



Pima Environmental Services, LLC
1601 N. Turner Ste 500
Hobbs, NM 88240
575-964-7740

June 4, 2021

NMOCD District 2
Mr. Mike Bratcher
811 S. First Street
Artesia, NM 88210

Bureau of Land Management
Mr. Jim Amos
620 East Green Street
Carlsbad, NM 88220

**Re: Site Remediation and Closure Report
Mizar 11 Federal Com #1H
API No. 30-015-41964
GPS: Latitude 32.68153 Longitude -103.8485107
UL "D", Sec. 11, T19S, R31E
Eddy County, NM
NMOCD Ref. No. NAPP2035734383
Pima Project No.: 1-63**

Dear Mr. Bratcher and Mr. Amos,

Pima Environmental Services, LLC (Pima) has been contracted by Devon Energy Production Company (Devon) to perform a spill assessment and remediation activities for a crude oil release that occurred at the Mizar 11 Federal Com #1H (Mizar). The initial C-141 was submitted on December 22nd, 2020 (Appendix C). This incident was assigned Incident ID NAPP2035734383, by the New Mexico Oil Conservation Division (NMOCD).

Site Characterization

The Mizar is located approximately twelve (12) miles southeast of Loco Hills, NM. This spill site is in Unit D, Section 11, Township 19S, Range 31E, Latitude 32.68153, Longitude -103.8485107, in Eddy County, NM. Figure 1 references a location map.

Per the New Mexico Bureau of Geology and Mineral Resources, the geology is in the Quaternary Formation-Piedmont alluvial deposits (Holocene to lower Pleistocene). Includes deposits of higher gradient tributaries bordering major stream valleys, alluvial veneers of the piedmont slope, and alluvial fans. May locally include uppermost Pliocene deposits. According to the United States Department of Agriculture Natural Resources Conservation Service soil survey, the soil in this area comprises Simona gravelly fine sandy loam, 0 to 3 percent slopes (Appendix B). The drainage courses in this area are well-drained. There is a low potential for karst geology in the area of the Mizar (Figure 3).

According to the New Mexico Office of the State Engineer, depth to the nearest groundwater in this area is 102 feet below grade surface (BGS). According to the United States Geological Survey (USGS), the nearest groundwater is between greater than 100 feet BGS. The closest waterway and is a playa located approximately 5.86 miles to the west of this location. See Appendix A for referenced water surveys.

Table 1 NMAC and Closure Criteria 19.15.29					
Depth to Groundwater (Appendix A)	Constituent & Limits				
	Chlorides	Total TPH	GRO+DRO	BTEX	Benzene
102'	20,000 mg/kg	2,500 mg/kg	1,000 mg/kg	50 mg/kg	10 mg/kg
If the release occurred within any of the following areas, the responsible party would treat the release as if the groundwater was less than 50 feet per Rule 19.15.29					
Water Issues				Yes	No
Within 300 feet of any continuously flowing watercourse or any other significant watercourse					X
Within 200 feet of any lakebed, sinkhole, or playa lake (measures from the ordinary high-water mark)					X
Within 300 feet from an occupied permanent residence, school, hospital, institution, or church					X
Within 500 feet of a spring or a private, domestic freshwater well used by less than five households for domestic or stock water purposes					X
Within 1000 feet of any freshwater well or spring					X
Within incorporated municipal boundaries or within a defined municipal freshwater well field					X
Within 300 feet of a wetlands					X
Within the area overlying a subsurface mine					X
Within an unstable area (Karst)					X
Within a 100-year floodplain					X

Reference Figure 2 for a Topographic Map.

Release Information

NAPP2035734383: On December 18th, 2020, the packing in the stuffing box failed, which caused fluid to release onto the ground around the wellheads. The released fluids were calculated to be approximately 9.35 barrels (bbls) of crude oil. Approximately 9 bbls of total fluid was recovered via vacuum truck.

Site Assessment and Soil Sampling Results

On December 22nd, 2020, Pima Environmental conducted a site assessment and obtained soil samples to get a more in-depth picture of the vertical and horizontal extent of the contamination. Laboratory results of this sampling event can be found in the following data table.

