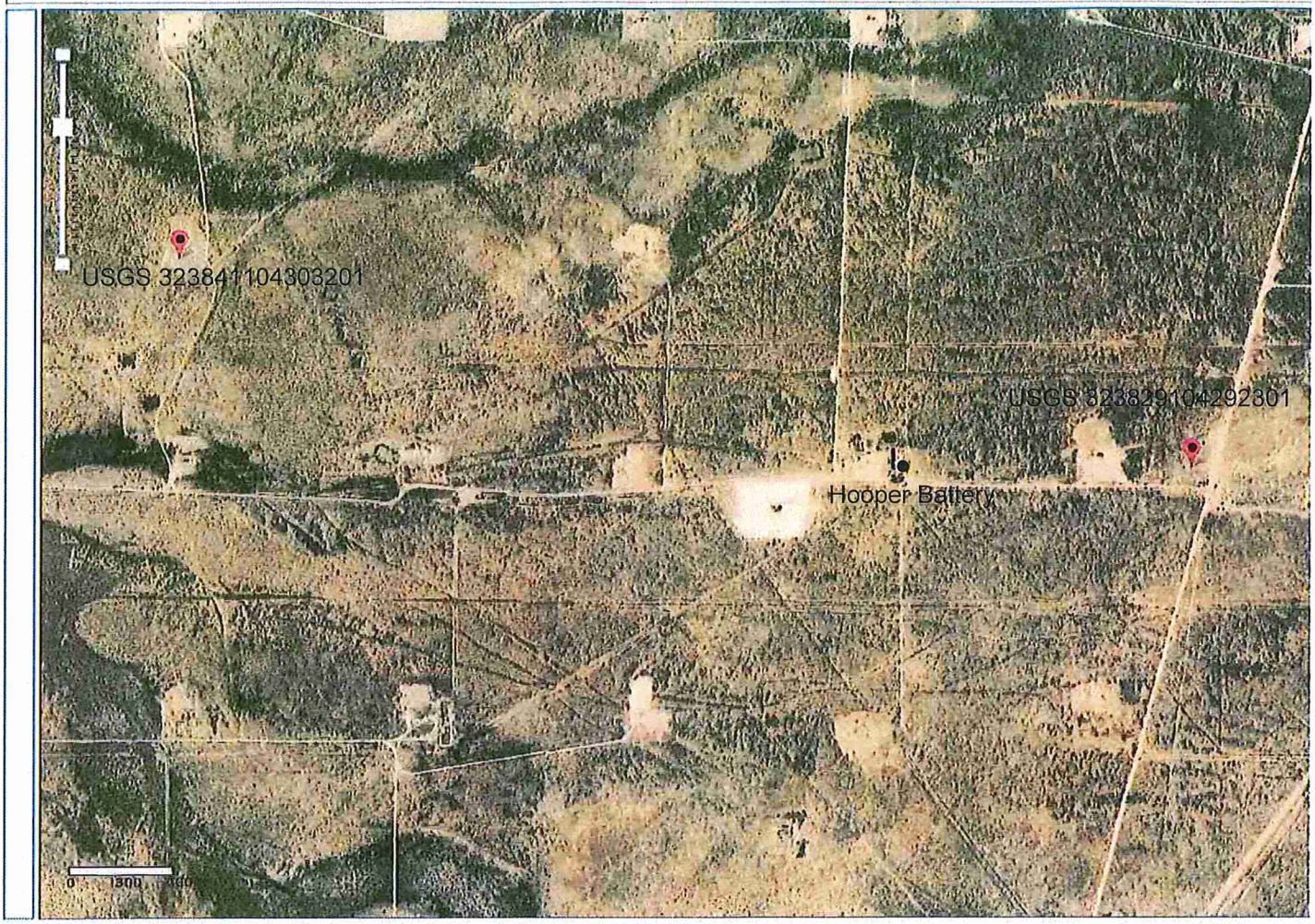



Appendix A
Groundwater Depth Information

USGS
science for a changing world

National Water Information System: Map View



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Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =

- 323841104303201

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

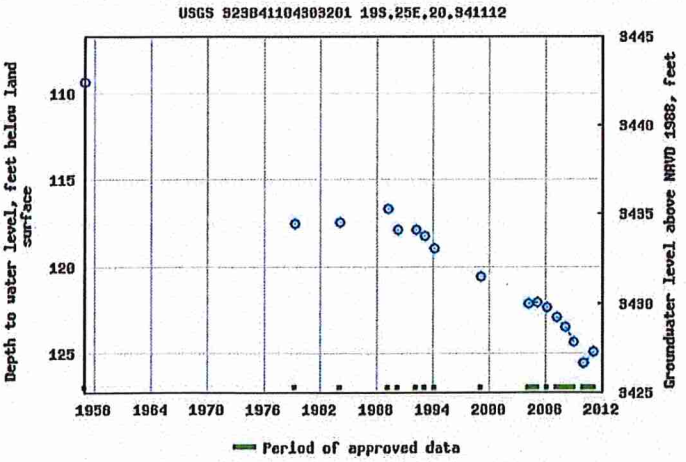
USGS 323841104303201 19S.25E.20.341112

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

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°38'41", Longitude 104°30'32" NAD27
Land-surface elevation 3,552 feet above NAVD88
The depth of the well is 130 feet below land surface.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

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



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

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National Water Information System: Web Interface

USGS Water Resources

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

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Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =

- 323829104292301

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

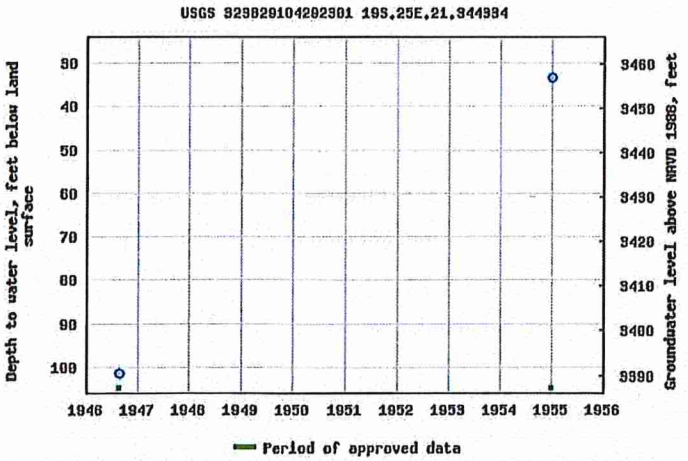
USGS 323829104292301 19S.25E.21.344334

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

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°38'29", Longitude 104°29'23" NAD27
Land-surface elevation 3,491 feet above NAVD88
The depth of the well is 260 feet below land surface.
This well is completed in the Artesia Group (313ARTS) local aquifer.

Output formats

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



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

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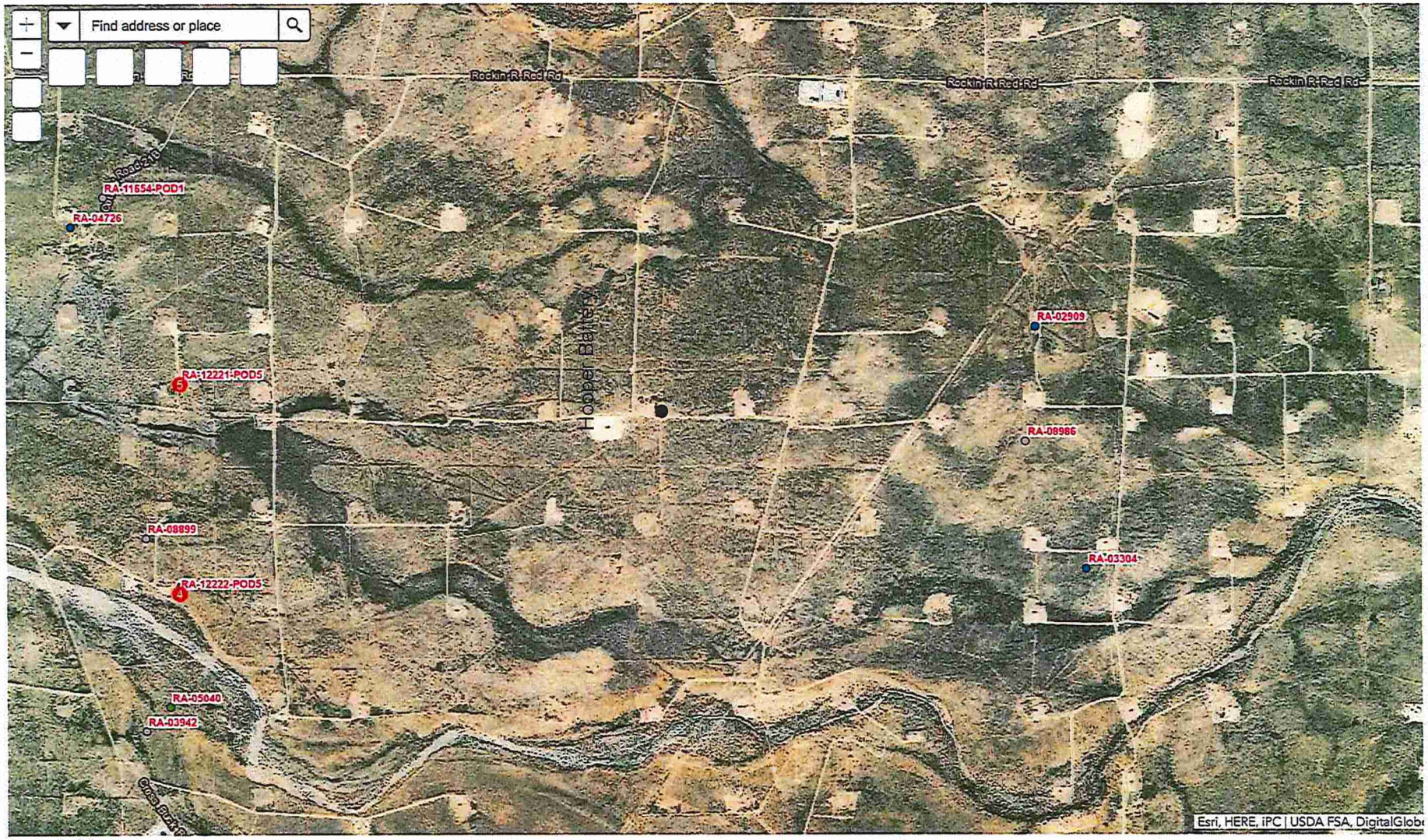
News

OSE POD Locations Points of Diversion visible at 1:19,000 with 1,000 features per view Water Rights Look Up



1:18055

0.3mi

-104.497 32.637 Degrees

New Mexico Office of the State Engineer
Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Twsp	Rng	(NAD83 UTM in meters) X	Y
	RA 03304			1	27	19S	25E	549081	3610973*

Driller License: 62 **Driller Company:** BEATTY, J.R.

Driller Name: BEATTY, J.R.

