



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

EOG Resources, Inc.

***Characterization &
Remediation Plan***

Mescalero ARL State #2

30-025-37039

Section 2, T10S-R32E

Lea County, New Mexico

March 3, 2020

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I. Location

Go southeast on Highway 380 from Caprock Store for approximately 3 miles (between MM 205 & MM206) to Button Mesa Road (CR 156). Turn north and go approximately 7 miles to Caliche Pit on the East. Turn east on lease road and go approximately 0.7 miles. Turn left (North) onto the access road to the southeast corner of the pad.

II. Background

EOG Resources, Inc. submitted to the NMOCD District I office a Form C-141, Release Notification for the release of 5 B/PW with 4 B/PW recovered, that occurred on December 6, 2019. The affected area is approximately 10' X 250' on the well pad. The release was caused by a pressure gauge on the wellhead for the tubing that failed, which caused the release. A vacuum truck was called and recovered the remaining oil. A backhoe was dispatched and scraped up the surface of the impacted area, contaminated soils (approximately 60 cubic yards) were disposed at an NMOCD approved facility. The release occurred on the well pad and remained on the well pad

III. Surface and Ground Water

Area surface geology is Eolian deposits. The Mescalero ARL State #2 is located in a Low Karst per Bureau of Land Management Karst Potential KMZ File Google Map Layer (Appendix 2).

Based on information regarding this location (Section 2, T10S-R32E), the United States Geological Survey (USGS) National Water Information System, indicates the depth to groundwater as follows: USGS #332658103385101, (Depth to Water: 53', Field groundwater-level measurements: 1/1996, Distance from Location: 1.42 miles), USGS #332908103364901, (Depth to Water: 80', Field groundwater-level measurements: 4/1971, Distance from Location: 1.78 miles), USGS #33265810339202, (Depth to Water: 80', Field groundwater-level measurements: 11/1991, Distance from Location: 1.81 miles). See Appendix 2.

Watercourses in the area are dry except for infrequent flows in response to major precipitation events, lateral extents of the release are not within a 100-year floodplain and the distance to nearest significant watercourse being approximately 2.95 miles south of the location (Appendix 4).

IV. NMOCD Table I Criteria

Depth to ground water	51-100'
Wellhead Protection Area	> 1000'
Distance to significant watercourse	> 1000'

Depth	Constituent	Method	Limit
51-100'	Chloride	EPA 300.0 or SM4500 Cl B	10,000 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg



V. Site Delineation Status

Initial sampling was conducted on January 29, 2020, with samples collected being 5 point composite samples at the depth of 1' BSL & GPS coordinates are shown below and results on Appendix 5, (2/26/2020 sidewall samples collected, are also a 5 point composite at the depth of 1' BSL & GPS coordinates are shown below and results on Appendix 5).

S- 1.1: (33.46975°; -103.63943°) S- 7.1: (33.46995°; -103.63931°) S- 13.1: (33.46989°; -103.63907°)
S- 2.1: (33.46979°; -103.63941°) S- 8.1: (33.46995°; -103.63927°) S- 14.1: (33.46986°; -103.63904°)
S- 3.1: (33.46982°; -103.63939°) S- 9.1: (33.46994°; -103.63923°) S- 15.1: (33.46988°; -103.63929°)
S- 4.1: (33.46985°; -103.63940°) S- 10.1: (33.46993°; -103.63919°) S- 16.1: (33.46986°; -103.63925°)
S- 5.1: (33.46989°; -103.63936°) S- 11.1: (33.46992°; -103.63915°) S- 17.1: (33.46984°; -103.63921°)
S- 6.1: (33.46993°; -103.63934°) S- 12.1: (33.46991°; -103.63911°) S- 18.1: (33.46980°; -103.63918°)

SW-1.A.1: (33.46974°; -103.63945°) (33.46986°; -103.63938°) (33.46997°; -103.63934°) (33.46995°; -103.63916°) (33.46988°; -103.63901°)

SW-1.B.1: (33.46975°; -103.63941°) (33.46983°; -103.63937°) (33.46989°; -103.63933°) (33.46986°; -103.63926°) (33.46979°; -103.63918°)

SW-1.C.1: (33.46983°; -103.63917°) (33.46989°; -103.63927°) (33.46993°; -103.63930°) (33.46992°; -103.63918°) (33.46988°; -103.63906°)

These samples were sent to an NMOCD approved laboratory and analysis for the following constituents/methods.

Chlorides:	EPA 300.0
TPH (GRO+DRO+MRO):	Method 8015M
GRO+DRO:	Method 8015M
BTEX:	Method 8015B
Benzene:	Method 8015B

Field Data/Sample Data (Appendix 5).

Laboratory Data and COC (Appendix 6).

VI. Remediation Plan

EOG proposes the following remediation plan.

Based off of the 1/29/2020 and 2/26/2020 enclosed analytical results. EOG will excavate/sample the following areas (S-3.1, S-4.1, S-5.1, S-8.1 & S-9.1), until limits are below Table I Criteria for GRO+DRO levels.

Once levels are meet, EOG will notify the appropriate division district office two business days prior to conducting final sampling. Separate representative wall and base 5-point composite samples will be collected to show horizontal and vertical remediation. Each composite sample must not be representative of more than 200 ft².

If all composite and grab sample concentrations are less than or equal to the parameters listed in Table I, then the responsible party will proceed to backfill the excavated area(s) with approximately 64 cubic yards of clean/like backfill material.

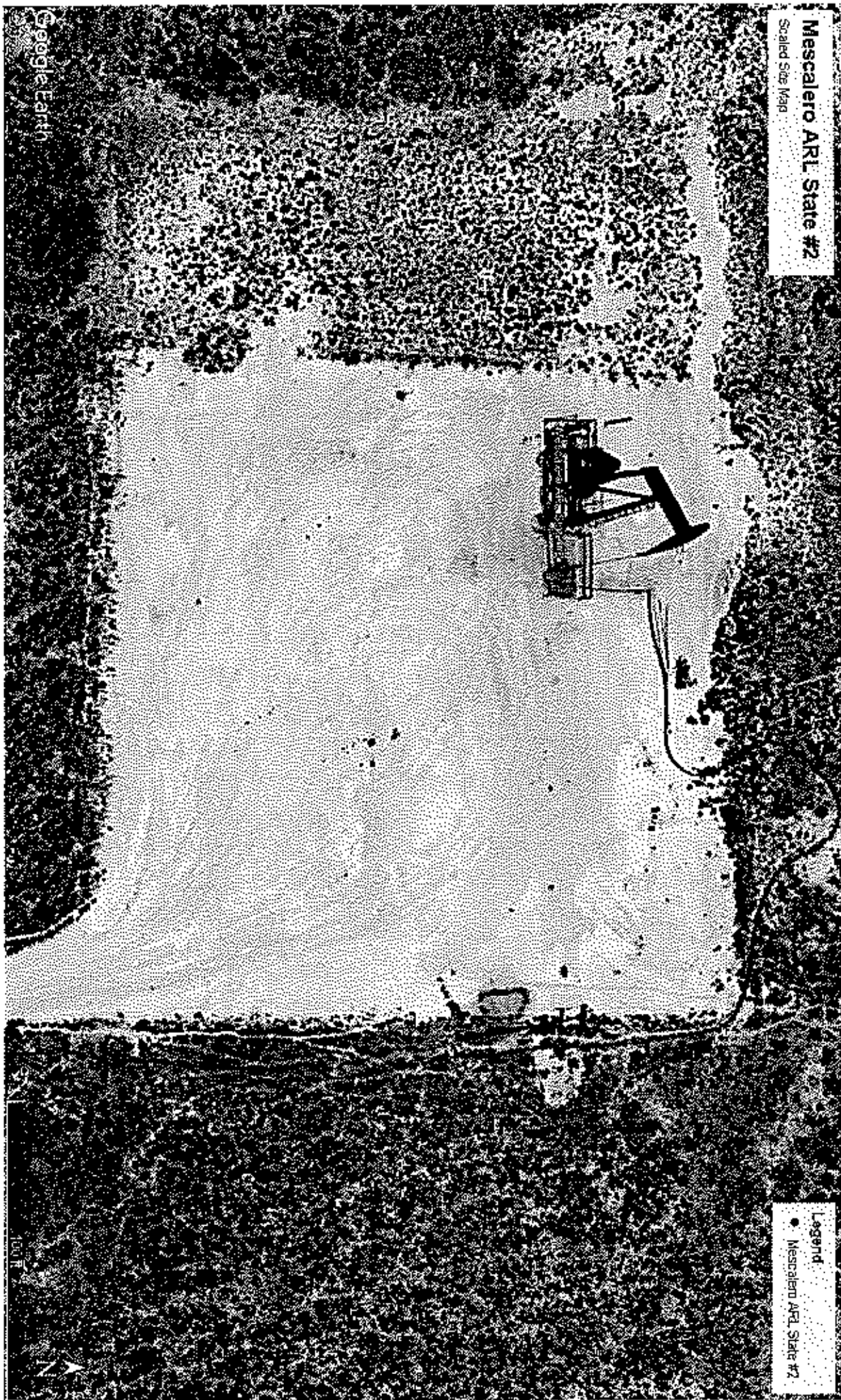
VII. Site Closure

Upon completion of the remedial and backfilling activities, EOG Resources, Inc. will submit a Form C-141/Closure to the NMOCD, including the Closure Report Attachment Checklist.