12-22-20 Soil Sample Results

NMOCD Table 1 Closure Criteria 19.15.29 NMAC (Depth to Groundwater is <50')								
Devon Energy - Mizar 11 Fed Com #1H								
Date 12-22-20		NM Approved Laboratory Results						
Sample ID	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Cl mg/kg
S-1	0-6	ND	ND	ND	10	ND	10	1400
S-2	0-6	ND	ND	ND	14	ND	14	5900
S-3	0-6	ND	ND	ND	ND	ND	ND	2800
S-4	0-6	ND	ND	ND	ND	ND	ND	2500
	1'	ND	ND	ND	ND	ND	ND	1100
S-5	0-6	ND	ND	ND	14	ND	14	1300
S-6	0-6	ND	ND	9.8	3300	2200	5509.8	5600
S-7	0-6	ND	ND	ND	47	63	110	1500
S-8	0-6	ND	ND	ND	2000	1800	3800	6900
S-9	0-6	ND	ND	ND	28	60	88	3800
S-10	0-6	ND	ND	ND	94	280	374	1800
S-11	0-6	ND	ND	ND	68	110	178	5700
S-12	0-6	ND	ND	ND	ND	ND	ND	190
	1'	ND	ND	ND	ND	ND	ND	87
BG-1	0	ND	ND	ND	ND	ND	ND	150
BG-2	0	ND	ND	ND	ND	ND	ND	ND
BG-3	0	ND	ND	ND	ND	ND	ND	ND

ND- Analyte Not Detected

Remediation Activities

On March 2nd, 2021, Pima mobilized personnel and equipment to conduct remedial activities. We excavated the contaminated material, laid it out in a staging area on the pad, then tilled and treated with a bio-remediation chemical solution. This process was repeated twice more, for a total of 3 times, to make sure all the contaminated soil could be neutralized with this treatment. Composite samples were taken from the excavation to ensure all the contamination was removed and treated. The results of this sampling event can be seen in the following table. Photographic documentation can be found in Appendix D.

3-2-21 Soil Sample Results

NMOCD Table 1 Closure Criteria 19.15.29 NMAC (Depth to Groundwater is <50')								
DEVON ENERGY MIZAR 11 FED COM 1H								
Sample Date 3-2-2021		NM Approved Laboratory Results						
Sample ID	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Cl mg/kg
S1-B	1'	ND	ND	ND	10	ND	10	496
S2-B	1'	ND	ND	ND	14	ND	14	160
S3-B	1'	ND	ND	ND	ND	ND	ND	784
S4-B	1'	ND	ND	ND	ND	ND	ND	400
S5-B	1'	ND	ND	ND	14	ND	14	176
S6-B	1'	ND	ND	ND	ND	ND	ND	432
S7-B	1'	ND	ND	ND	ND	ND	ND	1650
S8-B	1'	ND	ND	ND	ND	ND	ND	128
S9-B	1'	ND	ND	ND	28	60	88	368
S10-B	1'	ND	ND	ND	ND	ND	ND	288
S11-B	1'	ND	ND	ND	ND	ND	ND	144
S12-B	1'	ND	ND	ND	ND	ND	ND	352
S13-B	1'	ND	ND	ND	ND	ND	ND	304
S14-B	1'	ND	ND	ND	ND	ND	ND	304
S15-B	1'	ND	ND	ND	ND	ND	ND	144

ND – Analyte Not Detected

On March 3rd, 2021, Pima returned to the site to complete the remediation process. The areas in the vicinity of S3-B and S7-B were excavated further, and the contaminated soil was tilled and treated 3 times with a bio-remediation chemical solution. Samples were taken from the excavated areas to ensure the contamination had been removed. The laboratory results of this sampling event can be found in the following data table.

3-3-21 Soil Sample Results

NMOCD Table 1 Closure Criteria 19.15.29 NMAC (Depth to Groundwater is <50')								
DEVON ENERGY MIZAR 11 FED COM 1H								
Sample Date 3-3-2021		NM Approved Laboratory Results						
Sample ID	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Cl mg/kg
S-3	2	-	-	-	-	-	-	ND
S-7	3	-	-	-	-	-	-	32

ND- Analyte Not Detected

On May 21st, 2021, after sending a 48-hour notification, Pima returned to the site to collect confirmation samples of the treated areas. The confirmation lab results can be found in the following table. Figure 5 references a confirmation site map.

5-21-21 Confirmation Soil Sample Results

NMOCD Table 1 Closure Criteria 19.15.29 NMAC (Depth to Groundwater is 50')								
DEVON ENERGY - Mizar 11 Fed Com #1H								
Date 5/21/21		NM Approved Laboratory Results						
Sample ID	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Cl mg/kg
CS-1	6"	ND	ND	ND	ND	ND	ND	5.33
CS-2	6"	ND	ND	ND	ND	ND	ND	5.49
CS-3	6"	ND	ND	ND	ND	ND	ND	5.54
CS-4	6"	ND	ND	ND	ND	ND	ND	13.9
CS-5	2'	ND	ND	ND	ND	ND	ND	5.53
CS-6	2'	ND	ND	ND	ND	ND	ND	8.33
CS-7	2'	ND	ND	ND	ND	ND	ND	ND
CS-8	6"	ND	ND	ND	ND	ND	ND	24.6
CS-9	6"	ND	ND	ND	ND	ND	ND	ND
CS-10	6"	ND	ND	ND	ND	ND	ND	6.62
CS-11	6"	ND	ND	ND	ND	ND	ND	38
CS-12	6"	ND	ND	ND	ND	ND	ND	7.65
CS-13	6"	ND	ND	ND	ND	ND	ND	17.3
CS-14	6"	ND	ND	ND	ND	ND	ND	5.05

ND – Analyte Not Detected

Complete Laboratory Reports can be found in Appendix E.