Drill Start Date: 10/13/1954 **Drill Finish Date:** 10/15/1954 **Plug Date:**

Log File Date: 11/22/1954 **PCW Rcv Date:** **Source:** Shallow

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

Casing Size: 7.00 **Depth Well:** 130 feet **Depth Water:** 60 feet

Water Bearing Stratifications:	Top	Bottom	Description
	90	100	Sandstone/Gravel/Conglomerate
	103	118	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	90	118

*UTM location was derived from PLSS - see Help

New Mexico Office of the State Engineer
Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Twp	Rng	(NAD83 UTM in meters) X	Y
	RA 02909	1	3		22	19S	25E	548864	3611989*

Driller License:		**Driller Company:**			
Driller Name:	A.F. SMITH				
Drill Start Date:	06/26/1952	**Drill Finish Date:**	07/05/1952	**Plug Date:**	
Log File Date:	08/11/1952	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:	8.63	**Depth Well:**	188 feet	**Depth Water:**	130 feet

Water Bearing Stratifications:	Top	Bottom	Description
	120	130	Sandstone/Gravel/Conglomerate

*UTM location was derived from PLSS - see Help

New Mexico Office of the State Engineer
Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Twp	Rng	(NAD83 UTM in meters) X	Y
	RA 04726	3	2		19	19S	25E	544825	3612390*

Driller License: 62 **Driller Company:** BEATTY, J.R.

Driller Name:

Drill Start Date: 12/05/1962 **Drill Finish Date:** 12/20/1962 **Plug Date:**

Log File Date: 11/08/1962 **PCW Rcv Date:** **Source:** Shallow

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

Casing Size: 7.00 **Depth Well:** 390 feet **Depth Water:** 310 feet

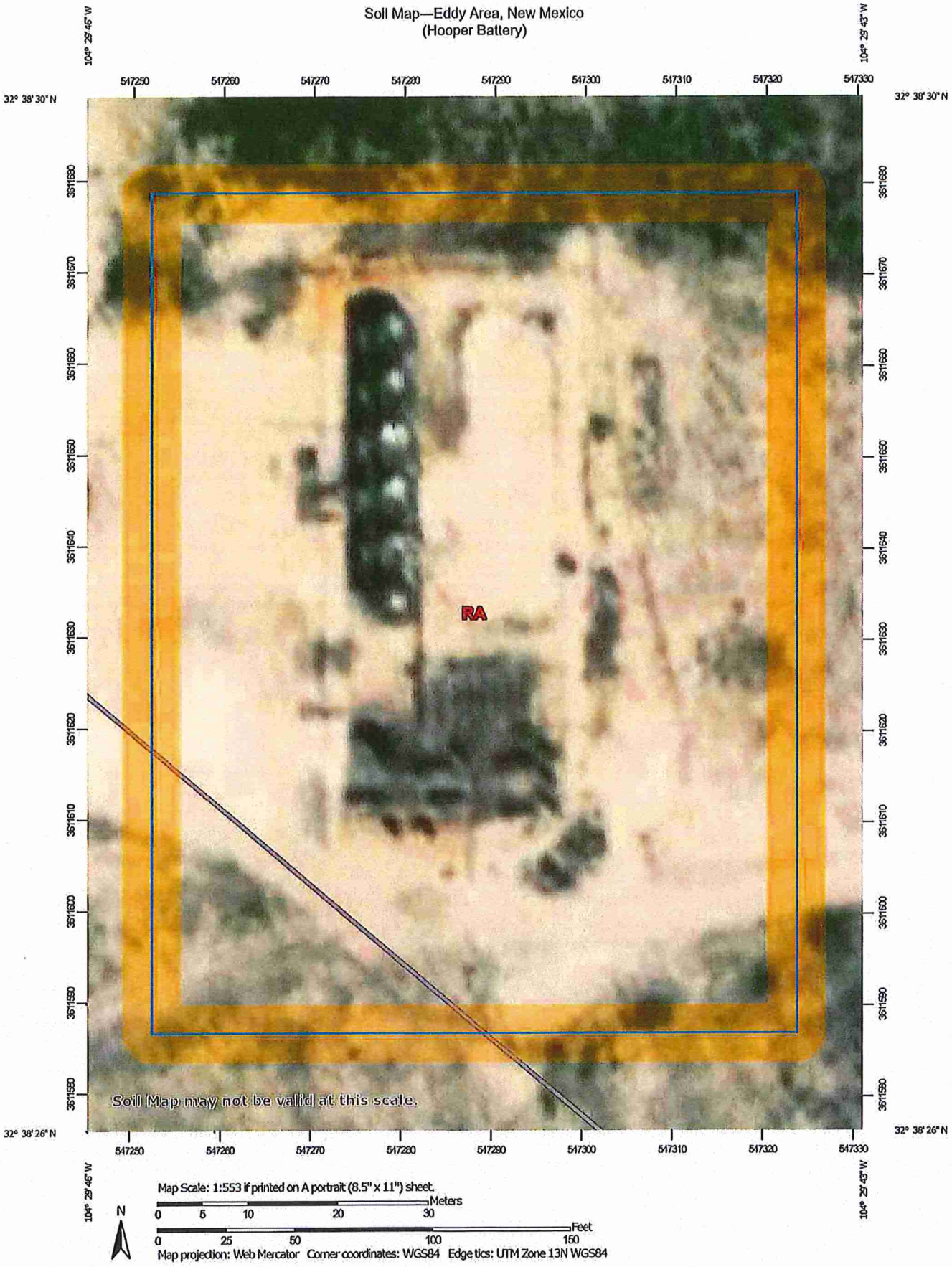
Water Bearing Stratifications:	Top	Bottom	Description
	320	390	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	320	390

*UTM location was derived from PLSS - see Help

Appendix B
NRCS Soil Classification

Soil Map—Eddy Area, New Mexico
(Hooper Battery)



Soil Map—Eddy Area, New Mexico
(Hooper Battery)

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Eddy Area, New Mexico
Survey Area Data: Version 15, Sep 15, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 30, 2015—Dec 15, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
RA	Reagan loam, 0 to 3 percent slopes	1.6	100.0%
Totals for Area of Interest		**1.6**	**100.0%**

Appendix C
100 Year Floodplain Map

FEMA
(//www.fema.gov/)

FEMA Flood Map Service Center: Search By Address

Navigation

Search

Languages

MSC Home (/portal/)

MSC Search by Address (/portal/search)

MSC Search All Products (/portal/advanceSearch)

MSC Products and Tools (/portal/resources/productsandtools)

- Hazus (/portal/resources/hazus)
- LOMC Batch Files (/portal/resources/lomc)
- Product Availability (/portal/productAvailability)

MSC Frequently Asked Questions (FAQs) (/portal/resources/faq)

MSC Email Subscriptions (/portal/subscriptionHome)

Contact MSC Help (/portal/resources/contact)

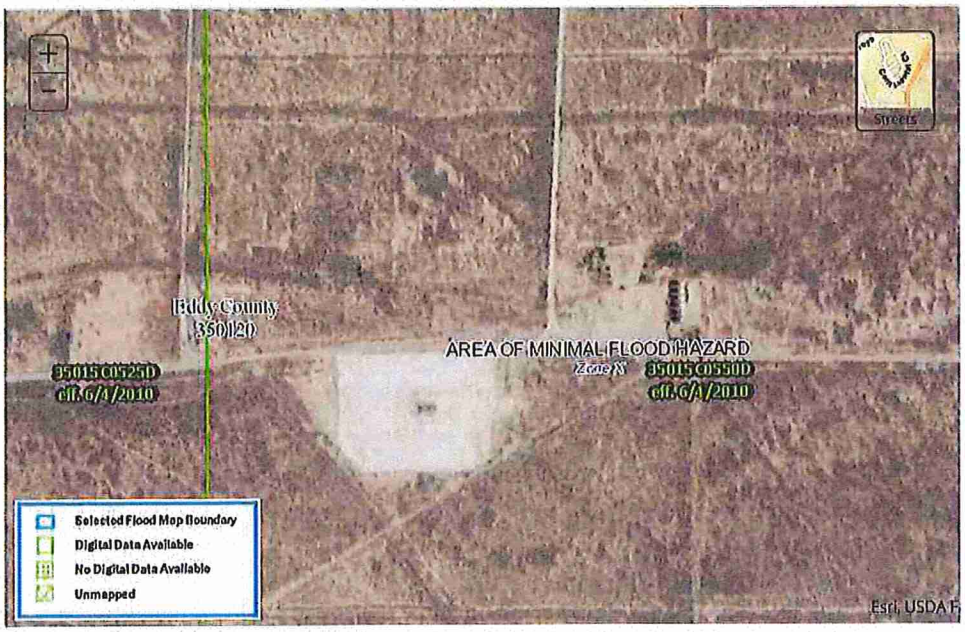
Enter an address, place, or coordinates:

Eddy County New Mexico | Search

Users may experience download failures on the Flood Map Service Center (MSC) website when working with large files. If you are working with files larger than 100MB, try downloading during non-peak hours.

Whether you are in a high risk zone or not, you may need flood insurance (https://www.fema.gov/national-flood-insurance-program) because most homeowners insurance doesn't cover flood damage. If you live in an area with low or moderate flood risk, you are 5 times more likely to experience flood than a fire in your home over the next 30 years. For many, a National Flood Insurance Program's flood insurance policy could cost less than $400 per year. Call your insurance agent today and protect what you've built.

Learn more about steps you can take (https://www.fema.gov/what-mitigation) to reduce flood risk damage.



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Appendix D
Laboratory Soil Data

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

December 17, 2019

CHASE SETTLE

EOG Y RESOURCES, INC

105 SOUTH 4TH STREET

ARTESIA, NM 88210

RE: HOOPER BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 12/11/19 15:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-19-12. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	12/11/2019	Sampling Date:	12/11/2019
Reported:	12/17/2019	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Celey D. Keene
Project Location:	HOOPER BATTERY		

Sample ID: V1-4' (H904149-01)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/12/2019	ND	2.07	103	2.00	1.27	
Toluene*	<0.050	0.050	12/12/2019	ND	2.09	105	2.00	0.239	
Ethylbenzene*	<0.050	0.050	12/12/2019	ND	2.03	101	2.00	0.648	
Total Xylenes*	<0.150	0.150	12/12/2019	ND	5.87	97.9	6.00	0.636	
Total BTEX	<0.300	0.300	12/12/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID 97.5 % 73.3-129

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1170**	16.0	12/12/2019	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/12/2019	ND	164	82.1	200	13.7	
DRO >C10-C28*	**15.5**	10.0	12/12/2019	ND	174	87.2	200	17.9	
EXT DRO >C28-C36	<10.0	10.0	12/12/2019	ND					

Surrogate: 1-Chlorooctane 74.4 % 41-142

Surrogate: 1-Chlorooctadecane 74.9 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	12/11/2019	Sampling Date:	12/11/2019
Reported:	12/17/2019	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Celey D. Keene
Project Location:	HOOPER BATTERY		

Sample ID: V2-4' (H904149-02)