Appendix 1

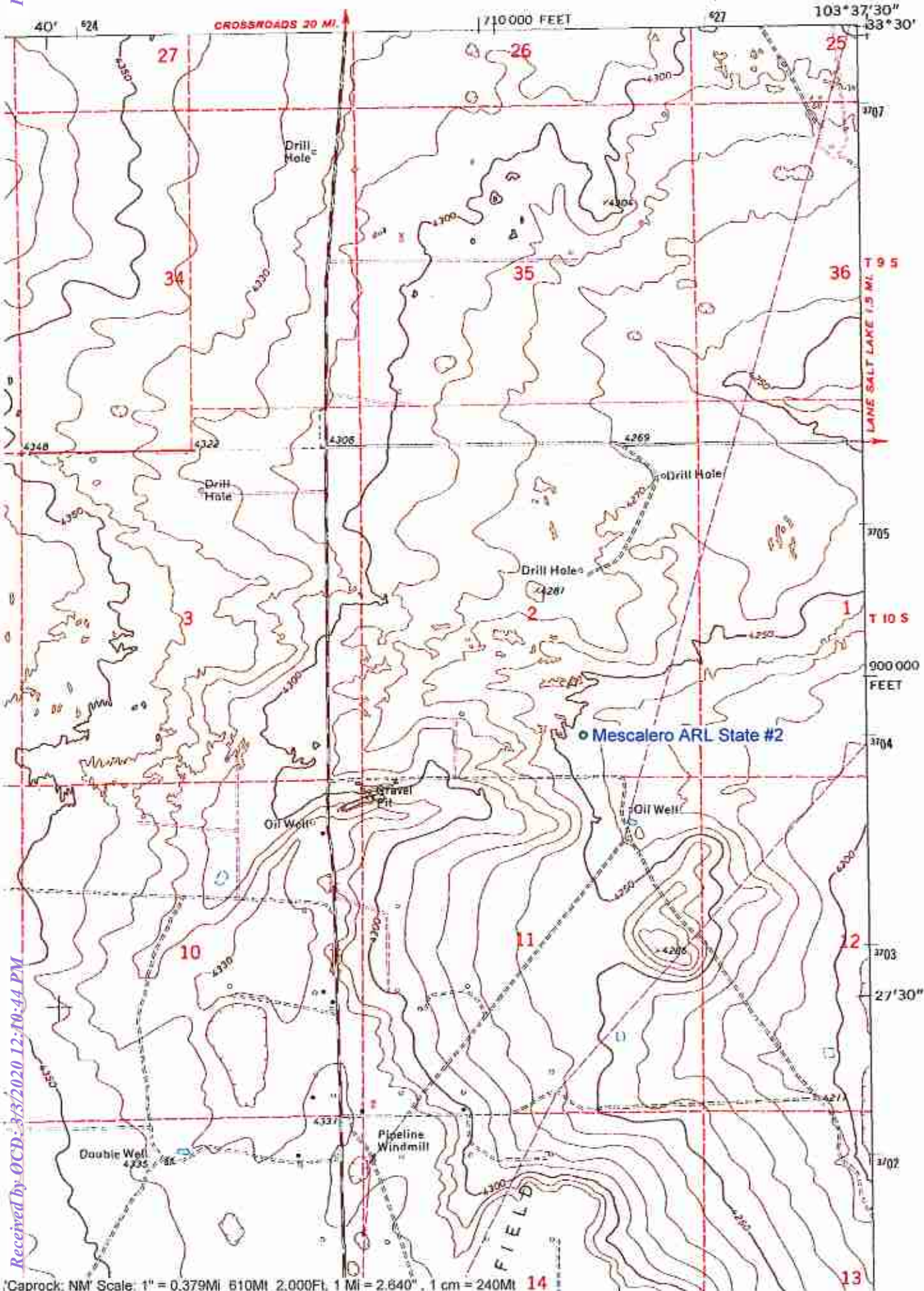
Site/Topo/Impacted Map

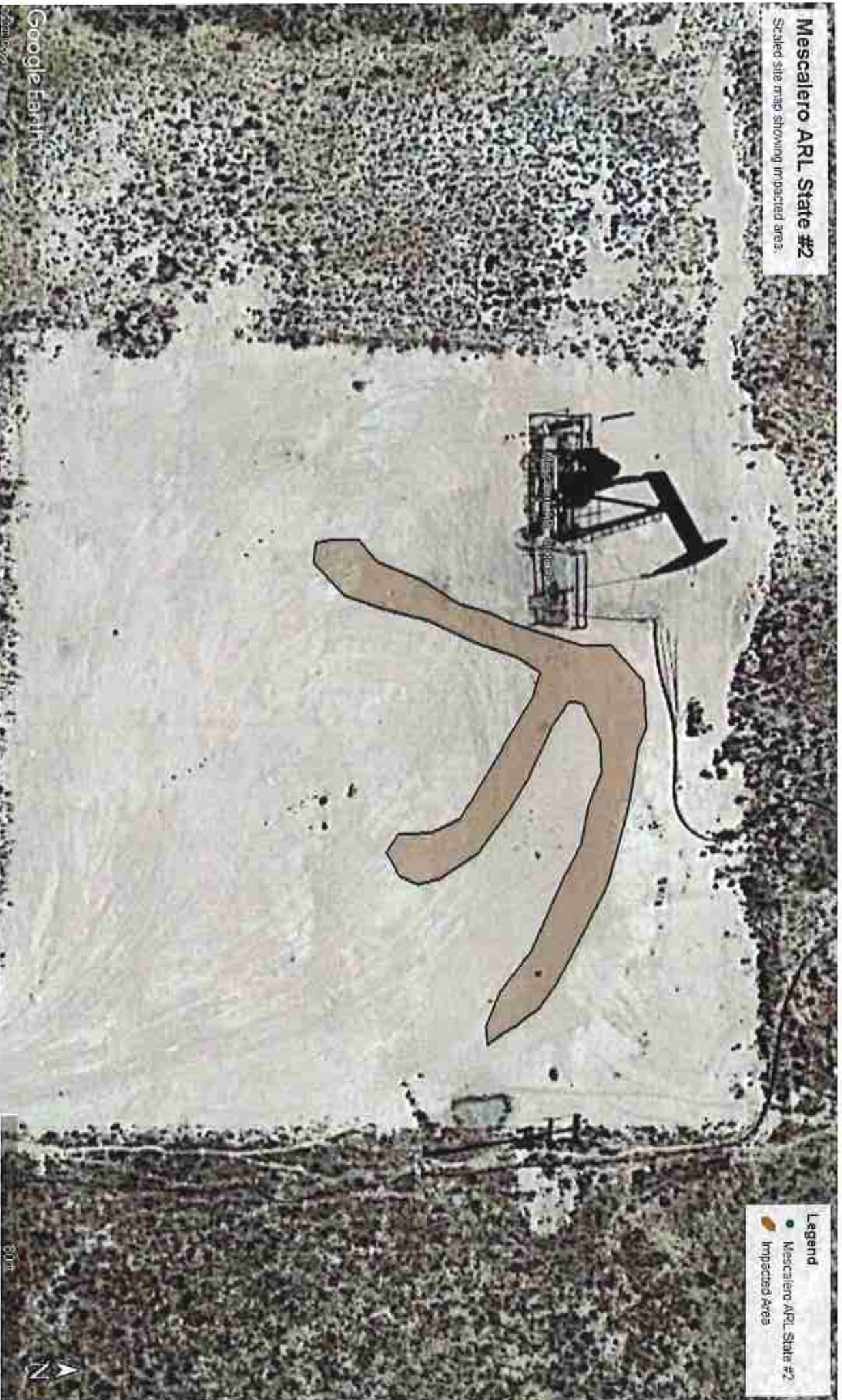




CAPROCK QUADRANGLE
NEW MEXICO
7.5 MINUTE SERIES (TOPOGRAPHIC)

5261 P SE
FLYING M RANCH



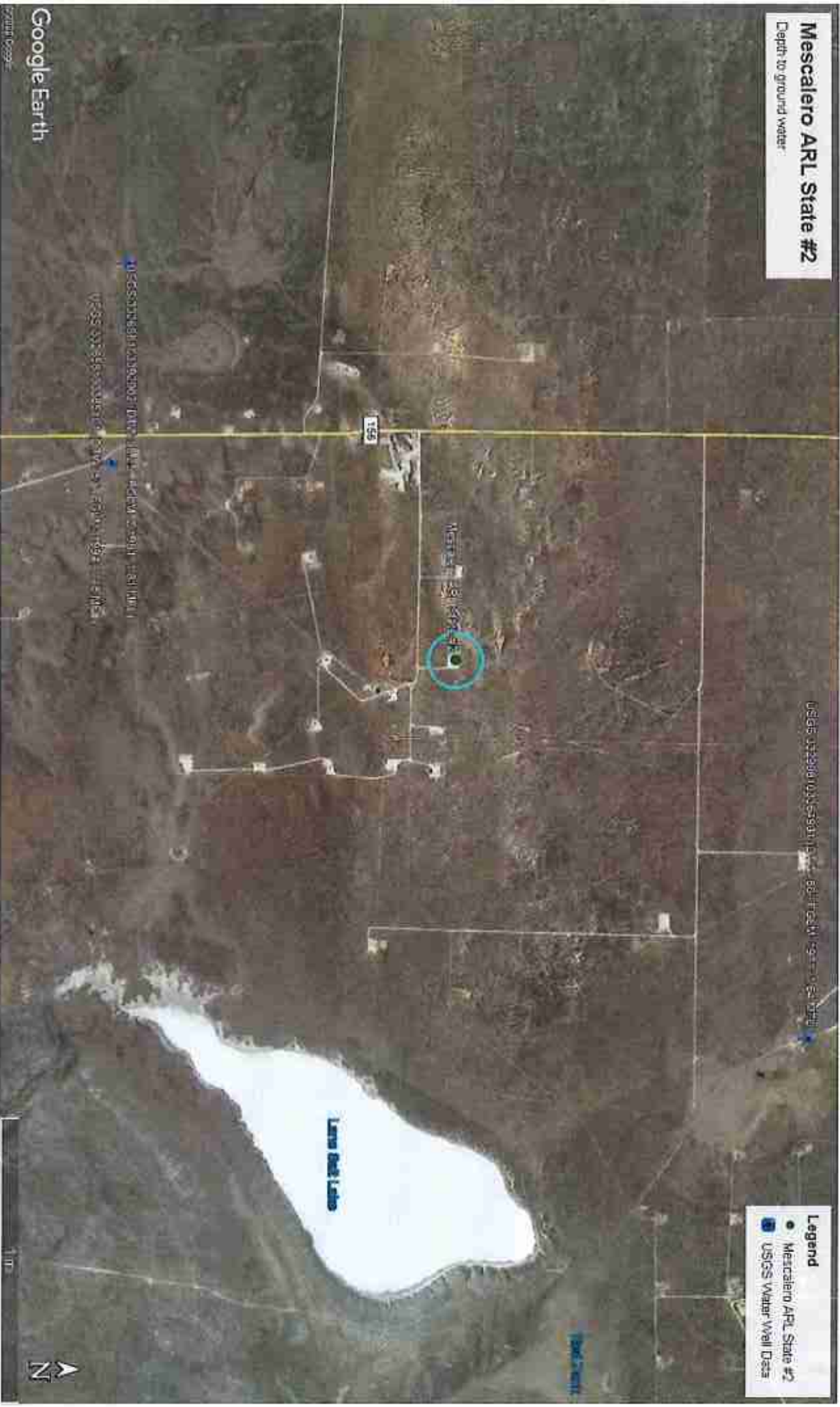


Appendix 2

Surface and Depth to Ground Water

Mescalero ARL State #2
Kast Potentilla (Low)





Mescalero ARL State #2
Depth to ground water

USGS Water Well Data

Legend
● Mescalero ARL State #2
■ USGS Water Well Data

Google Earth

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USGS 332908103364901 09S.32E.36.42422

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Well Site

DESCRIPTION:

Latitude 33°29'14", Longitude 103°36'59" NAD27
Lea County, New Mexico , Hydrologic Unit 12080001
Well depth: 300 feet
Land surface altitude: 4,228.00 feet above NGVD29.
Well completed in "Chinle Formation of Dockum Group" (231CHNL) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1957-06-09	1971-04-29	3
Revisions	Unavailable (site:0) (timeseries:0)		

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Lea County, New Mexico

Hydrologic Unit Code 12080001

Latitude 33°29'14", Longitude 103°36'59" NAD27

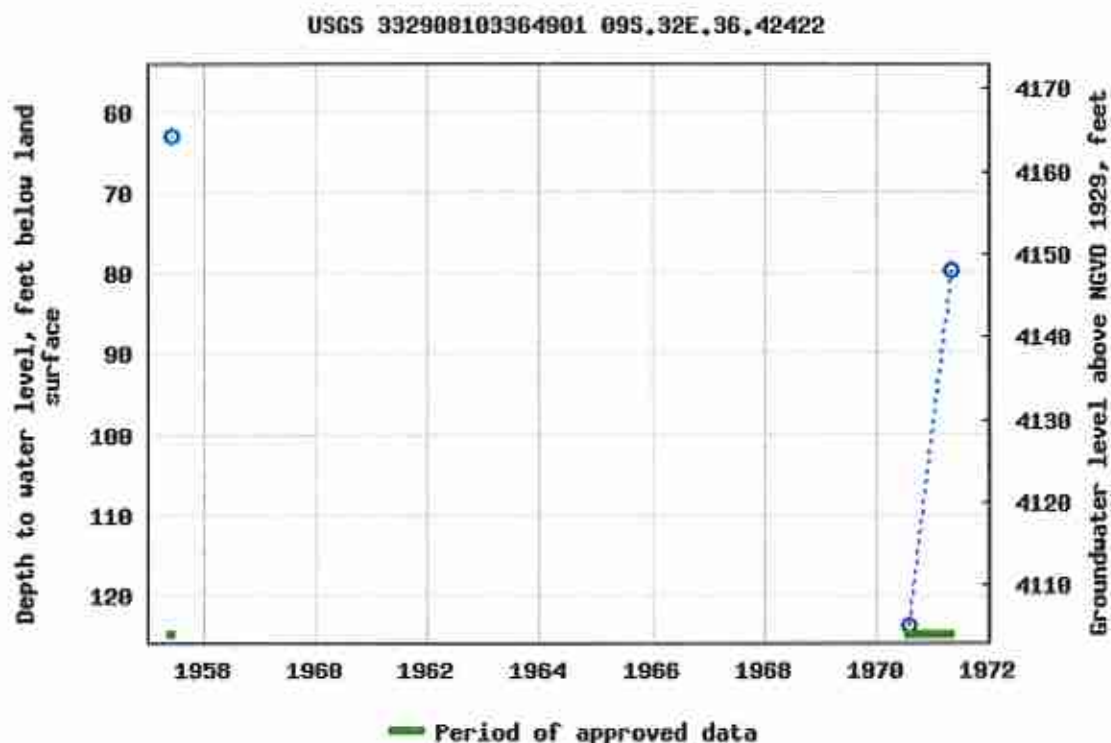
Land-surface elevation 4,228.00 feet above NGVD29

The depth of the well is 300 feet below land surface.

This well is completed in the Chinle Formation of Dockum Group (231CHNL) 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.