Closure Request

After careful review, Pima requests that this incident, NAPP2035734383, be closed. Devon has complied with the applicable closure requirements set forth in rule 19.15.19.12 NMAC.

Should you have any questions or need additional information, please feel free to contact Tom Bynum at 575-964-7740 or tom@pimaoil.com.

Respectfully,



Tom Bynum
Environmental Project Manager
Pima Environmental Services, LLC

Attachments

Figures:

- 1- Location Map
- 2- Topo Map
- 3- Karst Map
- 4- Site Map
- 5- Confirmation Site Map

Appendices:

- Appendix A - Referenced Water Surveys
- Appendix B - Soil Survey and Geological Data
- Appendix C - C-141's
- Appendix D - Photographic Documentation
- Appendix E - Laboratory Reports



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Figures:

1-Location Map

2-Topo Map

3-Karst Map

4-Site Map

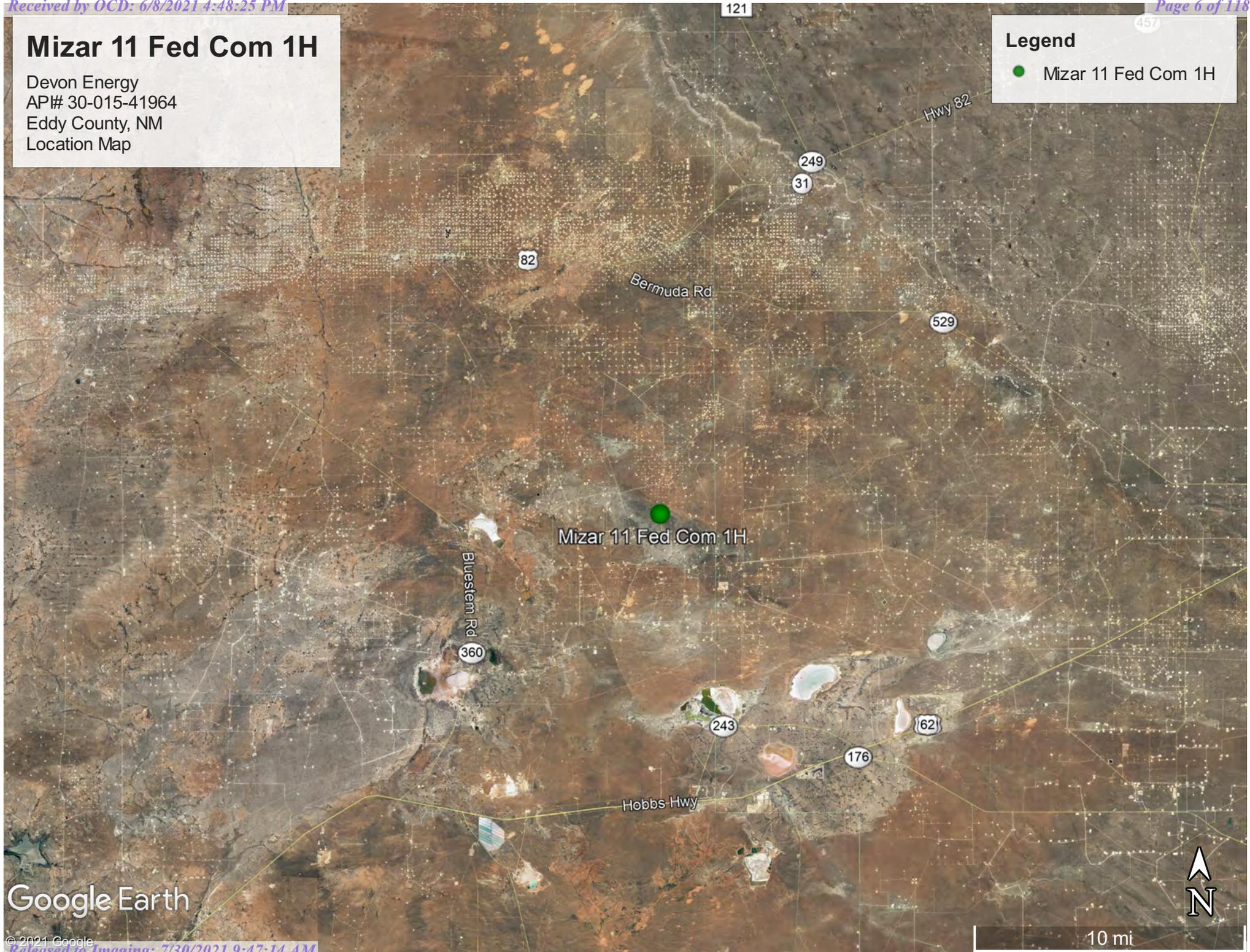