BTEX 8021B mg/kg Analyzed By: MS S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/13/2019	ND	2.07	103	2.00	1.27	
Toluene*	<0.050	0.050	12/13/2019	ND	2.09	105	2.00	0.239	
Ethylbenzene*	**0.232**	0.050	12/13/2019	ND	2.03	101	2.00	0.648	
Total Xylenes*	**0.632**	0.150	12/13/2019	ND	5.87	97.9	6.00	0.636	
Total BTEX	**0.864**	0.300	12/13/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *164 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1440**	16.0	12/12/2019	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**74.2**	10.0	12/12/2019	ND	164	82.1	200	13.7	
DRO >C10-C28*	**3640**	10.0	12/12/2019	ND	174	87.2	200	17.9	
EXT DRO >C28-C36	**889**	10.0	12/12/2019	ND					

Surrogate: 1-Chlorooctane *114 %* *41-142*

Surrogate: 1-Chlorooctadecane *174 %* *37.6-147*

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	12/11/2019	Sampling Date:	12/11/2019
Reported:	12/17/2019	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Celey D. Keene
Project Location:	HOOPER BATTERY		

Sample ID: V3-2' (H904149-03)

BTEX 8021B mg/kg Analyzed By: MS S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/13/2019	ND	2.07	103	2.00	1.27	
Toluene*	<0.050	0.050	12/13/2019	ND	2.09	105	2.00	0.239	
Ethylbenzene*	**0.162**	0.050	12/13/2019	ND	2.03	101	2.00	0.648	
Total Xylenes*	**0.343**	0.150	12/13/2019	ND	5.87	97.9	6.00	0.636	
Total BTEX	**0.505**	0.300	12/13/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID 166 % 73.3-129

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**560**	16.0	12/12/2019	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**58.0**	10.0	12/12/2019	ND	174	86.9	200	12.0	
DRO >C10-C28*	**1720**	10.0	12/12/2019	ND	176	87.9	200	12.6	QM-07
EXT DRO >C28-C36	**380**	10.0	12/12/2019	ND					

Surrogate: 1-Chlorooctane 127 % 41-142

Surrogate: 1-Chlorooctadecane 154 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	12/11/2019	Sampling Date:	12/11/2019
Reported:	12/17/2019	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Celey D. Keene
Project Location:	HOOPER BATTERY		

Sample ID: V4-4' (H904149-04)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/13/2019	ND	1.95	97.5	2.00	3.09	
Toluene*	<0.050	0.050	12/13/2019	ND	1.91	95.7	2.00	3.77	
Ethylbenzene*	<0.050	0.050	12/13/2019	ND	1.93	96.5	2.00	3.47	
Total Xylenes*	<0.150	0.150	12/13/2019	ND	5.61	93.5	6.00	3.34	
Total BTEX	<0.300	0.300	12/13/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID 98.5 % 73.3-129

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1300**	16.0	12/12/2019	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/12/2019	ND	174	86.9	200	12.0	
DRO >C10-C28*	**59.4**	10.0	12/12/2019	ND	176	87.9	200	12.6	
EXT DRO >C28-C36	<10.0	10.0	12/12/2019	ND					

Surrogate: 1-Chlorooctane 119 % 41-142

Surrogate: 1-Chlorooctadecane 129 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	12/11/2019	Sampling Date:	12/11/2019
Reported:	12/17/2019	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Celey D. Keene
Project Location:	HOOPER BATTERY		

Sample ID: V5-4' (H904149-05)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/13/2019	ND	1.95	97.5	2.00	3.09	
Toluene*	<0.050	0.050	12/13/2019	ND	1.91	95.7	2.00	3.77	
Ethylbenzene*	**0.237**	0.050	12/13/2019	ND	1.93	96.5	2.00	3.47	
Total Xylenes*	**0.323**	0.150	12/13/2019	ND	5.61	93.5	6.00	3.34	
Total BTEX	**0.560**	0.300	12/13/2019	ND					

Surrogate: 4-Bromofluorobenzene (PIL *110 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1120**	16.0	12/12/2019	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/12/2019	ND	174	86.9	200	12.0	
DRO >C10-C28*	**363**	10.0	12/12/2019	ND	176	87.9	200	12.6	
EXT DRO >C28-C36	**50.8**	10.0	12/12/2019	ND					

Surrogate: 1-Chlorooctane *98.1 %* *41-142*

Surrogate: 1-Chlorooctadecane *117 %* *37.6-147*

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	12/11/2019	Sampling Date:	12/11/2019
Reported:	12/17/2019	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Celey D. Keene
Project Location:	HOOPER BATTERY		

Sample ID: V6-4' (H904149-06)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/13/2019	ND	1.95	97.5	2.00	3.09	
Toluene*	<0.050	0.050	12/13/2019	ND	1.91	95.7	2.00	3.77	
Ethylbenzene*	<0.050	0.050	12/13/2019	ND	1.93	96.5	2.00	3.47	
Total Xylenes*	<0.150	0.150	12/13/2019	ND	5.61	93.5	6.00	3.34	
Total BTEX	<0.300	0.300	12/13/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *100 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1500**	16.0	12/12/2019	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/12/2019	ND	174	86.9	200	12.0	
DRO >C10-C28*	<10.0	10.0	12/12/2019	ND	176	87.9	200	12.6	
EXT DRO >C28-C36	<10.0	10.0	12/12/2019	ND					

Surrogate: 1-Chlorooctane *108 %* *41-142*

Surrogate: 1-Chlorooctadecane *114 %* *37.6-147*

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

ARDINAL LABORATORIES
101 East Marland, Hobbs, NM 88240
(505) 393-2326 FAX (505) 393-2476

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Chase Settle
Company Name: EOG Y Resources Inc.
Company Address: 104 South 4th Street
City/State/Zip: Artesia, NM 88210
Telephone No: 575-748-1471
Sampler Signature:

Project Name: Hooper Battery
Project #:
Project Loc: Hooper Battery
PO #: 205-0750
Fax No:
e-mail: Chase_Settle@eogresources.com
Report Format: [x] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: H904149-

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge	GW = Groundwater S=Soil/Solid	NP=Non-Potable Specify Other	Analyze For: TCLP: TOTAL: TPH: 8015B	TPH: TX 1005	TX 1005 TX 1000	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX: 8021B	RCI	N.O.R.M.	Chlorides	SAR	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	V1-4'			12/11/2019	8:57 AM		1	X									S		X									X			X			X
02	V2-4'			12/11/2019	8:59 AM		1	X									S		X									X			X			X
03	V3-2'			12/11/2019	9:01 AM		1	X									S		X									X			X			X
04	V4-4'			12/11/2019	9:05 AM		1	X									S		X									X			X			X
05	V5-4'			12/11/2019	9:07 AM		1	X									S		X									X			X			X
06	V6-4'			12/11/2019	9:09 AM		1	X									S		X									X			X			X

Special Instructions: TPH EXTENDED needed.

Relinquished by:	Date	Time	Received by:	Date	Time
	12-11-19	11:50		12/11/19	15:00
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

Laboratory Comments:

Sample Containers Intact?	(Y)	N
VOCs Free of Headspace?	(Y)	N
Labels on container(s)	(Y)	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	(Y)	N
by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 4.3 °C
#97 4.7 Corrected

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

January 15, 2020

CHASE SETTLE

EOG Y RESOURCES, INC

105 SOUTH 4TH STREET

ARTESIA, NM 88210

RE: HOOPER BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 01/09/20 15:16.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-19-12. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	01/09/2020	Sampling Date:	01/09/2020
Reported:	01/15/2020	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	HOOPER BATTERY		

Sample ID: V 2 - 6' (H000085-01)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/13/2020	ND	1.99	99.5	2.00	0.488	
Toluene*	<0.050	0.050	01/13/2020	ND	1.95	97.7	2.00	0.624	
Ethylbenzene*	<0.050	0.050	01/13/2020	ND	1.97	98.5	2.00	0.873	
Total Xylenes*	<0.150	0.150	01/13/2020	ND	5.75	95.8	6.00	0.803	
Total BTEX	<0.300	0.300	01/13/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID 98.3 % 73.3-129

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**352**	16.0	01/10/2020	ND	400	100	400	7.69	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/13/2020	ND	185	92.5	200	9.10	
DRO >C10-C28*	**453**	10.0	01/13/2020	ND	189	94.7	200	11.6	
EXT DRO >C28-C36	**91.2**	10.0	01/13/2020	ND					

Surrogate: 1-Chlorooctane 96.6 % 41-142

Surrogate: 1-Chlorooctadecane 116 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	01/09/2020	Sampling Date:	01/09/2020
Reported:	01/15/2020	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	HOOPER BATTERY		

Sample ID: V 3 - 6' (H000085-02)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/13/2020	ND	1.99	99.5	2.00	0.488	
Toluene*	<0.050	0.050	01/13/2020	ND	1.95	97.7	2.00	0.624	
Ethylbenzene*	<0.050	0.050	01/13/2020	ND	1.97	98.5	2.00	0.873	
Total Xylenes*	<0.150	0.150	01/13/2020	ND	5.75	95.8	6.00	0.803	
Total BTEX	<0.300	0.300	01/13/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.7 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	01/10/2020	ND	400	100	400	7.69	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<50.0	50.0	01/13/2020	ND	185	92.5	200	9.10	
DRO >C10-C28*	**876**	50.0	01/13/2020	ND	189	94.7	200	11.6	
EXT DRO >C28-C36	**236**	50.0	01/13/2020	ND					

Surrogate: 1-Chlorooctane *103 %* *41-142*

Surrogate: 1-Chlorooctadecane *133 %* *37.6-147*

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	01/09/2020	Sampling Date:	01/09/2020
Reported:	01/15/2020	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	HOOPER BATTERY		

Sample ID: V 4 - 6' (H000085-03)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	01/13/2020	ND	1.99	99.5	2.00	0.488	
Toluene*	**0.271**	0.200	01/13/2020	ND	1.95	97.7	2.00	0.624	
Ethylbenzene*	**0.785**	0.200	01/13/2020	ND	1.97	98.5	2.00	0.873	
Total Xylenes*	**4.35**	0.600	01/13/2020	ND	5.75	95.8	6.00	0.803	
Total BTEX	**5.41**	1.20	01/13/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *118 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**288**	16.0	01/10/2020	ND	400	100	400	7.69	

TPH 8015M mg/kg Analyzed By: MS S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**130**	10.0	01/13/2020	ND	185	92.5	200	9.10	
DRO >C10-C28*	**5450**	10.0	01/13/2020	ND	189	94.7	200	11.6	
EXT DRO >C28-C36	**1010**	10.0	01/13/2020	ND					

Surrogate: 1-Chlorooctane *110 %* *41-142*

Surrogate: 1-Chlorooctadecane *246 %* *37.6-147*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	01/09/2020	Sampling Date:	01/09/2020
Reported:	01/15/2020	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	HOOPER BATTERY		

Sample ID: V 5 - 6' (H000085-04)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/13/2020	ND	1.99	99.5	2.00	0.488	
Toluene*	<0.050	0.050	01/13/2020	ND	1.95	97.7	2.00	0.624	
Ethylbenzene*	<0.050	0.050	01/13/2020	ND	1.97	98.5	2.00	0.873	
Total Xylenes*	<0.150	0.150	01/13/2020	ND	5.75	95.8	6.00	0.803	
Total BTEX	<0.300	0.300	01/13/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.9 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	01/10/2020	ND	400	100	400	7.69	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/13/2020	ND	185	92.5	200	9.10	
DRO >C10-C28*	**16.3**	10.0	01/13/2020	ND	189	94.7	200	11.6	
EXT DRO >C28-C36	**15.5**	10.0	01/13/2020	ND					