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Well Site

DESCRIPTION:

Latitude 33°27'06", Longitude 103°39'39" NAD27
 Lea County, New Mexico , Hydrologic Unit 12080001
 Well depth: 125 feet
 Land surface altitude: 4,335.00 feet above NGVD29.
 Well completed in "Ogallala Formation" (121OGLL) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1954-09-17	1981-02-11	5
Revisions	Unavailable (site:0) (timeseries:0)		

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Groundwater: Field measurements ▼

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Lea County, New Mexico

Hydrologic Unit Code 12080001

Latitude 33°27'06", Longitude 103°39'39" NAD27

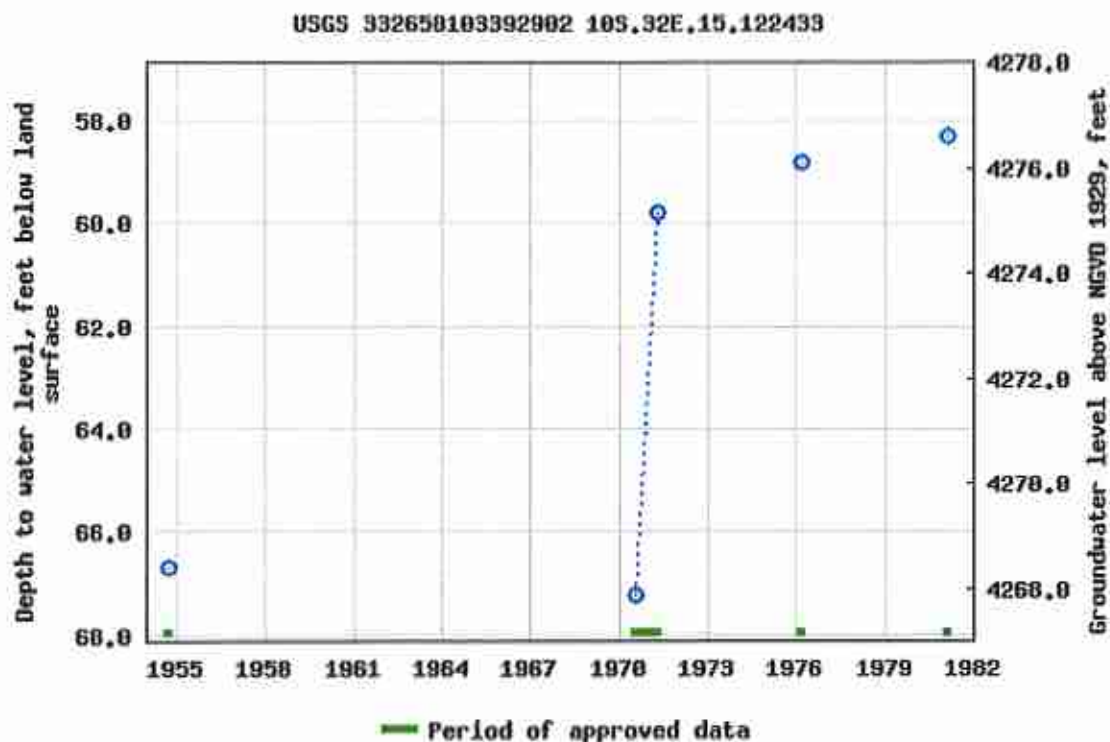
Land-surface elevation 4,335.00 feet above NGVD29

The depth of the well is 125 feet below land surface.

This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

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



Breaks in the plot represent a gap of at least one year between field measurements.

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Well Site

DESCRIPTION:

Latitude 33°27'07", Longitude 103°39'02" NAD27
 Lea County, New Mexico , Hydrologic Unit 12080001
 Well depth: not determined.
 Land surface altitude: 4,322.00 feet above NGVD29.
 Well completed in "Ogallala Formation" (121OGLL) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1957-06-13	1996-01-31	7
Revisions	Unavailable (site:0) (timeseries:0)		

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Groundwater: Field measurements ▼

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Lea County, New Mexico

Hydrologic Unit Code 12080001

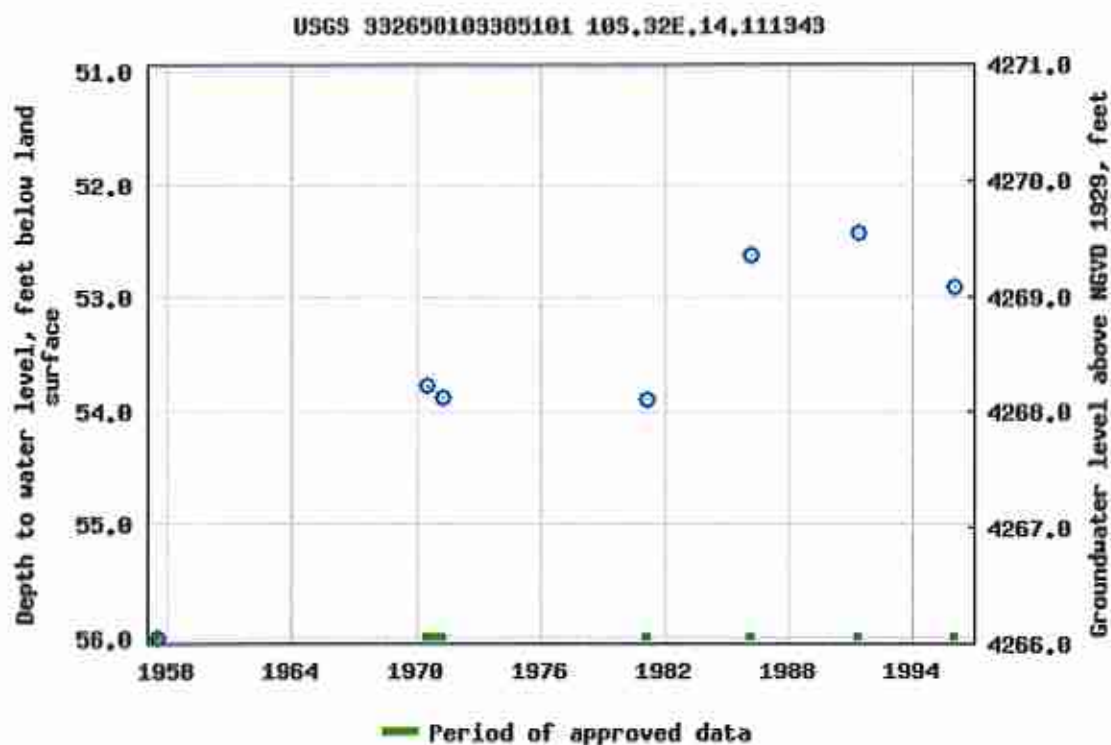
Latitude 33°27'07", Longitude 103°39'02" NAD27

Land-surface elevation 4,322.00 feet above NGVD29

This well is completed in the Ogallala Formation (1210GLL) local aquifer.

Output formats

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Graph of data
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Appendix 3