5-Confirmation Site Map

Mizar 11 Fed Com 1H

Devon Energy
API# 30-015-41964
Eddy County, NM
Location Map

Legend

- Mizar 11 Fed Com 1H



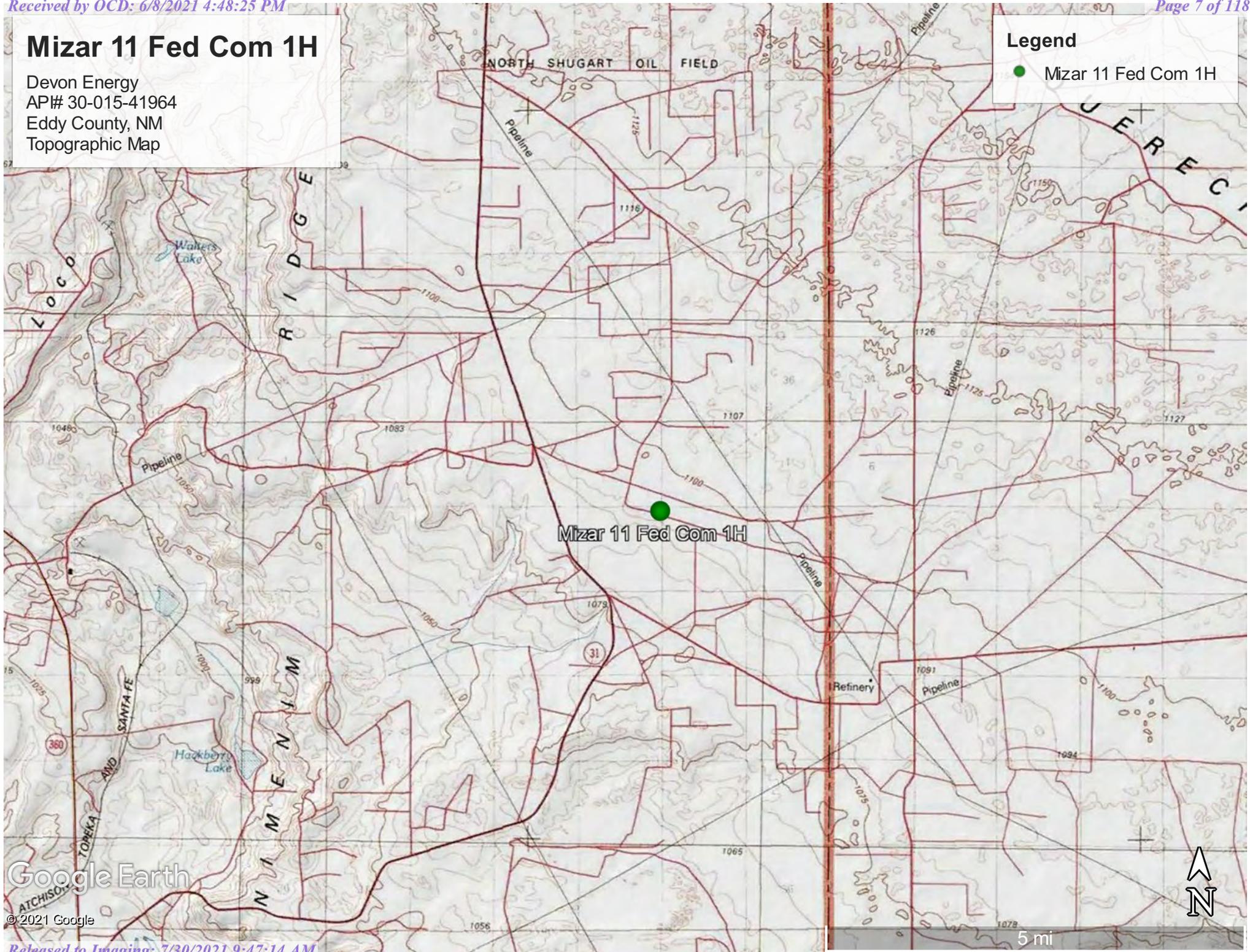
Google Earth

Mizar 11 Fed Com 1H

Devon Energy
API# 30-015-41964
Eddy County, NM
Topographic Map

Legend

- Mizar 11 Fed Com 1H



Google Earth

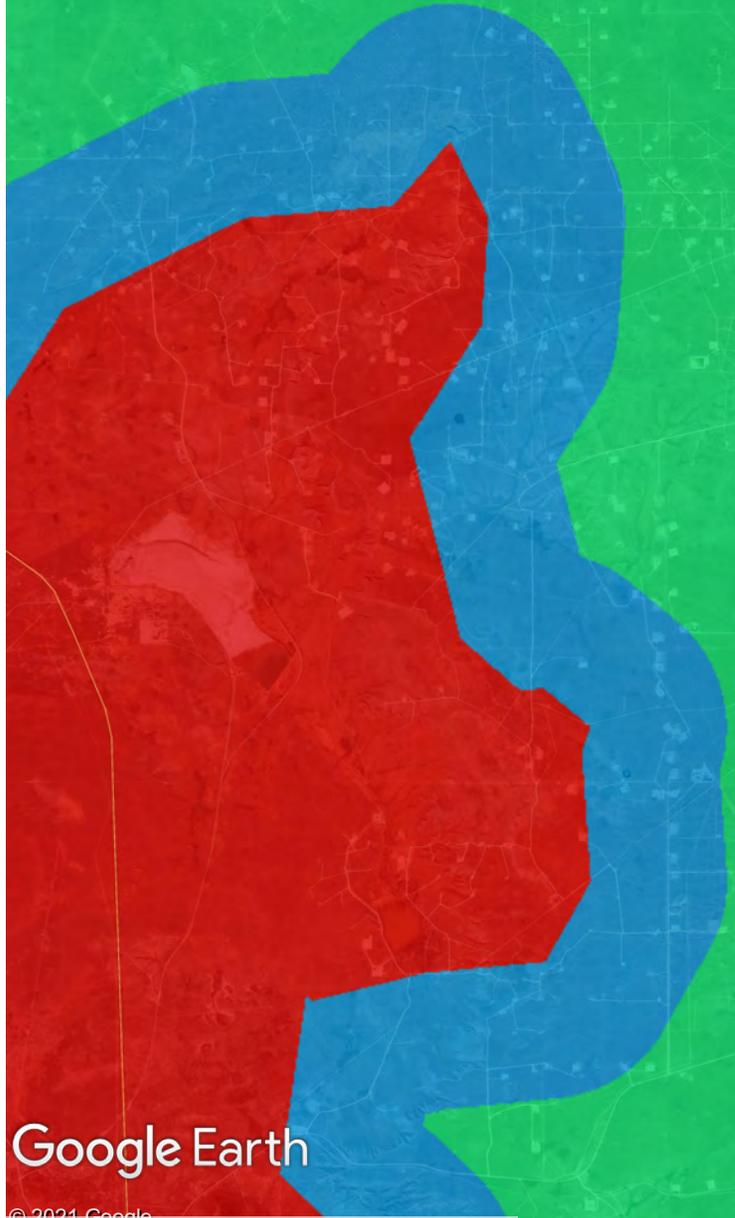
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Mizar 11 Fed Com 1H