Surrogate: 1-Chlorooctane *93.4 %* *41-142*

Surrogate: 1-Chlorooctadecane *100 %* *37.6-147*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	01/09/2020	Sampling Date:	01/09/2020
Reported:	01/15/2020	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	HOOPER BATTERY		

Sample ID: V 7 - 6' (H000085-05)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/13/2020	ND	1.99	99.5	2.00	0.488	
Toluene*	<0.050	0.050	01/13/2020	ND	1.95	97.7	2.00	0.624	
Ethylbenzene*	<0.050	0.050	01/13/2020	ND	1.97	98.5	2.00	0.873	
Total Xylenes*	<0.150	0.150	01/13/2020	ND	5.75	95.8	6.00	0.803	
Total BTEX	<0.300	0.300	01/13/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	01/10/2020	ND	400	100	400	7.69	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/13/2020	ND	185	92.5	200	9.10	
DRO >C10-C28*	**188**	10.0	01/13/2020	ND	189	94.7	200	11.6	
EXT DRO >C28-C36	**19.2**	10.0	01/13/2020	ND					

Surrogate: 1-Chlorooctane *92.2 %* *41-142*

Surrogate: 1-Chlorooctadecane *105 %* *37.6-147*

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PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	01/09/2020	Sampling Date:	01/09/2020
Reported:	01/15/2020	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	HOOPER BATTERY		

Sample ID: V 8 - 6' (H000085-06)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/13/2020	ND	1.99	99.5	2.00	0.488	
Toluene*	<0.050	0.050	01/13/2020	ND	1.95	97.7	2.00	0.624	
Ethylbenzene*	<0.050	0.050	01/13/2020	ND	1.97	98.5	2.00	0.873	
Total Xylenes*	**0.258**	0.150	01/13/2020	ND	5.75	95.8	6.00	0.803	
Total BTEX	<0.300	0.300	01/13/2020	ND					

Surrogate: 4-Bromofluorobenzene (PIL 99.3 % 73.3-129

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	01/10/2020	ND	400	100	400	7.69	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/13/2020	ND	185	92.5	200	9.10	
DRO >C10-C28*	**336**	10.0	01/13/2020	ND	189	94.7	200	11.6	
EXT DRO >C28-C36	**22.7**	10.0	01/13/2020	ND					

Surrogate: 1-Chlorooctane 96.6 % 41-142

Surrogate: 1-Chlorooctadecane 115 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	01/09/2020	Sampling Date:	01/09/2020
Reported:	01/15/2020	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	HOOPER BATTERY		

Sample ID: V 9 - 2' (H000085-07)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/13/2020	ND	1.99	99.5	2.00	0.488	
Toluene*	<0.050	0.050	01/13/2020	ND	1.95	97.7	2.00	0.624	
Ethylbenzene*	<0.050	0.050	01/13/2020	ND	1.97	98.5	2.00	0.873	
Total Xylenes*	<0.150	0.150	01/13/2020	ND	5.75	95.8	6.00	0.803	
Total BTEX	<0.300	0.300	01/13/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID 99.6 % 73.3-129

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**384**	16.0	01/10/2020	ND	400	100	400	7.69	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/13/2020	ND	185	92.5	200	9.10	
DRO >C10-C28*	**950**	10.0	01/13/2020	ND	189	94.7	200	11.6	
EXT DRO >C28-C36	**124**	10.0	01/13/2020	ND					

Surrogate: 1-Chlorooctane 90.1 % 41-142

Surrogate: 1-Chlorooctadecane 124 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	01/09/2020	Sampling Date:	01/09/2020
Reported:	01/15/2020	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	HOOPER BATTERY		

Sample ID: V 10 - 6" (H000085-08)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/13/2020	ND	1.99	99.5	2.00	0.488	
Toluene*	<0.050	0.050	01/13/2020	ND	1.95	97.7	2.00	0.624	
Ethylbenzene*	<0.050	0.050	01/13/2020	ND	1.97	98.5	2.00	0.873	
Total Xylenes*	<0.150	0.150	01/13/2020	ND	5.75	95.8	6.00	0.803	
Total BTEX	<0.300	0.300	01/13/2020	ND					

Surrogate: 4-Bromofluorobenzene (PIL 106 % 73.3-129

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2440**	16.0	01/10/2020	ND	400	100	400	7.69	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**10.4**	10.0	01/13/2020	ND	185	92.5	200	9.10	
DRO >C10-C28*	**1180**	10.0	01/13/2020	ND	189	94.7	200	11.6	
EXT DRO >C28-C36	**321**	10.0	01/13/2020	ND					

Surrogate: 1-Chlorooctane 79.3 % 41-142

Surrogate: 1-Chlorooctadecane 124 % 37.6-147

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Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager

ARDINAL LABORATORIES
101 East Marland, Hobbs, NM 88240
(505) 393-2326 FAX (505) 393-2476

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Chase Settle
Company Name: EOG Y Resources Inc.
Company Address: 104 South 4th Street
City/State/Zip: Artesia, NM 88210
Telephone No: 575-748-1471
Sampler Signature:

Project Name: Hooper Battery
Project #:
Project Loc: Hooper Battery
PO #: 205-0750
Report Format: [x] Standard [ ] TRRP [ ] NPDES
Fax No:
e-mail: Chase_Settle@eogresources.com

(lab use only)
ORDER #: H000085

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 8015B	TOTAL: TPH: TX 1005	TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX: 8021B	RCI	N.O.R.M.	Chlorides	SAR		RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
1	V2-6'			1/9/2020	8:00 AM		1	X								S	X									X			X				X
2	V3-6'			1/9/2020	8:03 AM		1	X								S	X									X			X				X
3	V4-6'			1/9/2020	8:05 AM		1	X								S	X									X			X				X
4	V5-6'			1/9/2020	8:08 AM		1	X								S	X									X			X				X
5	V7-6'			1/9/2020	8:11 AM		1	X								S	X									X			X				X
6	V8-6'			1/9/2020	8:13 AM		1	X								S	X									X			X				X
7	V9-2'			1/9/2020	8:16 AM		1	X								S	X									X			X				X
8	V10-6"			1/9/2020	8:19 AM		1	X								S	X									X			X				X

Special Instructions: TPH EXTENDED needed.

Relinquished by:	Date	Time	Received by:	Date	Time
	1-9-20	3:16		1-9-20	1516
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

Laboratory Comments:
Sample Containers Intact? Y N
VOCs Free of Headspace? Y N
Labels on container(s) Y N
Custody seals on container(s) Y N
Custody seals on cooler(s) Y N
Sample Hand Delivered by Sampler/Client Rep. ? Y N
by Courier? UPS DHL FedEx Lone Star
Temperature Upon Receipt: -2.8 °C
#113

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

January 23, 2020

CHASE SETTLE

EOG Y RESOURCES, INC

105 SOUTH 4TH STREET

ARTESIA, NM 88210

RE: HOOPER BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 01/20/20 12:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-19-12. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	01/20/2020	Sampling Date:	01/20/2020
Reported:	01/23/2020	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	HOOPER BATTERY		

Sample ID: V 4 - 6.5' (H000195-01)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/21/2020	ND	1.88	94.2	2.00	3.12	
Toluene*	<0.050	0.050	01/21/2020	ND	1.95	97.4	2.00	2.86	
Ethylbenzene*	<0.050	0.050	01/21/2020	ND	1.94	96.9	2.00	2.76	
Total Xylenes*	**0.258**	0.150	01/21/2020	ND	5.76	96.0	6.00	2.53	
Total BTEX	<0.300	0.300	01/21/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID 95.4 % 73.3-129

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**544**	16.0	01/23/2020	ND	400	100	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/21/2020	ND	204	102	200	0.615	
DRO >C10-C28*	**52.2**	10.0	01/21/2020	ND	213	106	200	1.51	
EXT DRO >C28-C36	<10.0	10.0	01/21/2020	ND					

Surrogate: 1-Chlorooctane 99.6 % 41-142

Surrogate: 1-Chlorooctadecane 105 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	01/20/2020	Sampling Date:	01/20/2020
Reported:	01/23/2020	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	HOOPER BATTERY		

Sample ID: V 10 - 8" (H000195-02)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/21/2020	ND	1.88	94.2	2.00	3.12	
Toluene*	<0.050	0.050	01/21/2020	ND	1.95	97.4	2.00	2.86	
Ethylbenzene*	<0.050	0.050	01/21/2020	ND	1.94	96.9	2.00	2.76	
Total Xylenes*	**0.239**	0.150	01/21/2020	ND	5.76	96.0	6.00	2.53	
Total BTEX	<0.300	0.300	01/21/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *91.8 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1380**	16.0	01/23/2020	ND	400	100	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/21/2020	ND	204	102	200	0.615	
DRO >C10-C28*	**161**	10.0	01/21/2020	ND	213	106	200	1.51	
EXT DRO >C28-C36	**45.2**	10.0	01/21/2020	ND					

Surrogate: 1-Chlorooctane *90.4 %* *41-142*

Surrogate: 1-Chlorooctadecane *104 %* *37.6-147*

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	01/20/2020	Sampling Date:	01/20/2020
Reported:	01/23/2020	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	HOOPER BATTERY		

Sample ID: V 11 - 8" (H000195-03)

BTEX 8021B mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/21/2020	ND	1.92	96.1	2.00	0.934	
Toluene*	<0.050	0.050	01/21/2020	ND	2.01	101	2.00	0.236	
Ethylbenzene*	<0.050	0.050	01/21/2020	ND	1.97	98.4	2.00	0.0633	
Total Xylenes*	<0.150	0.150	01/21/2020	ND	5.82	96.9	6.00	0.00936	
Total BTEX	<0.300	0.300	01/21/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *95.2 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**224**	16.0	01/23/2020	ND	400	100	400	3.92	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/21/2020	ND	204	102	200	0.615	
DRO >C10-C28*	<10.0	10.0	01/21/2020	ND	213	106	200	1.51	
EXT DRO >C28-C36	<10.0	10.0	01/21/2020	ND					

Surrogate: 1-Chlorooctane *96.3 %* *41-142*

Surrogate: 1-Chlorooctadecane *102 %* *37.6-147*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager

ARDINAL LABORATORIES
101 East Marland, Hobbs, NM 88240 (505) 393-2326 FAX (505) 393-2476

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Chase Settle
Company Name: EOG Y Resources Inc.
Company Address: 104 South 4th Street
City/State/Zip: Artesia, NM 88210
Telephone No: 575-748-1471 Fax No:
Sampler Signature:

Project Name: Hooper Battery
Project #:
Project Loc: Hooper Battery
PO #: 205-0750
Report Format: [x] Standard [ ] TRRP [ ] NPDES
e-mail: Chase_Settle@eogresources.com

(lab use only)
ORDER #: H000195

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge	GW = Groundwater S=Soil/Solid	NP=Non-Potable Specify Other	Analyze For: TPH: 8015B	TPH: TX 1005	TPH: TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX: 8021B	RCI	N.O.R.M.	Chlorides	SAR		RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
1	V4-6.5'			1/20/2020	8:20 AM		1	X								S			X									X			X				X
2	V10-8"			1/20/2020	8:23 AM		1	X								S			X									X			X				X
3	V11-8"			1/20/2020	8:26 AM		1	X								S			X									X			X				X

Special Instructions: TPH EXTENDED needed.