Wellhead Protection Area



Mescalero ARL State #2
Wellhead protection area

Legend
Wellhead protection area (10.5 mile radius)
Mescalero ARL State #2

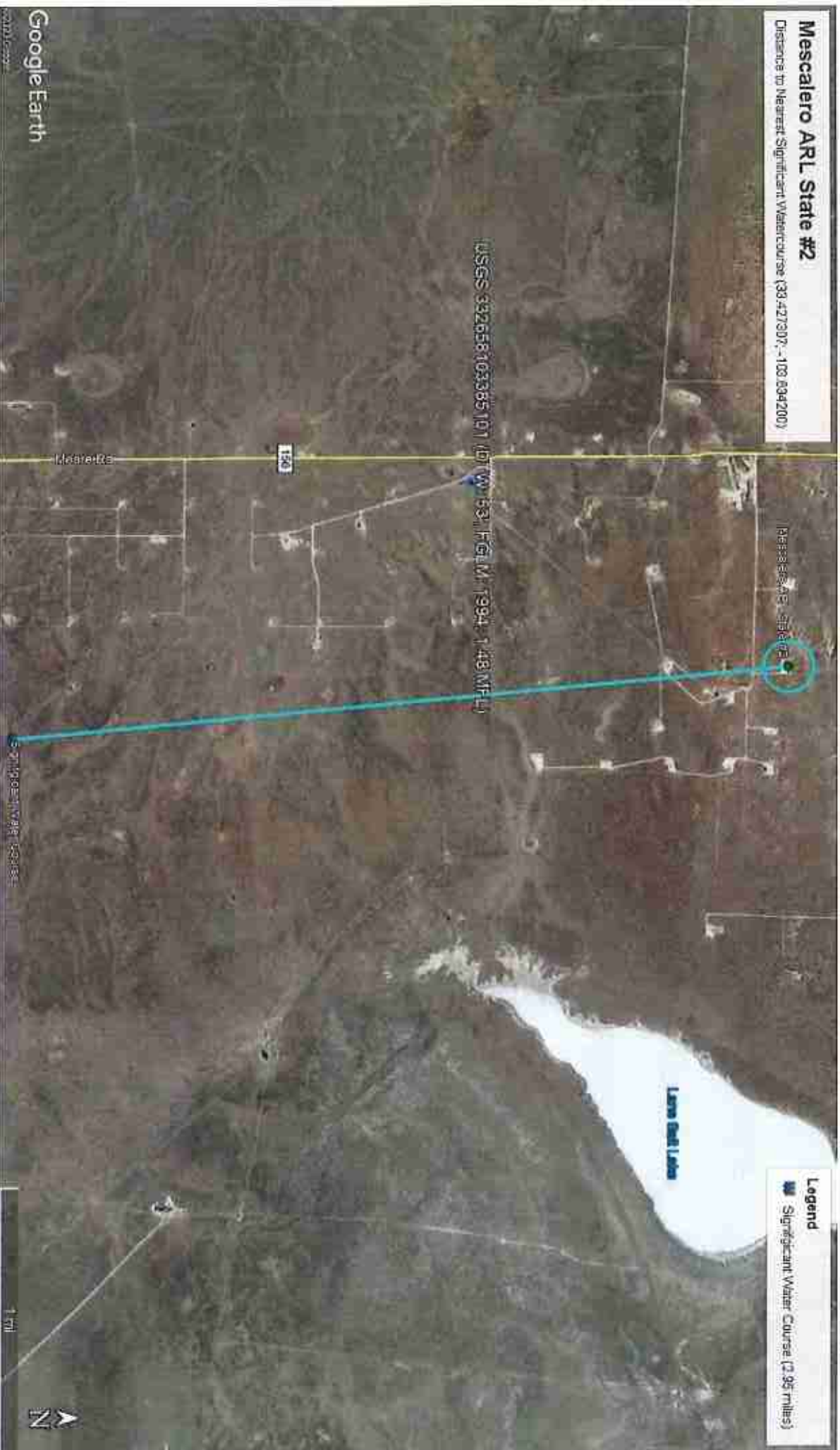
Google Earth

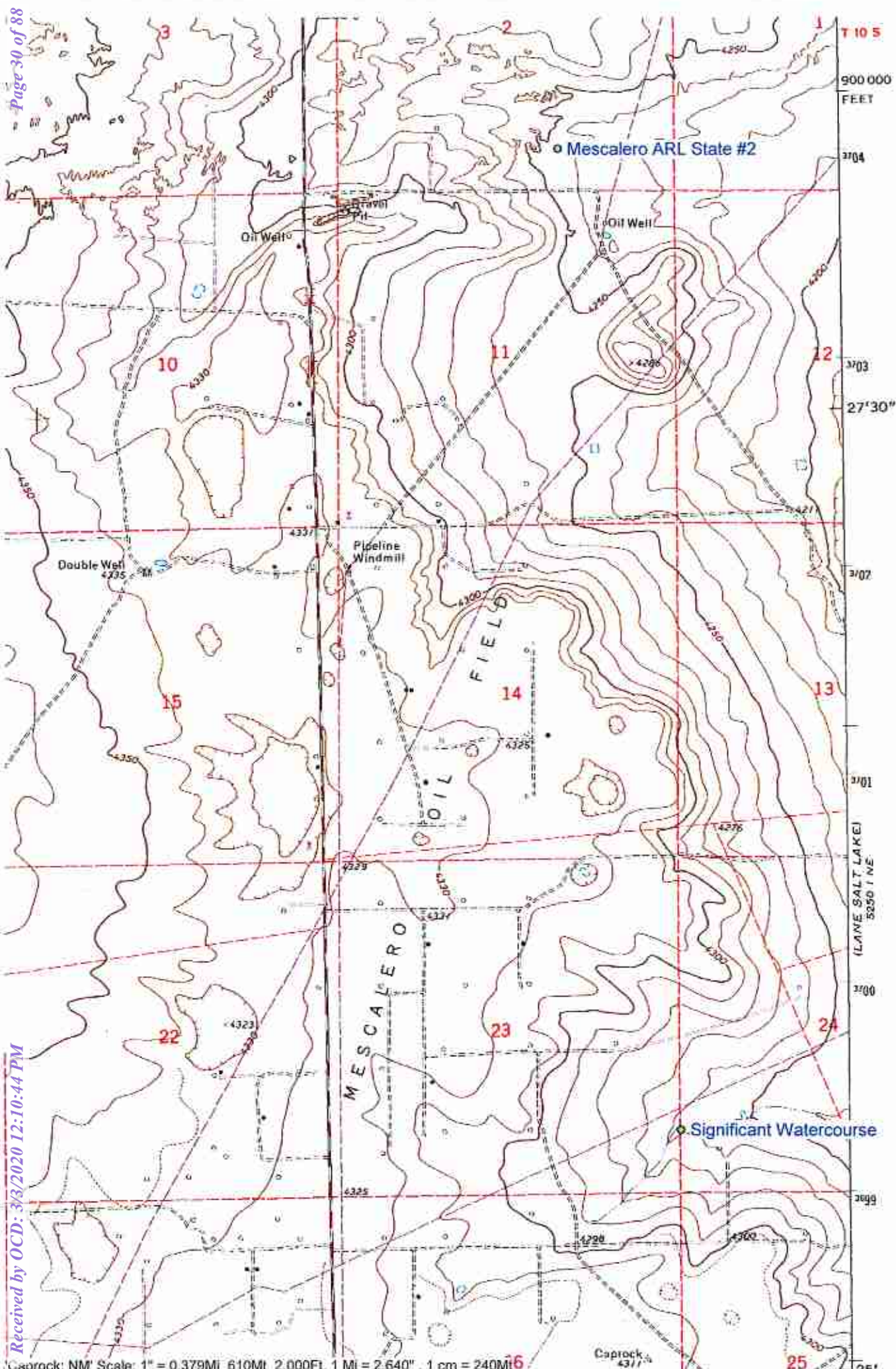


1000 ft

Appendix 4

Distance to Nearest Significant Watercourse





National Flood Hazard Layer FIRMette



33°26'26.25"N

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS	Without Base Flood Elevation (BFE) Zone A, X, AE3 With BFE or Depth zone AE, AH, AR, IF, AF Regulatory Floodway
----------------------------	--

OTHER AREAS OF FLOOD HAZARD	0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile (Zone 1) Future Conditions, 1% Annual Chance Flood Hazard Zone X Areas with Reduced Flood Risk due to Levees, See Notes, Zone X Areas with Flood Risk due to Levee Zone D
-----------------------------	--

OTHER AREAS	Area of Minimal Flood Hazard Zone X Effective LOMRs Area of Undetermined Flood Hazard Zone
GENERAL STRUCTURES	Channel, Culvert, or Storm Sewer Levee, Dike, or Floodwall

OTHER FEATURES	Cross Sections with 1% Annual Chance Water Surface Elevation Coastal Transsect Base Flood Elevation Line (BFE) Limit of Study Jurisdiction Boundary Coastal Transsect Baseline Profile Baseline Hydrographic Feature
----------------	---

MAP PANELS	Digital Data Available No Digital Data Available Unmapped
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The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/3/2020 at 8:41:33 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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USGS The National Map, Orthorectified, Data Refreshed April 2019

88 of 183 Pages 500 1,000 1,500 2,000 Feet 1,6,000



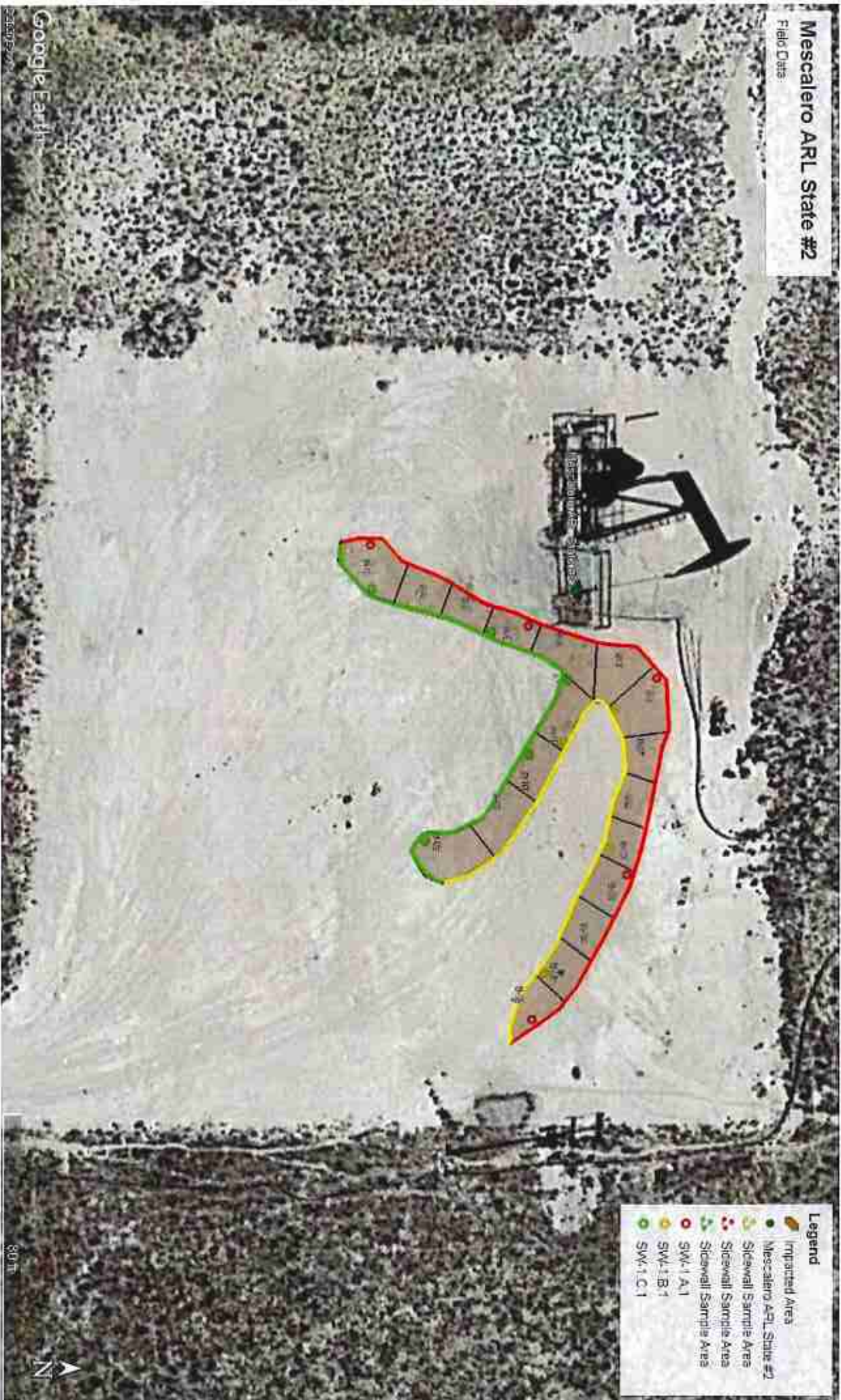
Appendix 5

Field Data/Sample Data

Mescalero ARL State #2
Sample Data
Per NMOCD Table I Criteria

Sample ID	Depth (ft. bgs)	Date	Chloride	TPH (GRO+DRO+ MRO)	GRO+DRO	BTEX	Benzene
S-1.1	1'	1/29/20	0	122	122	0.5120	0.0
S-2.1	1'	1/29/20	30.5	214	214	0.0667	0.0
S-3.1	1'	1/29/20	249	1268	1040	0.1450	0.0
S-4.1	1'	1/29/20	600	2481	1940	0.1680	0.0
S-5.1	1'	1/29/20	233	1237	1030	0.0000	0.0
S-6.1	1'	1/29/20	230	1031	867	0.0000	0.0
S-7.1	1'	1/29/20	157	1023	886	0.0923	0.0
S-8.1	1'	1/29/20	129	2319.6	2082.6	0.9916	0.0
S-9.1	1'	1/29/20	199	1277	1110	0.1520	0.0
S-10.1	1'	1/29/20	127	536	432	0.0000	0.0
S-11.1	1'	1/29/20	134	538.4	454	0.0000	0.0
S-12.1	1'	1/29/20	0	0	0	0.0000	0.0
S-13.1	1'	1/29/20	0	0	0	0.0000	0.0
S-14.1	1'	1/29/20	0	0	0	0.0000	0.0
S-15.1	1'	1/29/20	235	768	593	0.0000	0.0
S-16.1	1'	1/29/20	160	921	724	0.0000	0.0
S-17.1	1'	1/29/20	70.4	348.9	265	0.0000	0.0
S-18.1	1'	1/29/20	77.2	34.3	34.3	0.0000	0.0
Sample ID	Depth (ft. bgs)	Date	Chloride	TPH (GRO+DRO+ MRO)	GRO+DRO	BTEX	Benzene
SW-1.A.1	1'	2/26/20	50.2	0	0	0.0000	0.0
SW-1.B.1	1'	2/26/20	93	329	174	0.0000	0.0
SW-1.C.1	1'	2/26/20	89.9	0	0	0.0000	0.0

NMOCD Table I Criteria			
Depth	Constituent	Method	Limit
51-100'	Chloride	EPA 300.0 or SM4500 Cl-B	10,000 mg/kg
	TPH (GRO+DRO +MRO)	EPA SW-846 Method 8015M	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg



Appendix 6

Laboratory Data and COC



Analytical Report

Report Summary

Client: EOG Resources Inc. - Carlsbad

Samples Received: 1/31/2020

Job Number: 19034-0001

Work Order: P001096

Project Name/Location: Mascalero ARL State #2

Report Reviewed By:

Date: 2/3/20

Walter Hinchman, Laboratory Director



Envirotech Inc. certifies the test results meet all requirements of TNI unless footnoted otherwise.
 Statement of Data Authenticity: Envirotech, Inc. attests the data reported has not been altered in any way.
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 Envirotech, Inc. holds the Utah TNI certification NM009792018-1 for the data reported.
 Envirotech, Inc. holds the Texas TNI certification T104704557-19-2 for the data reported.



EOG Resources Inc. - Carlshad
104 South 4th Street
Artesia NM, 88210

Project Name: Mescalero ARL State #2
Project Number: 19034-0001
Project Manager: Robert Asher

Reported:
02/03/20 15:43

Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
S-1.1	P001096-01A	Soil	01/29/20	01/31/20	Glass Jar, 4 oz.
S-2.1	P001096-02A	Soil	01/29/20	01/31/20	Glass Jar, 4 oz.
S-3.1	P001096-03A	Soil	01/29/20	01/31/20	Glass Jar, 4 oz.
S-4.1	P001096-04A	Soil	01/29/20	01/31/20	Glass Jar, 4 oz.
S-5.1	P001096-05A	Soil	01/29/20	01/31/20	Glass Jar, 4 oz.
S-6.1	P001096-06A	Soil	01/29/20	01/31/20	Glass Jar, 4 oz.
S-7.1	P001096-07A	Soil	01/29/20	01/31/20	Glass Jar, 4 oz.
S-8.1	P001096-08A	Soil	01/29/20	01/31/20	Glass Jar, 4 oz.
S-9.1	P001096-09A	Soil	01/29/20	01/31/20	Glass Jar, 4 oz.
S-10.1	P001096-10A	Soil	01/29/20	01/31/20	Glass Jar, 4 oz.
S-11.1	P001096-11A	Soil	01/29/20	01/31/20	Glass Jar, 4 oz.
S-12.1	P001096-12A	Soil	01/29/20	01/31/20	Glass Jar, 4 oz.
S-13.1	P001096-13A	Soil	01/29/20	01/31/20	Glass Jar, 4 oz.
S-14.1	P001096-14A	Soil	01/29/20	01/31/20	Glass Jar, 4 oz.
S-15.1	P001096-15A	Soil	01/29/20	01/31/20	Glass Jar, 4 oz.
S-16.1	P001096-16A	Soil	01/29/20	01/31/20	Glass Jar, 4 oz.
S-17.1	P001096-17A	Soil	01/29/20	01/31/20	Glass Jar, 4 oz.
S-18.1	P001096-18A	Soil	01/29/20	01/31/20	Glass Jar, 4 oz.