Devon Energy
API# 30-015-41964
Eddy County, NM
Karst Map

Legend

-  High Karst
-  Low Karst
-  Medium Karst



Mizar 11 Fed Com 1H

Google Earth

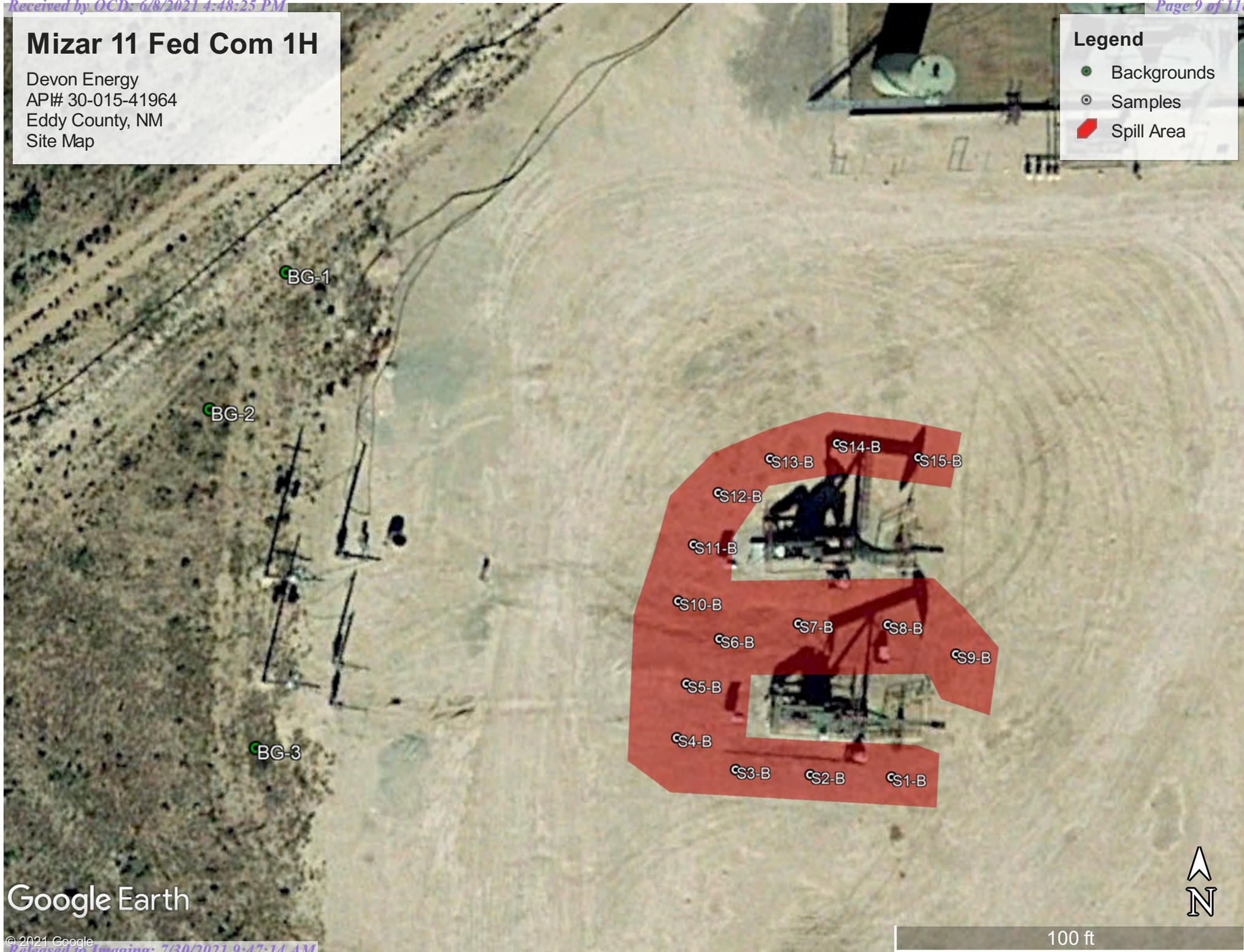


Mizar 11 Fed Com 1H

Devon Energy
API# 30-015-41964
Eddy County, NM
Site Map

Legend

- Backgrounds
- Samples
- Spill Area



Google Earth



Mizar 11 Fed Com 1H

Devon Energy
API# 30-015-41964
Eddy County, NM
Confirmation Site Map

Legend

- Confirmation Samples
- Spill Area



Google Earth





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Appendix A

Water Surveys:

OSE

USGS

Surface Water Map

Active Water Wells



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

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

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Number	POD Code	Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
CP 00849 POD1	CP	LE	3	1	3	35	18S	31E	608012	3618757*	2190	300			
CP 00829 POD1	CP	LE	2	4	16	19S	31E	606165	3614009*	3123	120				
CP 01554 POD1	CP	LE	2	2	1	22	19S	31E	607166	3613354	3308	400			
CP 01554 POD2	CP	LE	2	2	1	22	19S	31E	607165	3613322	3340	400			
CP 00563 POD1	CP	LE	1	1	2	19	19S	32E	612118	3613376*	5244	300			
CP 00640 POD1	CP	LE	2	2	19	19S	32E	612621	3613280*	5706	260	102	158		
CP 00642 POD1	CP	ED	2	2	25	19S	31E	611025	3611657*	5790	250				

Average Depth to Water: **102 feet**
 Minimum Depth: **102 feet**
 Maximum Depth: **102 feet**

Record Count: 7

UTMNAD83 Radius Search (in meters):

Easting (X): 607956

Northing (Y): 3616567.44

Radius: 6000

*UTM location was derived from PLSS - see Help

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

2/15/21 3:27 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER



USGS Home
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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

* IMPORTANT: [Next Generation Station Page](#)

Search Results -- 1 sites found

site_no list =

- 323810103511401

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 323810103511401 19S.31E.27.214121

Available data for this site

Groundwater: Field measurements

GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°38'10", Longitude 103°51'14" NAD27

Land-surface elevation 3,480 feet above NGVD29

The depth of the well is 210.00 feet below land surface.