Relinquished by:	Date	Time	Received by:	Date	Time
	1-29-20	12:00	Tamara Oldaker	1-30-20	12:00
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: #113 1.9°C
TO

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

January 23, 2020

CHASE SETTLE

EOG Y RESOURCES, INC

105 SOUTH 4TH STREET

ARTESIA, NM 88210

RE: HOOPER BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 01/20/20 12:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-19-12. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	01/20/2020	Sampling Date:	01/20/2020
Reported:	01/23/2020	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	HOOPER BATTERY		

Sample ID: H 1 (H000196-01)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/21/2020	ND	1.92	96.1	2.00	0.934	
Toluene*	<0.050	0.050	01/21/2020	ND	2.01	101	2.00	0.236	
Ethylbenzene*	<0.050	0.050	01/21/2020	ND	1.97	98.4	2.00	0.0633	
Total Xylenes*	<0.150	0.150	01/21/2020	ND	5.82	96.9	6.00	0.00936	
Total BTEX	<0.300	0.300	01/21/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID	*89.5 %*	*73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**992**	16.0	01/23/2020	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/21/2020	ND	204	102	200	0.615	
DRO >C10-C28*	<10.0	10.0	01/21/2020	ND	213	106	200	1.51	
EXT DRO >C28-C36	<10.0	10.0	01/21/2020	ND					

Surrogate: 1-Chlorooctane	*97.8 %*	*41-142*
Surrogate: 1-Chlorooctadecane	*109 %*	*37.6-147*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	01/20/2020	Sampling Date:	01/20/2020
Reported:	01/23/2020	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	HOOPER BATTERY		

Sample ID: H 2 (H000196-02)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/21/2020	ND	1.92	96.1	2.00	0.934	
Toluene*	<0.050	0.050	01/21/2020	ND	2.01	101	2.00	0.236	
Ethylbenzene*	<0.050	0.050	01/21/2020	ND	1.97	98.4	2.00	0.0633	
Total Xylenes*	<0.150	0.150	01/21/2020	ND	5.82	96.9	6.00	0.00936	
Total BTEX	<0.300	0.300	01/21/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID 93.0 % 73.3-129

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	01/23/2020	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/21/2020	ND	204	102	200	0.615	
DRO >C10-C28*	<10.0	10.0	01/21/2020	ND	213	106	200	1.51	
EXT DRO >C28-C36	<10.0	10.0	01/21/2020	ND					

Surrogate: 1-Chlorooctane 99.2 % 41-142

Surrogate: 1-Chlorooctadecane 102 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	01/20/2020	Sampling Date:	01/20/2020
Reported:	01/23/2020	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	HOOPER BATTERY		

Sample ID: H 3 (H000196-03)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/21/2020	ND	1.92	96.1	2.00	0.934	
Toluene*	<0.050	0.050	01/21/2020	ND	2.01	101	2.00	0.236	
Ethylbenzene*	<0.050	0.050	01/21/2020	ND	1.97	98.4	2.00	0.0633	
Total Xylenes*	<0.150	0.150	01/21/2020	ND	5.82	96.9	6.00	0.00936	
Total BTEX	<0.300	0.300	01/21/2020	ND					

Surrogate: 4-Bromofluorobenzene (PIC *96.3 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**96.0**	16.0	01/23/2020	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/21/2020	ND	204	102	200	0.615	
DRO >C10-C28*	<10.0	10.0	01/21/2020	ND	213	106	200	1.51	
EXT DRO >C28-C36	<10.0	10.0	01/21/2020	ND					

Surrogate: 1-Chlorooctane *89.4 %* *41-142*

Surrogate: 1-Chlorooctadecane *94.6 %* *37.6-147*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	01/20/2020	Sampling Date:	01/20/2020
Reported:	01/23/2020	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	HOOPER BATTERY		

Sample ID: H 4 (H000196-04)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/21/2020	ND	1.92	96.1	2.00	0.934	
Toluene*	<0.050	0.050	01/21/2020	ND	2.01	101	2.00	0.236	
Ethylbenzene*	<0.050	0.050	01/21/2020	ND	1.97	98.4	2.00	0.0633	
Total Xylenes*	<0.150	0.150	01/21/2020	ND	5.82	96.9	6.00	0.00936	
Total BTEX	<0.300	0.300	01/21/2020	ND					

Surrogate: 4-Bromofluorobenzene (PIL 92.9 % 73.3-129

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**128**	16.0	01/23/2020	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/21/2020	ND	204	102	200	0.615	
DRO >C10-C28*	<10.0	10.0	01/21/2020	ND	213	106	200	1.51	
EXT DRO >C28-C36	<10.0	10.0	01/21/2020	ND					

Surrogate: 1-Chlorooctane 93.3 % 41-142

Surrogate: 1-Chlorooctadecane 97.1 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	01/20/2020	Sampling Date:	01/20/2020
Reported:	01/23/2020	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	HOOPER BATTERY		

Sample ID: H 5 (H000196-05)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/21/2020	ND	1.92	96.1	2.00	0.934	
Toluene*	<0.050	0.050	01/21/2020	ND	2.01	101	2.00	0.236	
Ethylbenzene*	<0.050	0.050	01/21/2020	ND	1.97	98.4	2.00	0.0633	
Total Xylenes*	<0.150	0.150	01/21/2020	ND	5.82	96.9	6.00	0.00936	
Total BTEX	<0.300	0.300	01/21/2020	ND					

Surrogate: 4-Bromofluorobenzene (PIL 96.4 % 73.3-129

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**304**	16.0	01/23/2020	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/22/2020	ND	204	102	200	0.615	
DRO >C10-C28*	**44.5**	10.0	01/22/2020	ND	213	106	200	1.51	
EXT DRO >C28-C36	<10.0	10.0	01/22/2020	ND					

Surrogate: 1-Chlorooctane 86.0 % 41-142

Surrogate: 1-Chlorooctadecane 93.1 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	01/20/2020	Sampling Date:	01/20/2020
Reported:	01/23/2020	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	HOOPER BATTERY		

Sample ID: H 6 (H000196-06)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/21/2020	ND	1.92	96.1	2.00	0.934	
Toluene*	<0.050	0.050	01/21/2020	ND	2.01	101	2.00	0.236	
Ethylbenzene*	<0.050	0.050	01/21/2020	ND	1.97	98.4	2.00	0.0633	
Total Xylenes*	<0.150	0.150	01/21/2020	ND	5.82	96.9	6.00	0.00936	
Total BTEX	<0.300	0.300	01/21/2020	ND					

Surrogate: 4-Bromofluorobenzene (PIL 95.5 % 73.3-129

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**128**	16.0	01/23/2020	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/22/2020	ND	204	102	200	0.615	
DRO >C10-C28*	<10.0	10.0	01/22/2020	ND	213	106	200	1.51	
EXT DRO >C28-C36	<10.0	10.0	01/22/2020	ND					

Surrogate: 1-Chlorooctane 82.2 % 41-142

Surrogate: 1-Chlorooctadecane 85.7 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	01/20/2020	Sampling Date:	01/20/2020
Reported:	01/23/2020	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	HOOPER BATTERY		

Sample ID: H 7 (H000196-07)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/21/2020	ND	1.92	96.1	2.00	0.934	
Toluene*	<0.050	0.050	01/21/2020	ND	2.01	101	2.00	0.236	
Ethylbenzene*	<0.050	0.050	01/21/2020	ND	1.97	98.4	2.00	0.0633	
Total Xylenes*	<0.150	0.150	01/21/2020	ND	5.82	96.9	6.00	0.00936	
Total BTEX	<0.300	0.300	01/21/2020	ND					

Surrogate: 4-Bromofluorobenzene (PIL 91.6 % 73.3-129

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**256**	16.0	01/23/2020	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/22/2020	ND	204	102	200	0.615	
DRO >C10-C28*	**218**	10.0	01/22/2020	ND	213	106	200	1.51	
EXT DRO >C28-C36	**103**	10.0	01/22/2020	ND					

Surrogate: 1-Chlorooctane 101 % 41-142

Surrogate: 1-Chlorooctadecane 128 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	01/20/2020	Sampling Date:	01/20/2020
Reported:	01/23/2020	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	HOOPER BATTERY		

Sample ID: H 8 (H000196-08)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/21/2020	ND	1.92	96.1	2.00	0.934	
Toluene*	<0.050	0.050	01/21/2020	ND	2.01	101	2.00	0.236	
Ethylbenzene*	<0.050	0.050	01/21/2020	ND	1.97	98.4	2.00	0.0633	
Total Xylenes*	<0.150	0.150	01/21/2020	ND	5.82	96.9	6.00	0.00936	
Total BTEX	<0.300	0.300	01/21/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *96.5 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**288**	16.0	01/23/2020	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/22/2020	ND	204	102	200	0.615	
DRO >C10-C28*	<10.0	10.0	01/22/2020	ND	213	106	200	1.51	
EXT DRO >C28-C36	<10.0	10.0	01/22/2020	ND					

Surrogate: 1-Chlorooctane *96.2 %* *41-142*

Surrogate: 1-Chlorooctadecane *100 %* *37.6-147*

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	01/20/2020	Sampling Date:	01/20/2020
Reported:	01/23/2020	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	HOOPER BATTERY		

Sample ID: H 9 (H000196-09)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/22/2020	ND	1.95	97.3	2.00	5.89	
Toluene*	<0.050	0.050	01/22/2020	ND	1.94	97.0	2.00	6.20	
Ethylbenzene*	<0.050	0.050	01/22/2020	ND	1.96	98.2	2.00	6.41	
Total Xylenes*	<0.150	0.150	01/22/2020	ND	5.73	95.4	6.00	6.75	
Total BTEX	<0.300	0.300	01/22/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *95.3 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	01/23/2020	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/22/2020	ND	204	102	200	0.615	
DRO >C10-C28*	**133**	10.0	01/22/2020	ND	213	106	200	1.51	
EXT DRO >C28-C36	**58.7**	10.0	01/22/2020	ND					

Surrogate: 1-Chlorooctane *102 %* *41-142*

Surrogate: 1-Chlorooctadecane *114 %* *37.6-147*

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	01/20/2020	Sampling Date:	01/20/2020
Reported:	01/23/2020	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	HOOPER BATTERY		

Sample ID: H 10 (H000196-10)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/22/2020	ND	1.95	97.3	2.00	5.89	
Toluene*	<0.050	0.050	01/22/2020	ND	1.94	97.0	2.00	6.20	
Ethylbenzene*	<0.050	0.050	01/22/2020	ND	1.96	98.2	2.00	6.41	
Total Xylenes*	<0.150	0.150	01/22/2020	ND	5.73	95.4	6.00	6.75	
Total BTEX	<0.300	0.300	01/22/2020	ND					