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EOG Resources Inc. - Carlsbad	Project Name:	Masculero ARL State #2	Reported:
104 South 4th Street	Project Number:	19034-0001	02/03/20 15:43
Artesia NM, 88210	Project Manager:	Robert Asher	

S-1.1
P001096-01 (Solid)

Reporting:									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatiles Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
p,m-Xylene	0.0512	0.0500	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Total Xylenes	0.0512	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		107 %		50-150	2005035	01/31/20	01/31/20	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	122	25.0	mg/kg	1	2005033	01/31/20	01/31/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2005033	01/31/20	01/31/20	EPA 8015D	
Surrogate: n-Nonane		95.9 %		50-200	2005033	01/31/20	01/31/20	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8015D	
Surrogate: 1-Chloro-2-fluorobenzene-PID		95.9 %		50-150	2005035	01/31/20	01/31/20	EPA 8015D	

Anions by 300.0/9056A

Chloride	ND	20.0	mg/kg	1	2005038	01/31/20	01/31/20	EPA 300.0/9056A	
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EOG Resources Inc. - Carlsbad	Project Name:	Mescalero ARL State #2	Reported:
104 South 4th Street	Project Number:	19034-0001	02/03/20 15:43
Artesia NM, 88210	Project Manager:	Robert Asher	

S-2.1
P001096-02 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
p,m-Xylene	0.0667	0.0500	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Total Xylenes	0.0667	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		107 %		50-150	2005035	01/31/20	01/31/20	EPA 8021B	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	214	25.0	mg/kg	1	2005033	01/31/20	01/31/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2005033	01/31/20	01/31/20	EPA 8015D	
Surrogate: n-Nonane		86.9 %		50-200	2005033	01/31/20	01/31/20	EPA 8015D	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8015D	
Surrogate: 1-Chloro-1-fluorobenzene-1-D		94.2 %		50-150	2005035	01/31/20	01/31/20	EPA 8015D	
Anions by 300.0/9056A									
Chloride	30.5	20.0	mg/kg	1	2005038	01/31/20	01/31/20	EPA 300.0/9056A	

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EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Mescalero ARL State #2 Project Number: 19034-0001 Project Manager: Robert Asher	Reported: 02/03/20 15:43
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S-3.1
P001096-03 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
p,m-Xylene	0.145	0.0500	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Total Xylenes	0.145	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		11.3 %		50-150	2005035	01/31/20	01/31/20	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	1040	25.0	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8015D	
Oil Range Organics (C28-C40)	228	50.0	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8015D	
Surrogate: n-Nonane		94.3 %		50-200	2005035	01/31/20	01/31/20	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		95.8 %		50-150	2005035	01/31/20	01/31/20	EPA 8015D	

Anions by 300.0/9056A

Chloride	249	20.0	mg/kg	1	2005038	01/31/20	01/31/20	EPA 300.0/9056A	
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EOG Resources Inc. - Carlshad	Project Name:	Mescalero ARL State #2	Reported:
104 South 4th Street	Project Number:	19034-0001	02/03/20 15:43
Artesia NM, 88210	Project Manager:	Robert Asher	

S-4.1

P001096-04 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
p,m-Xylene	0.0912	0.0500	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
o-Xylene	0.0772	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Total Xylenes	0.168	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	

Surrogate: 4-Bromochlorobenzene-PID 110 % 50-150 2005035 01/31/20 01/31/20 EPA 8021B

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	1940	50.0	mg/kg	2	2005035	01/31/20	01/31/20	EPA 8015D	
Oil Range Organics (C28-C40)	541	100	mg/kg	2	2005035	01/31/20	01/31/20	EPA 8015D	

Surrogate: n-Nonane 110 % 50-200 2005035 01/31/20 01/31/20 EPA 8015D

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8015D	
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Surrogate: 1-Chloro-4-fluorobenzene-PID 96.4 % 50-150 2005035 01/31/20 01/31/20 EPA 8015D

Anions by 300.0/9056A

Chloride	500	20.0	mg/kg	1	2005038	01/31/20	01/31/20	EPA 300.0/9056A	
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EOG Resources Inc. - Carlsbad	Project Name:	Mescalero ARI, State #2	Reported:
104 South 4th Street	Project Number:	19034-0001	02/03/20 15:43
Artesia NM, 88210	Project Manager:	Robert Asher	

S-5.1
P001096-05 (Solid)

Reporting									
Analytic	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organics by EPA 8021

Benzene	ND	0.0250	µg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
p,m-Xylene	ND	0.0500	µg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Total Xylenes	ND	0.0250	µg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	

Surrogate: 4-Bromochlorobenzene-FID 107 % 50-150 2005035 01/31/20 01/31/20 EPA 8021B

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	1030	50.0	µg/kg	2	2005035	01/31/20	01/31/20	EPA 8015D	
Oil Range Organics (C28-C40)	207	100	mg/kg	2	2005035	01/31/20	01/31/20	EPA 8015D	

Surrogate: n-Nonane 105 % 50-200 2005035 01/31/20 01/31/20 EPA 8015D

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8015D	
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Surrogate: 1-Chloro-4-fluorobenzene-FID 93.7 % 50-150 2005035 01/31/20 01/31/20 EPA 8015D

Anions by 300.0/9056A

Chloride	233	20.0	mg/kg	1	2005035	01/31/20	01/31/20	EPA 300.0/9056A	
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FOG Resources Inc. - Carlshad 104 South 4th Street Artesia NM, 88210	Project Name: Mescalero ARL State #2 Project Number: 19034-0001 Project Manager: Robert Asher	Reported: 02/03/20 15:43
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S-6.1
P001096-06 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Surrogate: 1-Bromochlorobenzene-PID		107 %		50-150	2005035	01/31/20	01/31/20	EPA 8021B	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	867	50.0	mg/kg	2	2005033	01/31/20	01/31/20	EPA 8015D	
Oil Range Organics (C28-C40)	164	100	mg/kg	2	2005033	01/31/20	01/31/20	EPA 8015D	
Surrogate: n-Nonane		103 %		50-200	2005033	01/31/20	01/31/20	EPA 8015D	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-PID		95.2 %		50-150	2005035	01/31/20	01/31/20	EPA 8015D	
Anions by 300.0/9056A									
Chloride	230	20.0	mg/kg	1	200503K	01/31/20	01/31/20	EPA 300.0/9056A	

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EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Mascaero ARL State #2 Project Number: 19034-0001 Project Manager: Robert Asher	Reported: 02/03/20 15:43
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S-7.1

P001096-07 (Solid)

Reporting

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
p,m-Xylene	0.0531	0.0500	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
o-Xylene	0.0392	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Total Xylenes	0.0923	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-P113		108 %		50-150	2005035	01/31/20	01/31/20	EPA 8021B	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	886	25.0	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8015D	
Oil Range Organics (C28-C40)	137	50.0	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8015D	
Surrogate: n-Nonane		87.3 %		50-200	2005035	01/31/20	01/31/20	EPA 8015D	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		96.0 %		50-150	2005035	01/31/20	01/31/20	EPA 8015D	
Anions by 300.0/9056A									
Chloride	157	20.0	mg/kg	1	2005038	01/31/20	01/31/20	EPA 300.0/9056A	

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FOG Resources Inc. - Carlshad 104 South 4th Street Artesia NM, 88210	Project Name: Mescalero ARL State #2 Project Number: 19034-0001 Project Manager: Robert Asher	Reported: 02/03/20 15:43
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S-8.1
P001096-08 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Toluene	0.0296	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Ethylbenzene	0.0810	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
p,m-Xylene	0.576	0.0500	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
o-Xylene	0.304	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Total Xylenes	0.881	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	

Surrogate: 4-Bromochlorobenzene-PHD 116 % 50-150 2005035 01/31/20 01/31/20 EPA 8021B

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	2040	50.0	mg/kg	2	2005035	01/31/20	01/31/20	EPA 8015D	
Oil Range Organics (C28-C40)	257	100	mg/kg	2	2005035	01/31/20	01/31/20	EPA 8015D	

Surrogate: n-Nonane 107 % 50-200 2005035 01/31/20 01/31/20 EPA 8015D

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	22.6	20.0	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8015D	
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Surrogate: 1-Chloro-4-fluorobenzene-FID 95.4 % 50-150 2005035 01/31/20 01/31/20 EPA 8015D

Anions by 300.0/9056A

Chloride	129	20.0	mg/kg	1	2005038	01/31/20	01/31/20	EPA 300.0/9056A	
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EOG Resources Inc. - Carlshad 104 South 4th Street Artesia NM, 88210	Project Name: Mescalero ARL State #2 Project Number: 19034-0001 Project Manager: Robert Asher	Reported: 02/03/20 15:43
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S-9.1

P001096-09 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021A	
Toluene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
p,m-Xylene	0.0851	0.0500	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
o-Xylene	0.0673	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Total Xylenes	0.152	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PHD		107 %		50-150	2005035	01/31/20	01/31/20	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	1110	25.0	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8015D	
Oil Range Organics (C28-C40)	167	50.0	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8015D	
Surrogate: n-Nonane		109 %		50-200	2005035	01/31/20	01/31/20	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		93.5 %		50-150	2005035	01/31/20	01/31/20	EPA 8015D	

Anions by 300.0/9056A

Chloride	199	20.0	mg/kg	1	2005038	01/31/20	01/31/20	EPA 300.0/9056A	
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EOG Resources Inc. - Carlstad 104 South 4th Street Artesia NM, 88210	Project Name: Mescalero ARL State #2 Project Number: 19034-0001 Project Manager: Robert Asher	Reported: 02/03/20 15:43
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S-10.1**P001096-10 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PHD		107 %		50-150	2005035	01/31/20	01/31/20	EPA 8021D	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	432	25.0	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8015D	
Oil Range Organics (C28-C40)	104	50.0	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8015D	
Surrogate: n-Nonane		91.9 %		50-200	2005035	01/31/20	01/31/20	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		93.7 %		50-150	2005035	01/31/20	01/31/20	EPA 8015D	

Anions by 300.0/9056A

Chloride	127	20.0	mg/kg	1	2005038	01/31/20	01/31/20	EPA 300.0/9056A	
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FOG Resources Inc. - Carlshad
104 South 4th Street
Artesia NM, 88210

Project Name: Mescalero ARL State #2
Project Number: 19034-0001
Project Manager: Robert Asher

Reported:
02/03/20 15:43

S-11.1
P001096-11 (Solid)

Reporting

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-P113		100 %		50-150	2005035	01/31/20	01/31/20	EPA 8021B	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	454	25.0	mg/kg	1	2005033	01/31/20	01/31/20	EPA 8015D	
Oil Range Organics (C28-C40)	84.4	50.0	mg/kg	1	2005033	01/31/20	01/31/20	EPA 8015D	
Surrogate: n-Nonane		91.1 %		50-200	2005033	01/31/20	01/31/20	EPA 8015D	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005033	01/31/20	01/31/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-F1D		87.7 %		50-150	2005033	01/31/20	01/31/20	EPA 8015D	
Anions by 300.0/9056A									
Chloride	134	20.0	mg/kg	1	2005038	01/31/20	01/31/20	EPA 300.0/9056A	

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EC&I Resources Inc. - Carlshad 104 South 4th Street Artesia NM, 88210	Project Name: Mescalero ARL State #2 Project Number: 19034-0001 Project Manager: Robert Asher	Reported: 02/03/20 15:43
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S-12.1
P001096-12 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021H	
Toluene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021H	
o-Xylene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021H	
Surrogate: 1-Bromochlorobenzene-PHD		98.9 %		50-150	2005035	01/31/20	01/31/20	EPA 8021H	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2005033	01/31/20	01/31/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2005033	01/31/20	01/31/20	EPA 8015D	
Surrogate: n-Nonane		91.1 %		50-200	2005033	01/31/20	01/31/20	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-PHD		87.4 %		50-150	2005035	01/31/20	01/31/20	EPA 8015D	

Anions by 300.0/9056A

Chloride	ND	20.0	mg/kg	1	2005038	01/31/20	01/31/20	EPA 300.0/9056A	
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FOG Resources Inc. - Carlisbad 104 South 4th Street Artesia NM, 88210	Project Name: Mascadero ARL State #2 Project Number: 19034-0001 Project Manager: Robert Asher	Reported: 02/03/20 15:43
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S-13.1**P001096-13 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021H	
Toluene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021H	
o-Xylene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021H	
Surrogate: 1-Bromochlorobenzene-P113		100 %		50-150	2005035	01/31/20	01/31/20	EPA 8021H	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2005033	01/31/20	01/31/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2005033	01/31/20	01/31/20	EPA 8015D	
Surrogate: n-Nonane		92.8 %		50-200	2005033	01/31/20	01/31/20	EPA 8015D	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-F113		86.5 %		50-150	2005035	01/31/20	01/31/20	EPA 8015D	
Anions by 300.0/9056A									
Chloride	ND	20.0	mg/kg	1	2005038	01/31/20	01/31/20	EPA 300.0/9056A	