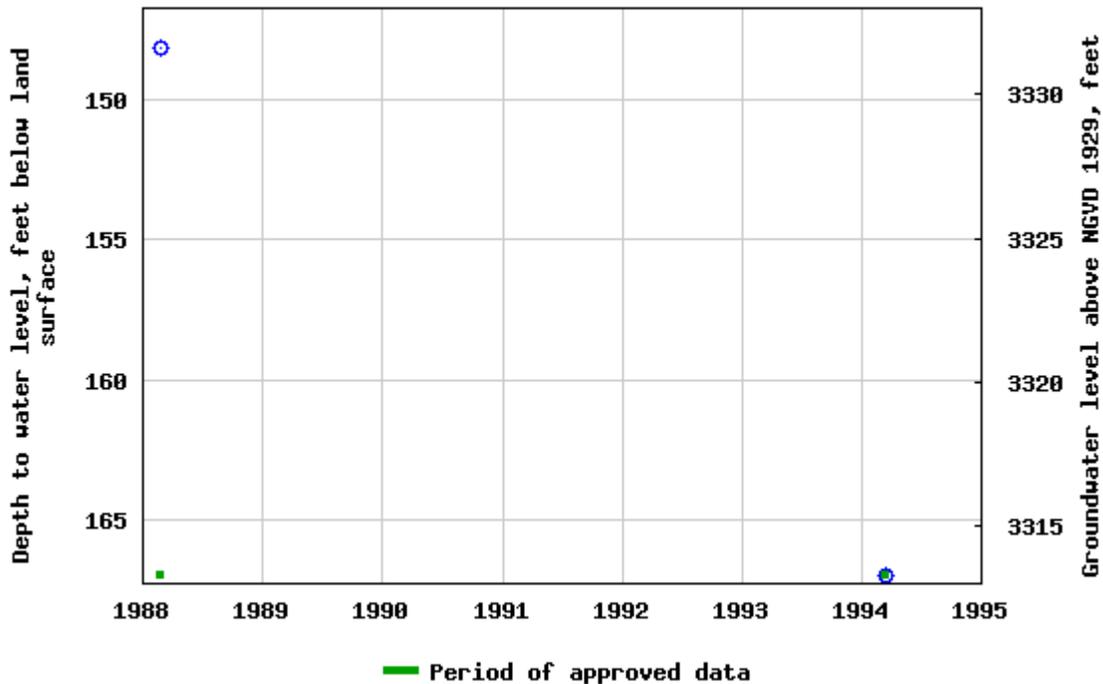
This well is completed in the Other aquifers (N9999OTHER) national aquifer.

This well is completed in the Santa Rosa Sandstone (231SNRS) local aquifer.

Output formats

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

USGS 323810103511401 19S.31E.27.214121



Breaks in the plot represent a gap of at least one year between field measurements.
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URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>



Page Contact Information: [USGS Water Data Support Team](#)

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0.68 0.6 nadww02



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National Water Information System: Web Interface

USGS Water Resources

Data Category:

Groundwater

Geographic Area:

United States

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Search Results -- 1 sites found

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- 324046103464101

Minimum number of levels = 1

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USGS 324046103464101 19S.32E.08.2