Surrogate: 4-Bromofluorobenzene (PIL 96.2 % 73.3-129

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**768**	16.0	01/23/2020	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/22/2020	ND	204	102	200	0.615	
DRO >C10-C28*	<10.0	10.0	01/22/2020	ND	213	106	200	1.51	
EXT DRO >C28-C36	<10.0	10.0	01/22/2020	ND					

Surrogate: 1-Chlorooctane 94.8 % 41-142

Surrogate: 1-Chlorooctadecane 99.2 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	01/20/2020	Sampling Date:	01/20/2020
Reported:	01/23/2020	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	HOOPER BATTERY		

Sample ID: H 11 (H000196-11)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/22/2020	ND	1.95	97.3	2.00	5.89	
Toluene*	<0.050	0.050	01/22/2020	ND	1.94	97.0	2.00	6.20	
Ethylbenzene*	<0.050	0.050	01/22/2020	ND	1.96	98.2	2.00	6.41	
Total Xylenes*	<0.150	0.150	01/22/2020	ND	5.73	95.4	6.00	6.75	
Total BTEX	<0.300	0.300	01/22/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *94.9 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**608**	16.0	01/23/2020	ND	416	104	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/22/2020	ND	206	103	200	1.03	
DRO >C10-C28*	**12.7**	10.0	01/22/2020	ND	218	109	200	1.06	
EXT DRO >C28-C36	<10.0	10.0	01/22/2020	ND					

Surrogate: 1-Chlorooctane *106 %* *41-142*

Surrogate: 1-Chlorooctadecane *110 %* *37.6-147*

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	01/20/2020	Sampling Date:	01/20/2020
Reported:	01/23/2020	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	HOOPER BATTERY		

Sample ID: H 12 (H000196-12)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/22/2020	ND	1.95	97.3	2.00	5.89	
Toluene*	<0.050	0.050	01/22/2020	ND	1.94	97.0	2.00	6.20	
Ethylbenzene*	<0.050	0.050	01/22/2020	ND	1.96	98.2	2.00	6.41	
Total Xylenes*	<0.150	0.150	01/22/2020	ND	5.73	95.4	6.00	6.75	
Total BTEX	<0.300	0.300	01/22/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID 98.1 % 73.3-129

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	01/23/2020	ND	416	104	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/22/2020	ND	206	103	200	1.03	
DRO >C10-C28*	<10.0	10.0	01/22/2020	ND	218	109	200	1.06	
EXT DRO >C28-C36	<10.0	10.0	01/22/2020	ND					

Surrogate: 1-Chlorooctane 90.4 % 41-142

Surrogate: 1-Chlorooctadecane 93.4 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

ARDINAL LABORATORIES
101 East Marland, Hobbs, NM 88240 (505) 393-2326 FAX (505) 393-2476

Project Manager: Chase Settle | Project Name: Hooper Battery
Company Name: EOG Y Resources Inc. | Project #:
Company Address: 104 South 4th Street | Project Loc: Hooper Battery
City/State/Zip: Artesia, NM 88210 | PO #: 205-0750
Telephone No: 575-748-1471 | Fax No: | Report Format: [x] Standard [ ] TRRP [ ] NPDES
Sampler Signature: | e-mail: Chase_Settle@eogresources.com

(lab use only)
ORDER #: H000196

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge / GW=Groundwater S=Soil/Solid / NP=Non-Potable Specify Other	Analyze For: TPH: 8015B	TPH: TX 1005	TPH TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX: 8021B	RCI	N.O.R.M.	Chlorides	SAR		RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
1	H1			1/20/2020	8:31 AM		1	X								S	X									X			X				X
2	H2			1/20/2020	8:33 AM		1	X								S	X									X			X				X
3	H3			1/20/2020	8:35 AM		1	X								S	X									X			X				X
4	H4			1/20/2020	8:37 AM		1	X								S	X									X			X				X
5	H5			1/20/2020	8:40 AM		1	X								S	X									X			X				X
6	H6			1/20/2020	8:42 AM		1	X								S	X									X			X				X
7	H7			1/20/2020	8:45 AM		1	X								S	X									X			X				X
8	H8			1/20/2020	8:47 AM		1	X								S	X									X			X				X
9	H9			1/20/2020	8:50 AM		1	X								S	X									X			X				X
10	H10			1/20/2020	8:53 AM		1	X								S	X									X			X				X

Special Instructions: TPH EXTENDED needed.

Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
				1-20-20	12:00

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: #113 1.9°C

ARDINAL LABORATORIES
101 East Marland, Hobbs, NM 88240
(505) 393-2326 FAX (505) 393-2476

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Chase Settle
Company Name: EOG Y Resources Inc.
Company Address: 104 South 4th Street
City/State/Zip: Artesia, NM 88210
Telephone No: 575-748-1471
Fax No:
Sampler Signature:
e-mail: Chase_Settle@eogresources.com

Project Name: Hooper Battery
Project #:
Project Loc: Hooper Battery
PO #: 205-0750
Report Format: [x] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: H00019916

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water GW=Groundwater NP=Non-Potable SL=Sludge S=Soil/Solid Specify Other	Analyze For: TCLP: TPH: 8015B	TPH: TX 1005	TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	TOTAL: BTEX: 8021B	RCI	N.O.R.M.	Chlorides	SAR		RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
H1	H11			1/20/2020	8:56 AM		1	X								S	X									X			X				X
H2	H12			1/20/2020	8:59 AM		1	X								S	X									X			X				X

Special Instructions: TPH EXTENDED needed.

Relinquished by:	Date	Time	Received by:	Date	Time
	1-20-20	12:00		1-20-20	12:00
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

Laboratory Comments:
Sample Containers Intact? Y N
VOCs Free of Headspace? Y N
Labels on container(s) Y N
Custody seals on container(s) Y N
Custody seals on cooler(s) Y N
Sample Hand Delivered Y N
by Sampler/Client Rep. ? Y N
by Courier? UPS DHL FedEx Lone Star
Temperature Upon Receipt: #113 1.9°C

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

February 04, 2020

CHASE SETTLE

EOG Y RESOURCES, INC

105 SOUTH 4TH STREET

ARTESIA, NM 88210

RE: HOOPER BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 01/29/20 11:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-19-12. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	01/29/2020	Sampling Date:	01/28/2020
Reported:	02/04/2020	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	HOOPER BATTERY		

Sample ID: V 10 - 1' (H000280-01)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/30/2020	ND	1.99	99.4	2.00	10.2	
Toluene*	<0.050	0.050	01/30/2020	ND	2.03	101	2.00	9.92	
Ethylbenzene*	<0.050	0.050	01/30/2020	ND	1.96	98.1	2.00	9.78	
Total Xylenes*	<0.150	0.150	01/30/2020	ND	5.89	98.2	6.00	9.82	
Total BTEX	<0.300	0.300	01/30/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID	*99.7 %*	*73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	01/31/2020	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/30/2020	ND	201	101	200	0.206	
DRO >C10-C28*	<10.0	10.0	01/30/2020	ND	217	108	200	6.76	
EXT DRO >C28-C36	<10.0	10.0	01/30/2020	ND					

Surrogate: 1-Chlorooctane	*68.8 %*	*41-142*
Surrogate: 1-Chlorooctadecane	*70.2 %*	*37.6-147*

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Celey D. Keene, Lab Director/Quality Manager

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

ARDINAL LABORATORIES
101 East Marland, Hobbs, NM 88240 (505) 393-2326 FAX (505) 393-2476

Project Manager: Chase Settle
Company Name: EOG Y Resources Inc.
Company Address: 104 South 4th Street
City/State/Zip: Artesia, NM 88210
Telephone No: 575-748-1471 Fax No:
Sampler Signature:
e-mail: Chase_Settle@eogresources.com

Project Name: Hooper Battery
Project #:
Project Loc: Hooper Battery
PO #: 205-0750
Report Format: [x] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: H000280

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 8015B	TOTAL: TPH: TX 1005	TPH: TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX: 8021B	RCI	N.O.R.M.	Chlorides	SAR		RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
1	V10-1'			1/28/2020	8:00 AM		1	X								S	X									X			X					X

Special Instructions: TPH EXTENDED needed.

Laboratory Comments:
Sample Containers Intact? Y N
VOCs Free of Headspace? Y N
Labels on container(s) Y N
Custody seals on container(s) Y N
Custody seals on cooler(s) Y N
Sample Hand Delivered Y N
by Sampler/Client Rep. ? Y N
by Courier? UPS DHL FedEx Lone Star
Temperature Upon Receipt: 3.2 °C
#113

Relinquished by:	Date	Time	Received by:	Date	Time
	1-29-20	11:45		1-29-20	1145
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

February 04, 2020

CHASE SETTLE

EOG Y RESOURCES, INC

105 SOUTH 4TH STREET

ARTESIA, NM 88210

RE: HOOPER BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 01/29/20 11:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-19-12. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	01/29/2020	Sampling Date:	01/28/2020
Reported:	02/04/2020	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	HOOPER BATTERY		

Sample ID: H 1- 2 (H000281-01)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/31/2020	ND	1.99	99.4	2.00	10.2	
Toluene*	<0.050	0.050	01/31/2020	ND	2.03	101	2.00	9.92	
Ethylbenzene*	<0.050	0.050	01/31/2020	ND	1.96	98.1	2.00	9.78	
Total Xylenes*	<0.150	0.150	01/31/2020	ND	5.89	98.2	6.00	9.82	
Total BTEX	<0.300	0.300	01/31/2020	ND					

Surrogate: 4-Bromofluorobenzene (PIL	*99.0 %*	*73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**96.0**	16.0	01/31/2020	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/30/2020	ND	201	101	200	0.206	
DRO >C10-C28*	<10.0	10.0	01/30/2020	ND	217	108	200	6.76	
EXT DRO >C28-C36	<10.0	10.0	01/30/2020	ND					

Surrogate: 1-Chlorooctane	*70.2 %*	*41-142*
Surrogate: 1-Chlorooctadecane	*75.0 %*	*37.6-147*

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	01/29/2020	Sampling Date:	01/28/2020
Reported:	02/04/2020	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	HOOPER BATTERY		

Sample ID: H 10- 2 (H000281-02)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/31/2020	ND	1.99	99.4	2.00	10.2	
Toluene*	<0.050	0.050	01/31/2020	ND	2.03	101	2.00	9.92	
Ethylbenzene*	<0.050	0.050	01/31/2020	ND	1.96	98.1	2.00	9.78	
Total Xylenes*	<0.150	0.150	01/31/2020	ND	5.89	98.2	6.00	9.82	
Total BTEX	<0.300	0.300	01/31/2020	ND					

Surrogate: 4-Bromofluorobenzene (PIL *98.3 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**128**	16.0	01/31/2020	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/30/2020	ND	201	101	200	0.206	
DRO >C10-C28*	<10.0	10.0	01/30/2020	ND	217	108	200	6.76	
EXT DRO >C28-C36	<10.0	10.0	01/30/2020	ND					

Surrogate: 1-Chlorooctane *65.7 %* *41-142*

Surrogate: 1-Chlorooctadecane *68.3 %* *37.6-147*

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	01/29/2020	Sampling Date:	01/28/2020
Reported:	02/04/2020	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	HOOPER BATTERY		