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S-14.1
P001096-14 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021H	
Toluene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021H	
Ethylbenzene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021H	
p,m-Xylene	ND	0.0500	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021H	
o-Xylene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021H	
Total Xylenes	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021H	
Surrogate: 4-Bromochlorobenzene-PID		101 %		50-150	2005035	01/31/20	01/31/20	EPA 8021H	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2005033	01/31/20	01/31/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2005033	01/31/20	01/31/20	EPA 8015D	
Surrogate: n-Nonane		92.8 %		50-200	2005033	01/31/20	01/31/20	EPA 8015D	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8015D	
Surrogate: 1,1-Dichloro-4-fluorobenzene-PID		87.6 %		50-150	2005035	01/31/20	01/31/20	EPA 8015D	
Anions by 300.0/9056A									
Chloride	ND	20.0	mg/kg	1	2005038	01/31/20	01/31/20	EPA 300.0/9056A	

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EOG Resources Inc. - Carlsbad
104 South 4th Street
Artesia NM, 88210

Project Name: Mescalero ARL State #2
Project Number: 19034-0001
Project Manager: Robert Asher

Reported:
02/03/20 15:43

S-15.1

P001096-15 (Solid)

Reporting

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021H	
Toluene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021H	
o-Xylene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021H	
Surrogate: 4-Bromochlorobenzene-P103		100 %		50-150	2005035	01/31/20	01/31/20	EPA 8021H	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	593	25.0	mg/kg	1	2005033	01/31/20	01/31/20	EPA 8015D	
Oil Range Organics (C28-C40)	175	50.0	mg/kg	1	2005033	01/31/20	01/31/20	EPA 8015D	
Surrogate: n-Nonane		92.2 %		50-200	2005033	01/31/20	01/31/20	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-F10		86.9 %		50-150	2005035	01/31/20	01/31/20	EPA 8015D	

Anions by 300.0/9056A

Chloride	235	20.0	mg/kg	1	2005038	01/31/20	01/31/20	EPA 300.0/9056A	
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EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Mascaron ARI, State #2 Project Number: 19034-0001 Project Manager: Robert Asher	Reported: 02/03/20 15:43
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S-16.1**P001096-16 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		99.1 %		50-150	2005035	01/31/20	01/31/20	EPA 8021B	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	724	25.0	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8015D	
Oil Range Organics (C28-C40)	197	50.0	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8015D	
Surrogate: n-Nonane		112 %		50-200	2005035	01/31/20	01/31/20	EPA 8015D	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		86.7 %		50-150	2005035	01/31/20	01/31/20	EPA 8015D	
Anions by 300.0/9056A									
Chloride	160	20.0	mg/kg	1	2005038	01/31/20	01/31/20	EPA 300.0/9056A	

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EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Mescalero ARL State #2 Project Number: 19034-0001 Project Manager: Robert Asher	Reported: 02/03/20 15:43
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S-17.1
P001096-17 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		101 %		50-150	2005035	01/31/20	01/31/20	EPA 8021B	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	265	25.0	mg/kg	1	2005033	01/31/20	01/31/20	EPA 8015D	
Oil Range Organics (C28-C40)	83.9	50.0	mg/kg	1	2005033	01/31/20	01/31/20	EPA 8015D	
<i>Surrogate: n-Nonane</i>		94.9 %		50-200	2005033	01/31/20	01/31/20	EPA 8015D	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005035	01/31/20	01/31/20	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-PID</i>		85.5 %		50-150	2005035	01/31/20	01/31/20	EPA 8015D	
Anions by 300.0/9056A									
Chloride	70.4	20.0	mg/kg	1	2005038	01/31/20	01/31/20	EPA 300.0/9056A	

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EOG Resources Inc. - Carlsbad
104 South 4th Street
Artesia NM, 88210

Project Name: Mescalero ARL State #2
Project Number: 19034-0001
Project Manager: Robert Asher

Reported:
02/03/20 15:43

S-18.1

P001096-18 (Solid)

Reporting

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	2005033	01/31/20	01/31/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2005033	01/31/20	01/31/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005033	01/31/20	01/31/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005033	01/31/20	01/31/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2005033	01/31/20	01/31/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2005033	01/31/20	01/31/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PHD		101 %		50-150	2005033	01/31/20	01/31/20	EPA 8021B	

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	34.3	25.0	mg/kg	1	2005033	01/31/20	02/03/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2005033	01/31/20	02/03/20	EPA 8015D	
Surrogate: n-Nonane		93.8 %		50-200	2005033	01/31/20	02/03/20	EPA 8015D	

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005033	01/31/20	01/31/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		85.9 %		50-150	2005033	01/31/20	01/31/20	EPA 8015D	

Anions by 300.0/9056A

Chloride	77.2	20.0	mg/kg	1	2005038	01/31/20	01/31/20	EPA 300.0/9056A	
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EOG Resources Inc. - Carlshad
104 South 4th Street
Artesia NM, 88210

Project Name: Mascalcro ARI, State #2
Project Number: 19034-0001
Project Manager: Robert Asher

Reported:
02/03/20 15:43

Volatile Organics by EPA 8021 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	Limit	RPD	RPD Limit	Notes
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Batch 2005035 - Purge and Trap EPA 5030A

Blank (2005035-BL.K1)

Prepared: 01/31/20 0 Analyzed: 01/31/20 1

Benzene	ND	0.0250	mg/kg							
Toluene	ND	0.0250	*							
Ethylbenzene	ND	0.0250	*							
p,m-Xylene	ND	0.0500	*							
o-Xylene	ND	0.0250	*							
Total Xylenes	ND	0.0250	*							
Surrogate: 4-Bromochlorobenzene-PID	8.63		*	8.00		108	30-150			

LCS (2005035-BL1)

Prepared: 01/31/20 0 Analyzed: 01/31/20 1

Benzene	5.12	0.0250	mg/kg	5.00		102	70-130			
Toluene	5.13	0.0250	*	5.00		103	70-130			
Ethylbenzene	5.11	0.0250	*	5.00		102	70-130			
p,m-Xylene	10.2	0.0500	*	10.0		102	70-130			
o-Xylene	5.14	0.0250	*	5.00		103	70-130			
Total Xylenes	15.3	0.0250	*	15.0		102	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.39		*	8.00		107	30-150			

Matrix Spike (2005035-MS1)

Source: P001096-01

Prepared: 01/31/20 0 Analyzed: 01/31/20 1

Benzene	5.03	0.0250	mg/kg	5.00	ND	101	54.3-133			
Toluene	5.05	0.0250	*	5.00	ND	101	61.4-130			
Ethylbenzene	5.04	0.0250	*	5.00	ND	101	61.4-133			
p,m-Xylene	10.1	0.0500	*	10.0	0.0512	100	63.3-131			
o-Xylene	5.07	0.0250	*	5.00	ND	101	63.3-131			
Total Xylenes	15.1	0.0250	*	15.0	0.0512	101	63.3-131			
Surrogate: 4-Bromochlorobenzene-PID	8.68		*	8.00		108	30-150			

Matrix Spike Dup (2005035-MSD1)

Source: P001096-01

Prepared: 01/31/20 0 Analyzed: 01/31/20 1

Benzene	5.08	0.0250	mg/kg	5.00	ND	103	54.3-133	0.926	20	
Toluene	5.07	0.0250	*	5.00	ND	101	61.4-130	0.215	20	
Ethylbenzene	5.05	0.0250	*	5.00	ND	101	61.4-133	0.284	20	
p,m-Xylene	10.1	0.0500	*	10.0	0.0512	100	63.3-131	0.194	20	
o-Xylene	5.07	0.0250	*	5.00	ND	101	63.3-131	0.0701	20	
Total Xylenes	15.2	0.0250	*	15.0	0.0512	101	63.3-131	0.153	20	
Surrogate: 4-Bromochlorobenzene-PID	8.33		*	8.00		106	30-150			

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EOG Resources Inc. - Carlsbad	Project Name:	Mescalero ARI, State #2	Reported: 02/03/20 15:43
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Robert Asher	

Nonhalogenated Organics by 8015 - DRO/ORO - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 2005033 - DRO Extraction EPA 3570

Blank (2005033-BLK1)

Prepared: 01/31/20 0 Analyzed: 02/03/20 0

Diesel Range Organics (C10-C20)	ND	25.0	mg/kg							
Oil Range Organics (C20-C40)	ND	50.0	"							
Surgegate: n-Nonane	48.0		"	50.0		96.0	50-200			

LCS (2005033-BS1)

Prepared: 01/31/20 0 Analyzed: 01/31/20 1

Diesel Range Organics (C10-C20)	415	25.0	mg/kg	500	122	82.9	38-132			
Surgegate: n-Nonane	69.3		"	50.0		98.6	50-200			

Matrix Spike (2005033-MS1)

Source: P001096-01

Prepared: 01/31/20 0 Analyzed: 01/31/20 1

Diesel Range Organics (C10-C20)	701	25.0	mg/kg	500	122	116	38-132			
Surgegate: n-Nonane	53.9		"	50.0		108	50-200			

Matrix Spike Dup (2005033-MSD1)

Source: P001096-01

Prepared: 01/31/20 0 Analyzed: 01/31/20 1

Diesel Range Organics (C10-C20)	597	25.0	mg/kg	500	122	94.9	38-132	16.4	30	
Surgegate: n-Nonane	47.9		"	50.0		95.8	50-200			

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ECOI Resources Inc. - Carlsbad	Project Name:	Masculero ARL State #2	Reported: 02/03/20 15:43
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Robert Asher	

Nonhalogenated Organics by 8015 - GRO - Quality Control

Envirotech Analytical Laboratory

Analyte:	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 2005035 - Purge and Trap EPA 5030A

Blank (2005035-BL K1)

Prepared: 01/31/2000 Analyzed: 01/31/2001

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrrogate: 1-Chloro-4-fluorobenzene-FID	7.79		*	8.00		97.9	50-150			

I.CS (2005035-BS2)

Prepared: 01/31/2000 Analyzed: 01/31/2001

Gasoline Range Organics (C6-C10)	40.8	20.0	mg/kg	50.0	ND	95.6	70-130			
Surrrogate: 1-Chloro-4-fluorobenzene-FID	7.69		*	8.00		96.2	50-150			

Matrix Spike (2005035-MS2)

Source: P001096-01

Prepared: 01/31/2000 Analyzed: 01/31/2001

Gasoline Range Organics (C6-C10)	47.7	20.0	mg/kg	50.0	ND	95.3	70-130			
Surrrogate: 1-Chloro-4-fluorobenzene-FID	7.33		*	8.00		94.4	50-150			

Matrix Spike Dup (2005035-MSD2)

Source: P001096-01

Prepared: 01/31/2000 Analyzed: 01/31/2001

Gasoline Range Organics (C6-C10)	48.1	20.0	mg/kg	50.0	ND	96.2	70-130	0.984	20	
Surrrogate: 1-Chloro-4-fluorobenzene-FID	7.46		*	8.00		93.3	50-150			

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EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Mescalero ARI, State #2 Project Number: 19034-0001 Project Manager: Robert Asher	Reported: 02/03/20 15:43
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Anions by 300.0/9056A - Quality Control
Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2005038 - Anion Extraction EPA 300.0/9056A										
Blank (2005038-BLK1)				Prepared: 01/31/20 0 Analyzed: 01/31/20 1						
Chloride	ND	20.0	mg/kg							
LCS (2005038-BS1)				Prepared: 01/31/20 0 Analyzed: 01/31/20 1						
Chloride	248	20.0	mg/kg	250		99.2	90-110			
Matrix Spike (2005038-MS1)				Prepared: 01/31/20 0 Analyzed: 01/31/20 1						
Chloride	267	20.0	mg/kg	250	NH	104	80-120			
Matrix Spike Dup (2005038-MSD1)				Prepared: 01/31/20 0 Analyzed: 01/31/20 1						
Chloride	261	20.0	mg/kg	250	ND	104	80-120	6.210	20	

QC Summary Report

Comment:

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

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EOG Resources Inc. - Carlsbad	Project Name:	Mescalero ARL State #2	
104 South 4th Street	Project Number:	19034-0001	Reported:
Artesia NM, 88210	Project Manager:	Robert Asher	02/03/20 15:43

Notes and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

** Methods marked with ** are non-accredited methods.

Soil data is reported on an "as received" weight basis, unless reported otherwise.

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Project Information				Chain of Custody				Page 1 of 2				
Client: EOG Resources, Inc.				Report Attention				Lab Use Only				
Project: Mescalero ARL State #2				Report due by: 2/3/2020				Job Number: 19034-0001				
Project Manager: Robert Asher				Attention: Robert Asher				TAT				
Address: 104 South 4th Street				Address: 104 South 4th Street				1D 3D RCRA CWA SDWA				
City, State, Zip: Artesia, NM 88210				City, State, Zip: Artesia, NM 88210				Analysis and Method				
Phone: (575) 748-4217				Phone: (575) 748-4217				State				
Email: robert.asher@eogresources.com				Email: robert.asher@eogresources.com				NM CO UT AZ				
Time Sampled	Date Sampled	Matrix	No. Containers	Sample ID	Lab Number	DRO/DRO by B015	GRO/DRO by B015	BTEX by B021	VOC by B260	Metals G010	Chloride 3000	Remarks
11:33 AM	1/29/20	S	1	S-1.1	1	X	X	X			X	BGDOC
11:35 AM	1/29/20	S	1	S-2.1	2	X	X	X			X	BGDOC
11:37 AM	1/29/20	S	1	S-3.1	3	X	X	X			X	BGDOC
11:40 AM	1/29/20	S	1	S-4.1	4	X	X	X			X	BGDOC
11:42 AM	1/29/20	S	1	S-5.1	5	X	X	X			X	BGDOC
11:45 AM	1/29/20	S	1	S-6.1	6	X	X	X			X	BGDOC
11:50 AM	1/29/20	S	1	S-7.1	7	X	X	X			X	BGDOC
11:54 AM	1/29/20	S	1	S-8.1	8	X	X	X			X	BGDOC
11:57 AM	1/29/20	S	1	S-9.1	9	X	X	X			X	BGDOC
					10							

Additional Instructions:
PO# 205632

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

Relinquished by: (Signature) *[Signature]* Date: 1/30/2019 Time: 7:51 AM

Relinquished by: (Signature) *[Signature]* Date: 1/30/2019 Time: 9:30 AM

Received on ice: ☒ Y ☐ N

Lab Use Only

T1 T2 T3

AVG Temp °C 4

Container Type: ☒ glass, ☐ poly/plastic, ag - amber glass, v - VOA

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



envirotech
Analytical Laboratory

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 24 hour Emergency Response Phone (800) 362-1879

Ph (505) 632-0615 FX (505) 632-1865

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 labadmin@envirotechinc.com

Project Information				Chain of Custody				Page 2 of 2				
Client: EOG Resources, Inc.				Report Attention				Lab Use Only				
Project: Mascajero ARL State #2				Report due by: 2/3/2020				Job Number: 19034-0001				
Project Manager: Robert Asher				Attention: Robert Asher				TAT				
Address: 104 South 4th Street				Address: 104 South 4th Street				1D 3D RCRA CWA SDWA				
City, State, Zip: Artesia, NM 88210				City, State, Zip: Artesia, NM 88210				Analysis and Method				
Phone: (575) 748-4217				Phone: (575) 748-4217				State				
Email: robert.asher@eogresources.com				Email: robert.asher@eogresources.com				NM CO UT AZ				
Time Sampled	Date Sampled	Matrix	# of Containers	Sample ID	Lab Number	DOH/OHIO by 8015	GRO/Ohio by 8015	BTEX by 8021	VOC by 8260	Metals 5010	Chloride 100.0	Remarks
12:00 PM	1/29/20	S	1	S-10.1	10	X	X	X			X	BGDOC
12:03 PM	1/29/20	S	1	S-11.1	11	X	X	X			X	BGDOC
12:06 PM	1/29/20	S	1	S-12.1	12	X	X	X			X	BGDOC
12:09 PM	1/29/20	S	1	S-13.1	13	X	X	X			X	BGDOC
12:12 PM	1/29/20	S	1	S-14.1	14	X	X	X			X	BGDOC
12:14 PM	1/29/20	S	1	S-15.1	15	X	X	X			X	BGDOC
12:16 PM	1/29/20	S	1	S-16.1	16	X	X	X			X	BGDOC
12:18 PM	1/29/20	S	1	S-17.1	17	X	X	X			X	BGDOC
12:20 PM	1/29/20	S	1	S-18.1	18	X	X	X			X	BGDOC

Additional Instructions:

PO# 205632

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

Relinquished by: (Signature) *Robert Asher* Date: 1/30/2019 Time: 7:51 AM

Relinquished by: (Signature) _____ Date: _____ Time: _____

Received by: (Signature) *Robert Asher* Date: 1/31/20 Time: 9:30

Received by: (Signature) _____ Date: _____ Time: _____

Lab Use Only

Received on ice: ☒ Y ☐ N

T1 _____ T2 _____ T3 _____

AVG Temp °C: 4

Container Type: ☒ glass, ☐ plastic, ☐ amber glass, ☐ VOA

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



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Analytical Laboratory

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labadmin@envirotech-inc.com



Analytical Report

Report Summary

Client: EOG Resources Inc. - Carlsbad

Samples Received: 2/28/2020

Job Number: 19034-0001

Work Order: P002098

Project Name/Location: Mascalero ARL State #2

Report Reviewed By:

A handwritten signature in black ink, appearing to read 'Walter Hinchman', is written over a horizontal line.

Date: 3/2/20

Walter Hinchman, Laboratory Director



Envirotech Inc. certifies the test results meet all requirements of TNI unless footnoted otherwise.
Statement of Data Authenticity: Envirotech, Inc. attests the data reported has not been altered in any way.
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Envirotech, Inc. holds the Utah TNI certification NM009792018-1 for the data reported.
Envirotech, Inc. holds the Texas TNI certification T104704557-19-2 for the data reported.



EOG Resources Inc. - Carlsbad	Project Name:	Mescalero ARI, State #2	
104 South 4th Street	Project Number:	19034-0001	Reported:
Artesia NM, 88210	Project Manager:	Robert Asher	03/02/20 14:20

Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW-1.A.1	P002098-01A	Soil	02/26/20	02/28/20	Glass Jar, 4 oz.
SW-1.B.1	P002098-02A	Soil	02/26/20	02/28/20	Glass Jar, 4 oz.
SW-1.C.1	P002098-03A	Soil	02/26/20	02/28/20	Glass Jar, 4 oz.

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EOG Resources Inc. - Carlsbad
104 South 4th Street
Artesia NM, 88210

Project Name: Mascadero ARL State #2
Project Number: 19034-0001
Project Manager: Robert Asher

Reported:
03/02/20 14:20

SW-1.A.1
P002098-01 (Solid)

Reporting

Analyte	Result	Limit	Unit	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2009035	02/28/20	02/28/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2009035	02/28/20	02/28/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2009035	02/28/20	02/28/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2009035	02/28/20	02/28/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2009035	02/28/20	02/28/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2009035	02/28/20	02/28/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		102 %		50-150	2009035	02/28/20	02/28/20	EPA 8021B	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2009034	02/28/20	02/28/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2009034	02/28/20	02/28/20	EPA 8015D	
Surrogate: n-Nonane		88.9 %		50-200	2009034	02/28/20	02/28/20	EPA 8015D	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2009035	02/28/20	02/28/20	EPA 8015D	
Surrogate: 1-Chloro-1-fluorobenzene-FID		87.4 %		50-150	2009035	02/28/20	02/28/20	EPA 8015D	
Anions by 300.0/9056A									
Chloride	50.2	20.0	mg/kg	1	2009037	02/28/20	02/28/20	EPA 300.0/9056A	

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FOG Resources Inc. - Carlshad	Project Name:	Mescalero ARL State #2	Reported:
104 South 4th Street	Project Number:	19034-0001	03/02/20 14:30
Artesia NM, 88210	Project Manager:	Robert Asher	

SW-1.B.1
P002098-02 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Volatile Organics by EPA 8021

Benzene	ND	0.0250	mg/kg	1	2009033	02/28/20	02/28/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2009033	02/28/20	02/28/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2009033	02/28/20	02/28/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2009033	02/28/20	02/28/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2009033	02/28/20	02/28/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2009033	02/28/20	02/28/20	EPA 8021B	

Surrogate: 4-Bromochlorobenzene-PID 102 % 50-150 2009033 02/28/20 02/28/20 EPA 8021B

Nonhalogenated Organics by 8015 - DRO/ORO

Diesel Range Organics (C10-C28)	174	25.0	mg/kg	1	2009034	02/28/20	02/28/20	EPA 8015D	
Oil Range Organics (C28-C40)	155	50.0	mg/kg	1	2009034	02/28/20	02/28/20	EPA 8015D	

Surrogate: n-Nonane 83.1 % 50-200 2009034 02/28/20 02/28/20 EPA 8015D

Nonhalogenated Organics by 8015 - GRO

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2009035	02/28/20	02/28/20	EPA 8015D	
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Surrogate: 1-Chloro-4-fluorobenzene-PID 87.9 % 50-150 2009035 02/28/20 02/28/20 EPA 8015D

Anions by 300.0/9056A

Chloride	93.0	20.0	mg/kg	1	2009037	02/28/20	02/28/20	EPA 300.0/9056A	
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EOG Resources Inc. - Carlsbad	Project Name:	Mescalero ARI, State #2	Reported:
104 South 4th Street	Project Number:	19034-0001	03/02/20 14:20
Artesia NM, 88210	Project Manager:	Robert Asher	

SW-L.C.1
P002098-03 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2009035	02/28/20	02/28/20	EPA 8021H	
Toluene	ND	0.0250	mg/kg	1	2009035	02/28/20	02/28/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2009035	02/28/20	02/28/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2009035	02/28/20	02/28/20	EPA 8021H	
o-Xylene	ND	0.0250	mg/kg	1	2009035	02/28/20	02/28/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2009035	02/28/20	02/28/20	EPA 8021H	
Surrogate: 4-Bromochlorobenzene-FID		102 %		50-150	2009035	02/28/20	02/28/20	EPA 8021H	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2009034	02/28/20	02/28/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2009034	02/28/20	02/28/20	EPA 8015D	
Surrogate: n-Nonane		96.3 %		50-200	2009034	02/28/20	02/28/20	EPA 8015D	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2009035	02/28/20	02/28/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		86.6 %		50-150	2009035	02/28/20	02/28/20	EPA 8015D	
Anions by 300.0/9056A									
Chloride	89.9	20.0	mg/kg	1	2009037	02/28/20	02/28/20	EPA 300.0/9056A	

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EOG Resources Inc. - Carlsbad
104 South 4th Street
Artesia NM, 88210

Project Name: Mascaleri ARL State #2
Project Number: 19034-0001
Project Manager: Robert Asher

Reported:
03/02/20 14:20

Volatile Organics by EPA 8021 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 2009035 - Purge and Trap EPA 5030A

Blank (2009035-BLK1)

Prepared & Analyzed: 02/28/20 1

Benzene	ND	0.0250	mg/kg							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
p,m-Xylene	ND	0.0500	"							
o-Xylene	ND	0.0250	"							
Total Xylenes	ND	0.0250	"							

Surrogate: 1-Bromochlorobenzene-PID 8.40 * 8.00 103 50-150

LCS (2009035-HS1)

Prepared & Analyzed: 02/28/20 1

Benzene	4.56	0.0250	mg/kg	5.00		99.1	70-130			
Toluene	4.97	0.0250	"	5.00		99.4	70-130			
Ethylbenzene	4.97	0.0250	"	5.00		99.3	70-130			
p,m-Xylene	9.92	0.0500	"	10.0		99.2	70-130			
o-Xylene	4.98	0.0250	"	5.00		99.6	70-130			
Total Xylenes	14.9	0.0250	"	15.0		99.3	0-200			

Surrogate: 1-Bromochlorobenzene-PID 8.51 * 8.00 106 50-150

Matrix Spike (2009035-MS1)

Source: P002081-01

Prepared & Analyzed: 02/28/20 1

Benzene	4.89	0.0250	mg/kg	5.00	ND	97.7	54.3-133			
Toluene	4.89	0.0250	"	5.00	ND	97.9	61.4-130			
Ethylbenzene	4.89	0.0250	"	5.00	ND	97.7	61.4-133			
p,m-Xylene	9.76	0.0500	"	10.0	ND	97.6	63.3-131			
o-Xylene	4.89	0.0250	"	5.00	ND	97.9	63.3-131			
Total Xylenes	14.7	0.0250	"	15.0	ND	97.7	0-200			

Surrogate: 1-Bromochlorobenzene-PID 8.57 * 8.00 107 50-150

Matrix Spike Dup (2009035-MSD1)