Sample ID: H 11 - 2 (H000281-03)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/31/2020	ND	1.99	99.4	2.00	10.2	
Toluene*	<0.050	0.050	01/31/2020	ND	2.03	101	2.00	9.92	
Ethylbenzene*	<0.050	0.050	01/31/2020	ND	1.96	98.1	2.00	9.78	
Total Xylenes*	<0.150	0.150	01/31/2020	ND	5.89	98.2	6.00	9.82	
Total BTEX	<0.300	0.300	01/31/2020	ND					

Surrogate: 4-Bromofluorobenzene (PIL	*101 %*	*73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**224**	16.0	01/31/2020	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/30/2020	ND	201	101	200	0.206	
DRO >C10-C28*	<10.0	10.0	01/30/2020	ND	217	108	200	6.76	
EXT DRO >C28-C36	<10.0	10.0	01/30/2020	ND					

Surrogate: 1-Chlorooctane	*72.6 %*	*41-142*
Surrogate: 1-Chlorooctadecane	*75.6 %*	*37.6-147*

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Celey D. Keene, Lab Director/Quality Manager

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

ARDINAL LABORATORIES
101 East Marland, Hobbs, NM 88240 (505) 393-2326 FAX (505) 393-2476

Project Manager: Chase Settle
Company Name: EOG Y Resources Inc.
Company Address: 104 South 4th Street
City/State/Zip: Artesia, NM 88210
Telephone No: 575-748-1471 Fax No:
Sampler Signature:
e-mail: Chase_Settle@eogresources.com

Project Name: Hooper Battery
Project #:
Project Loc: Hooper Battery
PO #: 205-0750
Report Format: [x] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: H000281

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge / GW=Groundwater S=Soil/Solid / NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 8015B	TPH: TX 1005	TPH: TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	TOTAL: BTEX: 8021B	RCI	N.O.R.M.	Chlorides	SAR		RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
1	H1-2			1/28/2020	8:04 AM		1	X								S	X									X			X				X
2	H10-2			1/28/2020	8:08 AM		1	X								S	X									X			X				X
3	H11-2			1/28/2020	8:16 AM		1	X								S	X									X			X				X

Special Instructions: TPH EXTENDED needed.

Relinquished by:	Date	Time	Received by:	Date	Time
	1-29-20	11:45	Tamara Hilliard	1-29-20	1145
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 3.2 °C
#113

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

February 14, 2020

CHASE SETTLE

EOG Y RESOURCES, INC

105 SOUTH 4TH STREET

ARTESIA, NM 88210

RE: HOOPER BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 02/13/20 13:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-19-12. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	02/13/2020	Sampling Date:	02/12/2020
Reported:	02/14/2020	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	HOOPER BATTERY		

Sample ID: H 7 - 2 (H000450-01)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/14/2020	ND	1.73	86.6	2.00	7.88	
Toluene*	<0.050	0.050	02/14/2020	ND	1.79	89.6	2.00	7.48	
Ethylbenzene*	<0.050	0.050	02/14/2020	ND	1.81	90.3	2.00	8.68	
Total Xylenes*	<0.150	0.150	02/14/2020	ND	5.23	87.2	6.00	8.78	
Total BTEX	<0.300	0.300	02/14/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *100 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**304**	16.0	02/14/2020	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/13/2020	ND	219	109	200	2.23	
DRO >C10-C28*	<10.0	10.0	02/13/2020	ND	221	110	200	1.01	
EXT DRO >C28-C36	<10.0	10.0	02/13/2020	ND					

Surrogate: 1-Chlorooctane *92.3 %* *41-142*

Surrogate: 1-Chlorooctadecane *92.0 %* *37.6-147*

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	02/13/2020	Sampling Date:	02/12/2020
Reported:	02/14/2020	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	HOOPER BATTERY		

Sample ID: H 9 - 2 (H000450-02)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/14/2020	ND	1.73	86.6	2.00	7.88	
Toluene*	<0.050	0.050	02/14/2020	ND	1.79	89.6	2.00	7.48	
Ethylbenzene*	<0.050	0.050	02/14/2020	ND	1.81	90.3	2.00	8.68	
Total Xylenes*	<0.150	0.150	02/14/2020	ND	5.23	87.2	6.00	8.78	
Total BTEX	<0.300	0.300	02/14/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *100 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**256**	16.0	02/14/2020	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/13/2020	ND	219	109	200	2.23	
DRO >C10-C28*	<10.0	10.0	02/13/2020	ND	221	110	200	1.01	
EXT DRO >C28-C36	<10.0	10.0	02/13/2020	ND					

Surrogate: 1-Chlorooctane *90.6 %* *41-142*

Surrogate: 1-Chlorooctadecane *90.7 %* *37.6-147*

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

ARDINAL LABORATORIES
101 East Marland, Hobbs, NM 88240
(505) 393-2326 FAX (505) 393-2476

Project Manager: Chase Settle
Company Name: EOG Y Resources Inc.
Company Address: 104 South 4th Street
City/State/Zip: Artesia, NM 88210
Telephone No: 575-748-1471
Fax No:
Sampler Signature:
e-mail: Chase_Settle@eogresources.com

Project Name: Hooper Battery
Project #:
Project Loc: Hooper Battery
PO #: 205-0750
Report Format: [x] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: H000450

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TOTAL: TPH: 8015B	TPH: TX 1005	TPH: TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX: 8021B	RCI	N.O.R.M.	Chlorides	SAR		RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
1	H7-2			2/12/2020	1:30 PM		1	X								S	X									X			X			X	
2	H9-2			2/12/2020	1:33 PM		1	X								S	X									X			X			X	

Special Instructions: TPH EXTENDED needed.

Relinquished by:	Date	Time	Received by:	Date	Time
	2/13/20	11:30	Jodi Henson	2/13/20	13:45
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

Laboratory Comments:
Sample Containers Intact? (Y) N
VOCs Free of Headspace? Y N
Labels on container(s) Y (N)
Custody seals on container(s) (Y) N
Custody seals on cooler(s) Y N
Sample Hand Delivered (Y) N
by Sampler/Client Rep. ? (Y) N
by Courier? UPS DHL FedEx Lone Star
Temperature Upon Receipt: 1.4 °C

#113

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

February 27, 2020

CHASE SETTLE

EOG Y RESOURCES, INC

105 SOUTH 4TH STREET

ARTESIA, NM 88210

RE: HOOPER BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 02/26/20 14:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-19-12. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	02/26/2020	Sampling Date:	02/26/2020
Reported:	02/27/2020	Sampling Type:	Soil
Project Name:	HOOPER BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	HOOPER BATTERY		

Sample ID: V 9 - 2.5' (H000617-01)

BTEX 8021B mg/kg **Analyzed By: CK**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/27/2020	ND	1.91	95.3	2.00	6.14	
Toluene*	<0.050	0.050	02/27/2020	ND	1.92	95.9	2.00	6.27	
Ethylbenzene*	<0.050	0.050	02/27/2020	ND	1.94	97.0	2.00	6.17	
Total Xylenes*	<0.150	0.150	02/27/2020	ND	5.69	94.9	6.00	6.24	
Total BTEX	<0.300	0.300	02/27/2020	ND					

Surrogate: 4-Bromofluorobenzene (PIL *100 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg **Analyzed By: GM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**96.0**	16.0	02/27/2020	ND	416	104	400	3.77	

TPH 8015M mg/kg **Analyzed By: CK**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/27/2020	ND	198	99.1	200	5.76	
DRO >C10-C28*	<10.0	10.0	02/27/2020	ND	216	108	200	2.61	
EXT DRO >C28-C36	<10.0	10.0	02/27/2020	ND					

Surrogate: 1-Chlorooctane *87.5 %* *44.3-144*

Surrogate: 1-Chlorooctadecane *90.9 %* *42.2-156*

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

ARDINAL LABORATORIES
101 East Marland, Hobbs, NM 88240
(505) 393-2326 FAX (505) 393-2476

Project Manager: Chase Settle
Company Name: EOG Y Resources Inc.
Company Address: 104 South 4th Street
City/State/Zip: Artesia, NM 88210
Telephone No: 575-748-1471
Fax No:
Sampler Signature:
e-mail: Chase_Settle@eogresources.com

Project Name: Hooper Battery
Project #:
Project Loc: Hooper Battery
PO #: 205-0750
Report Format: [x] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: H000617

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 8015B	TPH: TX 1005	TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	TOTAL: BTEX: 8021B	RCI	N.O.R.M.	Chlorides	SAR	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
1	V9-2.5'			2/26/2020	9:15 AM		1	X								S	X									X			X			X	

Special Instructions: TPH EXTENDED needed.

Relinquished by:	Date	Time	Received by:	Date	Time
	2-26-20	11:30	Tamara Oldaker	2-26-20	1445
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

Laboratory Comments:
Sample Containers Intact? Y N
VOCs Free of Headspace? Y N
Labels on container(s) Y N
Custody seals on container(s) Y N
Custody seals on cooler(s) Y N
Sample Hand Delivered Y N
by Sampler/Client Rep. ? Y N
by Courier? UPS DHL FedEx Lone Star
Temperature Upon Receipt: 0.1°C
#113