Source: P002081-01

Prepared & Analyzed: 02/28/20 1

Benzene	5.01	0.0250	mg/kg	5.00	ND	100	54.3-133	1.42	20	
Toluene	4.98	0.0250	"	5.00	ND	99.6	61.4-130	1.78	20	
Ethylbenzene	4.97	0.0250	"	5.00	ND	99.4	61.4-133	1.71	20	
p,m-Xylene	9.92	0.0500	"	10.0	ND	99.2	63.3-131	1.64	20	
o-Xylene	4.97	0.0250	"	5.00	ND	99.4	63.3-131	1.57	20	
Total Xylenes	14.9	0.0250	"	15.0	ND	99.3	0-200	1.62	200	

Surrogate: 1-Bromochlorobenzene-PID 8.43 * 8.00 103 50-150

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EOG Resources Inc. - Carlsbad	Project Name:	Mescalero ARI, State #2	Reported:
104 South 4th Street	Project Number:	19034-0001	03/02/20 14:20
Artesia NM, 88210	Project Manager:	Robert Asher	

Nonhalogenated Organics by 8015 - DRO/ORO - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
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Batch 2009034 - DRO Extraction EPA 3570

Blank (2009034-BLK1)

Prepared & Analyzed: 02/28/20 1

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40)	ND	50.0	"							
Surrogate: n-Nonane	49.3		"	50.0		99.0	50-200			

LCS (2009034-BS1)

Prepared & Analyzed: 02/28/20 1

Diesel Range Organics (C10-C28)	436	25.0	mg/kg	500		87.1	38-122			
Surrogate: n-Nonane	47.0		"	50.0		95.0	50-200			

Matrix Spike (2009034-MS1)

Source: P002097-01

Prepared: 02/28/20 1 Analyzed: 03/02/20 1

Diesel Range Organics (C10-C28)	528	25.0	mg/kg	500	ND	106	38-122			
Surrogate: n-Nonane	58.0		"	50.0		116	50-200			

Matrix Spike Dup (2009034-MSD1)

Source: P002097-01

Prepared: 02/28/20 1 Analyzed: 03/02/20 1

Diesel Range Organics (C10-C28)	514	25.0	mg/kg	500	ND	103	38-122	2.65	20	
Surrogate: n-Nonane	58.3		"	50.0		117	50-200			

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EOG Resources Inc. - Carlsbad
104 South 4th Street
Artesia NM, 88210

Project Name: Mascalerri ARI, State #2
Project Number: 19034-0001
Project Manager: Robert Asher

Reported:
03/02/20 14:20

Nonhalogenated Organics by 8015 - GRO - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 2009035 - Purge and Trap EPA 5030A

Blank (2009035-BLK1)

Prepared & Analyzed: 02/28/20 1

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.53		*	8.00		91.1	50-150			

LCS (2009035-BL2)

Prepared & Analyzed: 02/28/20 1

Gasoline Range Organics (C6-C10)	47.6	20.0	mg/kg	50.0		95.3	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.18		*	8.00		91.8	50-150			

Matrix Spike (2009035-MS2)

Source: P002081-01

Prepared & Analyzed: 02/28/20 1

Gasoline Range Organics (C6-C10)	45.0	20.0	mg/kg	50.0	ND	91.9	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.61		*	8.00		93.1	50-150			

Matrix Spike Dup (2009035-MSD2)

Source: P002081-01

Prepared & Analyzed: 02/28/20 1

Gasoline Range Organics (C6-C10)	47.0	20.0	mg/kg	50.0	ND	94.1	70-130	2.34	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.31		*	8.00		91.9	50-150			

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EOG Resources Inc. - Carlshad 104 South 4th Street Ariesia NM, 88210	Project Name: Mescalero ARL State #2 Project Number: 19034-0001 Project Manager: Robert Asher	Reported: 03/02/20 14:20
--	---	-----------------------------

Anions by 300.0/9056A - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 2009037 - Anion Extraction EPA 300.0/9056A

Blank (2009037-BLK1)

Prepared & Analyzed: 02/28/20 1

Chloride	ND	20.0	mg/kg							
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LCS (2009037-BS1)

Prepared & Analyzed: 02/28/20 1

Chloride	247	20.0	mg/kg	250		98.9	90-110			
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Matrix Spike (2009037-MS1)

Source: P002097-01

Prepared & Analyzed: 02/28/20 1

Chloride	448	20.0	mg/kg	250	194	101	80-120			
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Matrix Spike Dup (2009037-MSD1)

Source: P002097-01

Prepared & Analyzed: 02/28/20 1

Chloride	441	20.0	mg/kg	250	194	98.9	80-120	1.48	20	
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QC Summary Report

Comment:

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

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EOG Resources Inc. - Carlshad	Project Name:	Mescalero ARL State #2	
104 South 4th Street	Project Number:	19034-0001	Reported:
Artesia NM, 88210	Project Manager:	Robert Asher	03/02/20 14:20

Notes and Definitions

- ND: Analyte NOT DETECTED at or above the reporting limit
- NR: Not Reported
- RPD: Relative Percent Difference
- ** Methods marked with ** are non-accredited methods.
- Soil data is reported on an "as received" weight basis, unless reported otherwise.

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envirotech
Analytical Laboratory

5796 US Highway 64, Farmington, NM 87401
24 hour Emergency Response Phone (800) 562-1879

PH (505) 632-0615 FX (505) 632-1965

abdominal@emvirotechinc.com
emvirotechinc.com

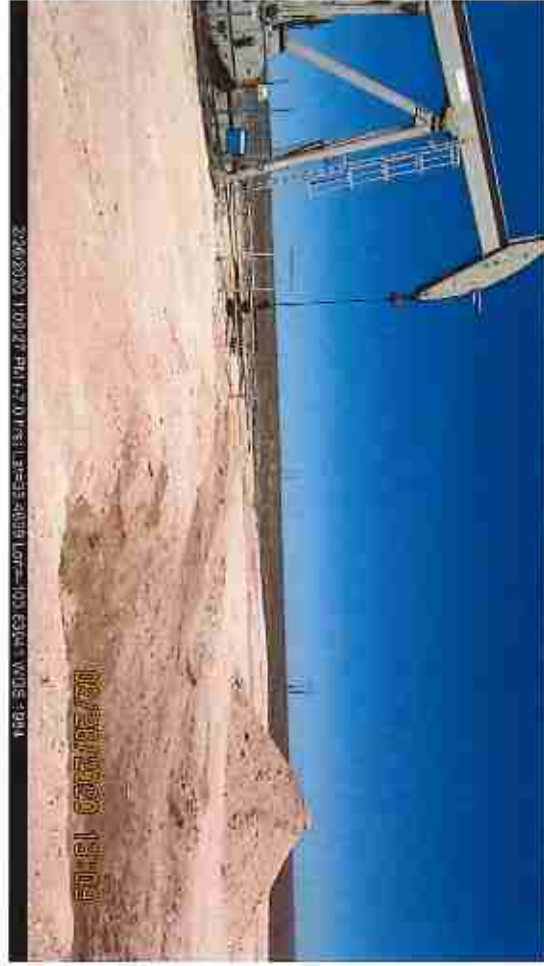
Appendix 7

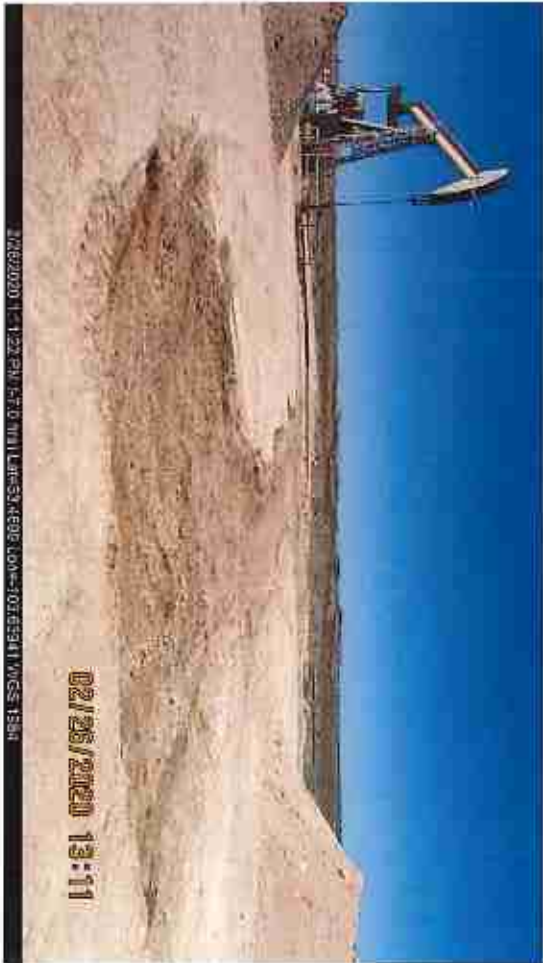
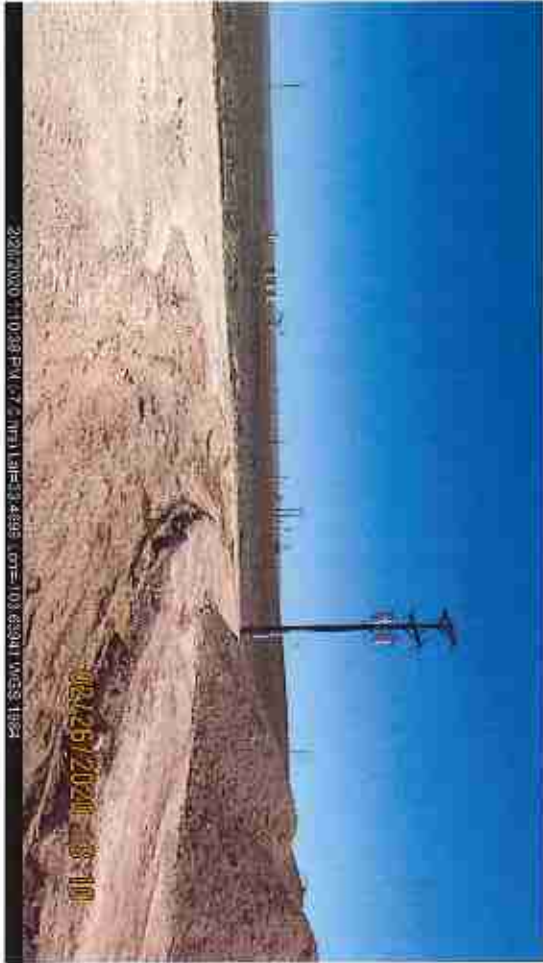
Photos













Appendix 8

Form C-141

Release Notification

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 OCC District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party EOG Resources, Inc.	OGRID 7377
Contact Name Robert Asher	Contact Telephone 575-748-4217
Contact email bob_asher@eogresources.com	Incident II (assigned by OCD)
Contact mailing address 104 S. 4 th Street, Artesia, New Mexico	

Location of Release Source

Latitude 33.46968 Longitude -103.63948
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Mescalero ARL State #2	Site Type: Well Pad
Date Release: Discovered 12/6/2019	API# 30-025-37039

Unit Letter	Section	Township	Range	County
O	2	10S	32E	Lea

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) 5	Volume Recovered (bbls) 3
	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;

Pressure gauge on wellhead for tubing failed causing release of produced water on location.

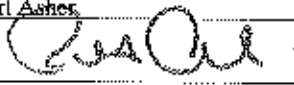
State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Initial Response

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

☒ The source of the release has been stopped. ☒ The impacted area has been secured to protect human health and the environment. ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. ☒ All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have not been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation. I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>Robert Asher</u> Signature:  email: <u>bob_asher@eogresources.com</u>	Title: <u>Environmental Supervisor</u> Date: <u>2/4/2020</u> Telephone: <u>575-748-4217</u>
OCD Only Received by: _____ Date: _____	

Appendix 9

Form C-141

Site Assessment/Characterization/Remediation Plan

State of New Mexico
Oil Conservation Division

Incident ID	NRH2003548427
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?	53' (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas not on an exploration, development, production, or storage site?	☐ Yes ☒ No

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	NRH2003548427
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: Robert Asher

Title: Environmental Supervisor

Signature: 

Date: 3/3/2020

email: bob_asher@cogresources.com

Telephone: 575-748-4217

OCD Only

Received by: Cristina Eads

Date: 04/08/2020

State of New Mexico
Oil Conservation Division

Incident ID	NRH2003548427
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: Robert Asher

Title: Environmental Supervisor

Signature: 

Date: 3/3/2020

email: bob_asher@cogresources.com

Telephone: 575-748-4217

OCD Only

Received by: Cristina Eads

Date: 04/08/2020

☐ Approved

☒ Approved with Attached Conditions of Approval

☐ Denied

☐ Deferral Approved

Signature: 

Date: 04/08/2020