Appendix E
NMOCD Denial Email

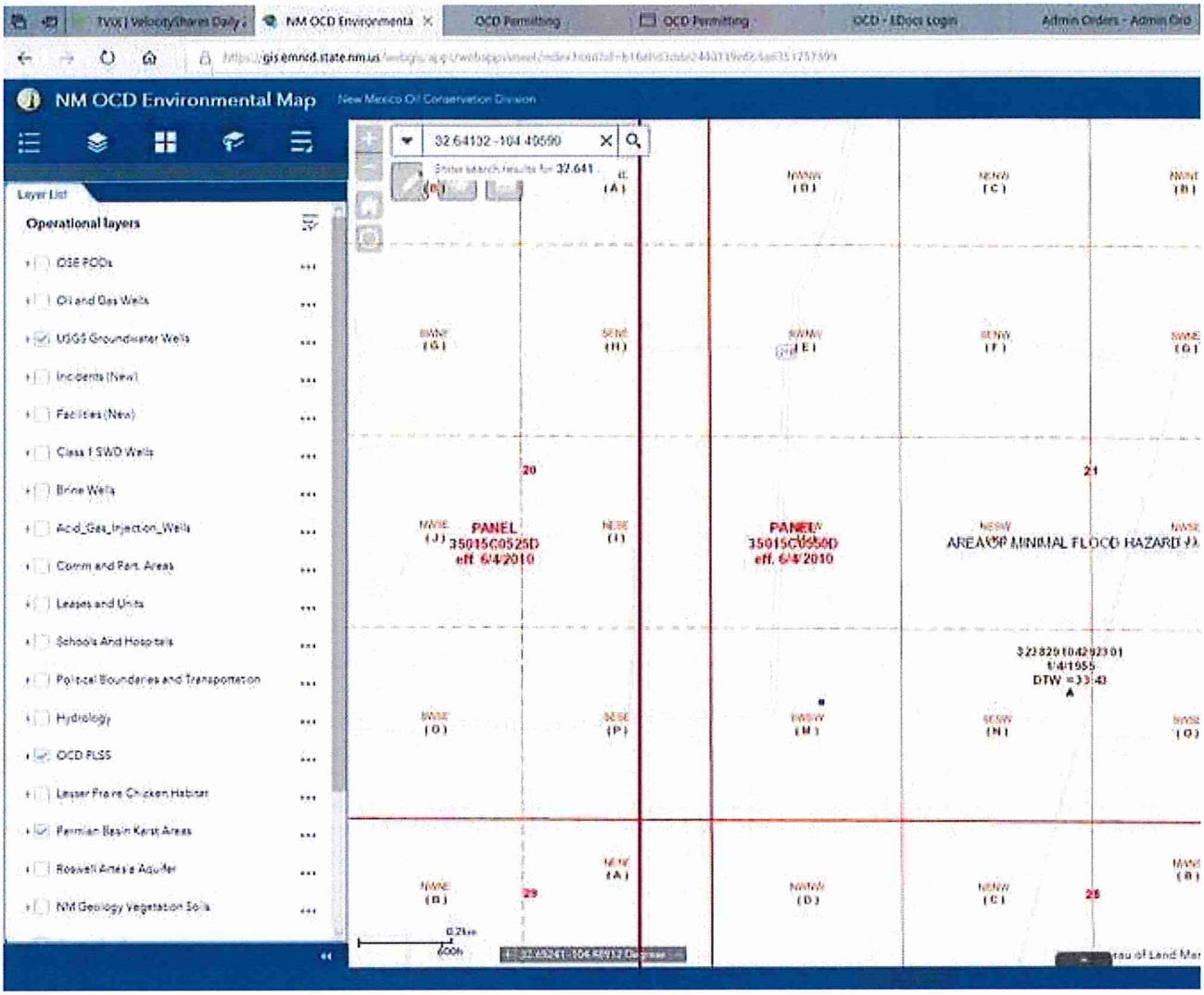
Hamlet, Robert, EMNRD

From: Hamlet, Robert, EMNRD
Sent: Monday, April 13, 2020 11:25 AM
To: Katie Jamison
Cc: Bratcher, Mike, EMNRD; Venegas, Victoria, EMNRD; Eads, Cristina, EMNRD
Subject: Closure Denied - EOG - Hooper Battery - (Incident #NRM2000240058) and (Incident #NCS2003542654)
Attachments: Closure Denied - EOG - Hooper Battery - (NRM2000240058).pdf; Closure Denied - EOG - Hooper Battery - (NCS2003542654).pdf

Katie,

We have received your closure reports and final C-141s for **Incident #NRM2000240058** and **Incident # NCS2003542654 Hooper Battery**, thank you. This closures are denied.

- There is a well less than ½ mile directly east of the Hooper Battery, which has a DTW of 33.43'. There are no wells within a 1/2 radius of the well location over 100' depth to groundwater. If you feel the depth to groundwater is >100', a shallow borehole can be drilled to 105' allowing for verification of the depth. If water is not visible after reaching bottom-hole and waiting 72 hours, the OCD will accept this as evidence. We would just need a copy of the driller's log.



- At this point, the DTW maintains that the site should be remediated to <50' DTW, which requires (600 mg/kg, Chlorides, 100 mg/kg TPH, etc.).
- Attempting to close 2 separate spills will require 2 payments to the OCD Payment Portal.
- If a second payment has already been accomplished, please e-mail me the P.O. Number from the Payment Portal. If not, please make a second payment and e-mail me the P.O. Number. You can just upload the same report a second time.

Please let me know if you have any further questions.

Regards,

Robert J Hamlet
State of New Mexico
Energy, Minerals, and Natural Resources
Oil Conservation Division
811 S. First St., Artesia NM 88210

(575) 748-1283
Robert.Hamlet@state.nm.us

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to groundwater, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Appendix F
Exploratory DTW Bore Log

BORING LOG

Project No.: 700438.241.01
Site Name: Hooper Battery
Location: Eddy County, New Mexico
Date: 6/25/2021
Boring Number: B-1

Weather: Clear, Temp.: 90°F
Logger: M. Collier
Field Instrument: NA
Latitude: 32.641657 N
Longitude: -104.496840 W

Driller: J. Michalsky
Rig Type: Sonic Drill
Bit Size: 6"
Drilling Method: Vibratory Rotary
Sample Retrieval Method: Core Barrel

Time	Lab Sample Collected	Sample Interval (ft)	Sample Recovery (ft)	USCS	Composition (%)	Sample Material/Comments Include composition, color, grain size, moisture, hardness, plasticity, density	Hydrocarbon Odor	PID (ppm)
	☐	0-10'				Light gray, clayey fine Sand (SC) and cobbles	None Slight Mod. Strong	
	☐	10-20'				Gray, sandy, low plasticity Clay (CL) and cobbles	None Slight Mod. Strong	
	☐	20-35'				Dry, light gray, slightly clayey fine Sand (SP-SC) and cobbles	None Slight Mod. Strong	
	☐	35-40'				Light gray/brown sandy Clay (CL) and limestone	None Slight Mod. Strong	
	☐	40-60'				Light red/brown, hi-plasticity Clay (CH)	None Slight Mod. Strong	
	☐	60-80'				Light gray, sandy, low plasticity Clay (CL) and limestone	None Slight Mod. Strong	
	☐	80-90'				Light gray, slightly sandy, low plasticity Clay (CL) and limestone	None Slight Mod. Strong	
	☐	90-100'				Light red/brown, hi-plasticity Clay (CH)	None Slight Mod. Strong	
	☐	100-105'				Light gray, semi-consolidated limestone and clay.	None Slight Mod. Strong	
	☐					__TD 105'__	None Slight Mod. Strong	
	☐						None Slight Mod. Strong	
	☐						None Slight Mod. Strong	

Surface Elevation: _____
Notes: Groundwater Not Encountered @ 105' BGS – 72 hr.

Logger Initials: MC

Time	Lab Sample Collected	Sample Interval (ft)	Sample Recovery (ft)	USCS	Composition (%)	**Sample Material/Comments** Include composition, color, grain size, moisture, hardness, plasticity, density	Hydrocarbon Odor	PID (ppm)
	☐						None Slight Mod. Strong	
	☐						None Slight Mod. Strong	
	☐						None Slight Mod. Strong	
	☐						None Slight Mod. Strong	
	☐						None Slight Mod. Strong	
	☐						None Slight Mod. Strong	
	☐						None Slight Mod. Strong	
	☐						None Slight Mod. Strong	
	☐						None Slight Mod. Strong	
	☐						None Slight Mod. Strong	
	☐						None Slight Mod. Strong	
	☐						None Slight Mod. Strong	
	☐						None Slight Mod. Strong	
	☐						None Slight Mod. Strong	

Notes:
The borehole was advanced to 105' below ground surface (bgs). A 2-inch diameter temporary well constructed of schedule 40 PVC thread coupled to 10-feet of machine slotted well screen was installed into the drill casing. 72-hours after installation, a Solinest water level meter was utilized to determine the presence or absence of groundwater.

Appendix G
Form C-141s

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	NRM2000240058
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party EOG Reources, Inc.	OGRID 7377
Contact Name Chase Settle	Contact Telephone 575-748-1471
Contact email Chase_Settle@eogresources.com	Incident # *(assigned by OCD)* NRM2000240058
Contact mailing address 104 South Fourth Street, Artesia, NM 88210	

Location of Release Source

Latitude 32.64132 Longitude -104.49590
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Hooper Battery	Site Type Battery
Date Release Discovered 10/30/2019	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
M	21	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) 70	Volume Recovered (bbls) 45
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☑ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release
A 2 inch poly to steel transition was corroded and was broken during other maintanence activities at the battery.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NRM 2000240058
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☑ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? Greater than 25 bbls were released.

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
Yes, email from Chase Settle (EOG Resources, Inc.) to Robert Hamlet (NMOCD), Victoria Venegas (NMOCD), Mike Bratcher (NMOCD) and Jim Griswold (NMOCD) on 10/31/2019 at 10:05 a.m.

Initial Response

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

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

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

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

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

Printed Name: Chase Settle
Title: Rep Safety & Environmental II
Signature: Chase Settle
Date: 11/4/2019
email: Chase_Settle@eogresources.com
Telephone: 575-748-1471

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NRM2000240058
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	127 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

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

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

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

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NRM2000240058
District RP	
Facility ID	
Application ID	

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

Printed Name: Chase Settle Title: Rep Safety and Environmental II

Signature: Chase Settle Date: 03/02/2020

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

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NRM2000240058
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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

Signature: _____ Date: _____

Form C-141
Page 6

State of New Mexico
Oil Conservation Division

Incident ID	NRM2000240058
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☑ Description of remediation activities

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

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

Signature: Chase Settle Date: 02/28/2022

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

OCD Only

Received by: Chad Hensley Date: 03/28/2022

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

Closure Approved by: Chad Hensley Date: 03/28/2022

Printed Name: Chad Hensley Title: Environmental Specialist Advanced

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	NCS2003542654
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	EOG Resources, Inc.	OGRID	7377
Contact Name	Chase Settle	Contact Telephone	575-748-1471
Contact email	Chase_Settle@eogresources.com	Incident # *(assigned by OCD)*	NCS2003542654
Contact mailing address	104 South 4th Street, Artesia, NM 88210		

Location of Release Source

Latitude 32.64132 Longitude -104.49590
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Hooper Battery	Site Type	Battery
Date Release Discovered	12/18/2019	API# *(if applicable)*	

Unit Letter	Section	Township	Range	County
M	21	19S	25E	Eddy

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

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) 88	Volume Recovered (bbls) 33
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release
Freezing temperatures caused a 3" ball valve to separate threads on the load line for an oil tank.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NCS2003542654
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☑ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? A volume greater than 25 bbls was released.

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
Yes, email notification was provided to Jim Griswold and Mike Bratcher on December 18, 2019, at 3:45 p.m. by Bob Asher.

Initial Response

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

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

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

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

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

Printed Name: Chase Settle
Title: Rep Safety and Environmental II
Signature: Chase Settle
Date: 12/30/2019
email: Chase_Settle@eogresources.com
Telephone: 575-748-1471

OCD Only

Received by: _____ Date: _____

Form C-141
Page 3

State of New Mexico
Oil Conservation Division

Incident ID	NCS2003542654
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	127 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

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

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

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

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NCS2003542654
District RP	
Facility ID	
Application ID	

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

Printed Name: Chase Settle Title: Rep Safety and Environmental II

Signature: Chase Settle Date: 03/02/2020

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

OCD Only

Received by: _____ Date: _____

Form C-141
Page 5

State of New Mexico
Oil Conservation Division

Incident ID	NCS2003542654
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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

Signature: _____ Date: _____

Form C-141
Page 6

State of New Mexico
Oil Conservation Division

Incident ID	NCS2003542654
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☑ Description of remediation activities

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

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

Signature: Chase Settle Date: 02/28/2022

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

OCD Only

Received by: Chad Hensley Date: 03/28/2022

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

Closure Approved by: Chad Hensley Date: 03/28/2022

Printed Name: Chad Hensley Title: Environmental Specialist Advanced

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

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

CONDITIONS

Action 84948

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 84948
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
chensley	Closure approved.	3/28/2022