Available data for this site

Groundwater: Field measurements

GO

Lea County, New Mexico

Hydrologic Unit Code 12080003

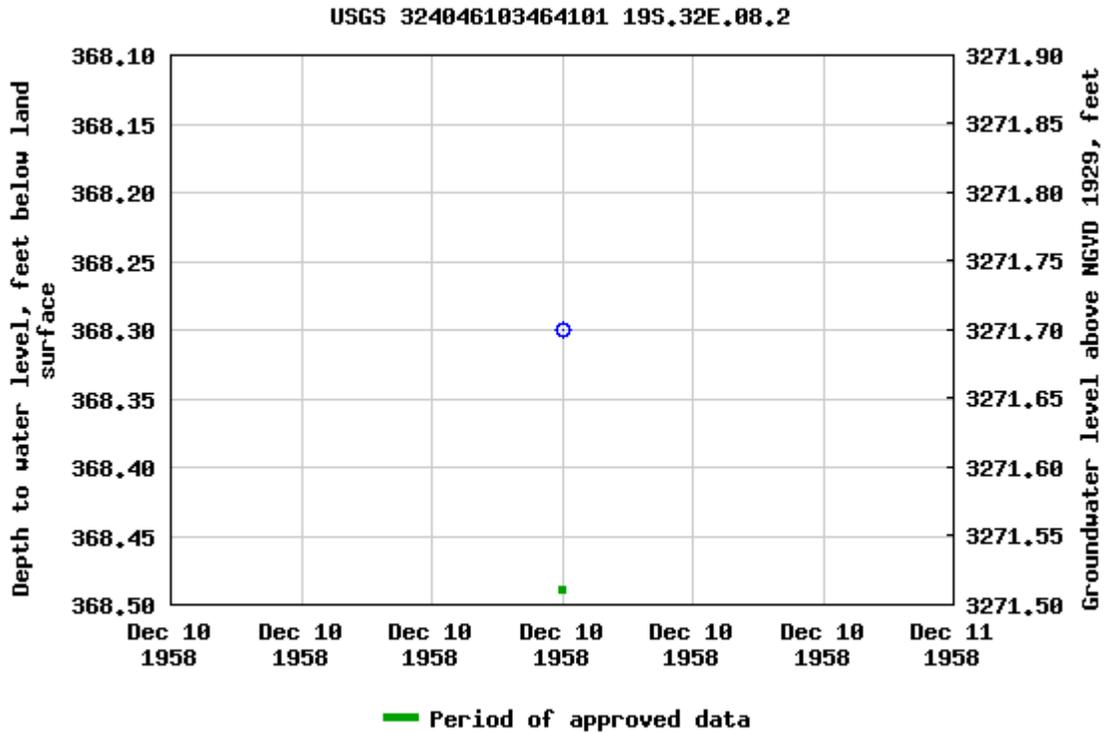
Latitude 32°40'42", Longitude 103°47'00" NAD27

Land-surface elevation 3,640 feet above NGVD29

This well is completed in the Other aquifers (N9999OTHER) national 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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0.61 0.52 nadww02



USGS Home
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National Water Information System: Web Interface

USGS Water Resources

Data Category:

Groundwater

Geographic Area:

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Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 324159103503801 18S.31E.35.31324

Available data for this site

Groundwater: Field measurements

GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°42'07.3", Longitude 103°50'50.1" NAD83

Land-surface elevation 3,630 feet above NAVD88

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

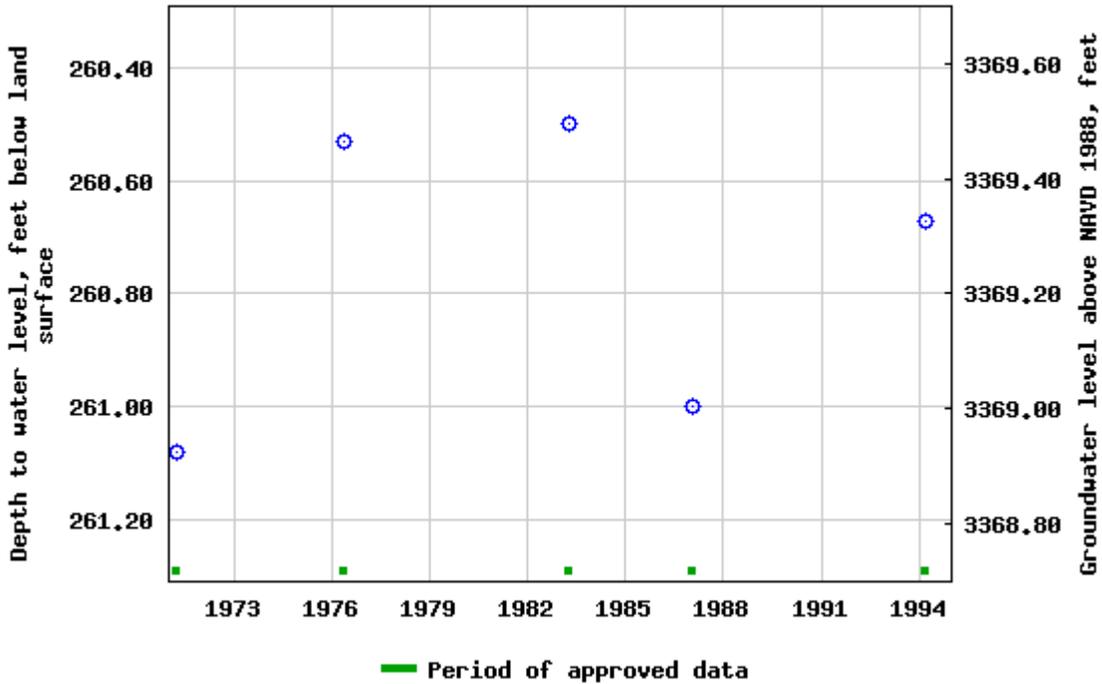
This well is completed in the Other aquifers (N9999OTHER) national aquifer.

This well is completed in the Chinle Formation (231CHNL) local aquifer.

Output formats

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

USGS 324159103503801 18S.31E.35.31324



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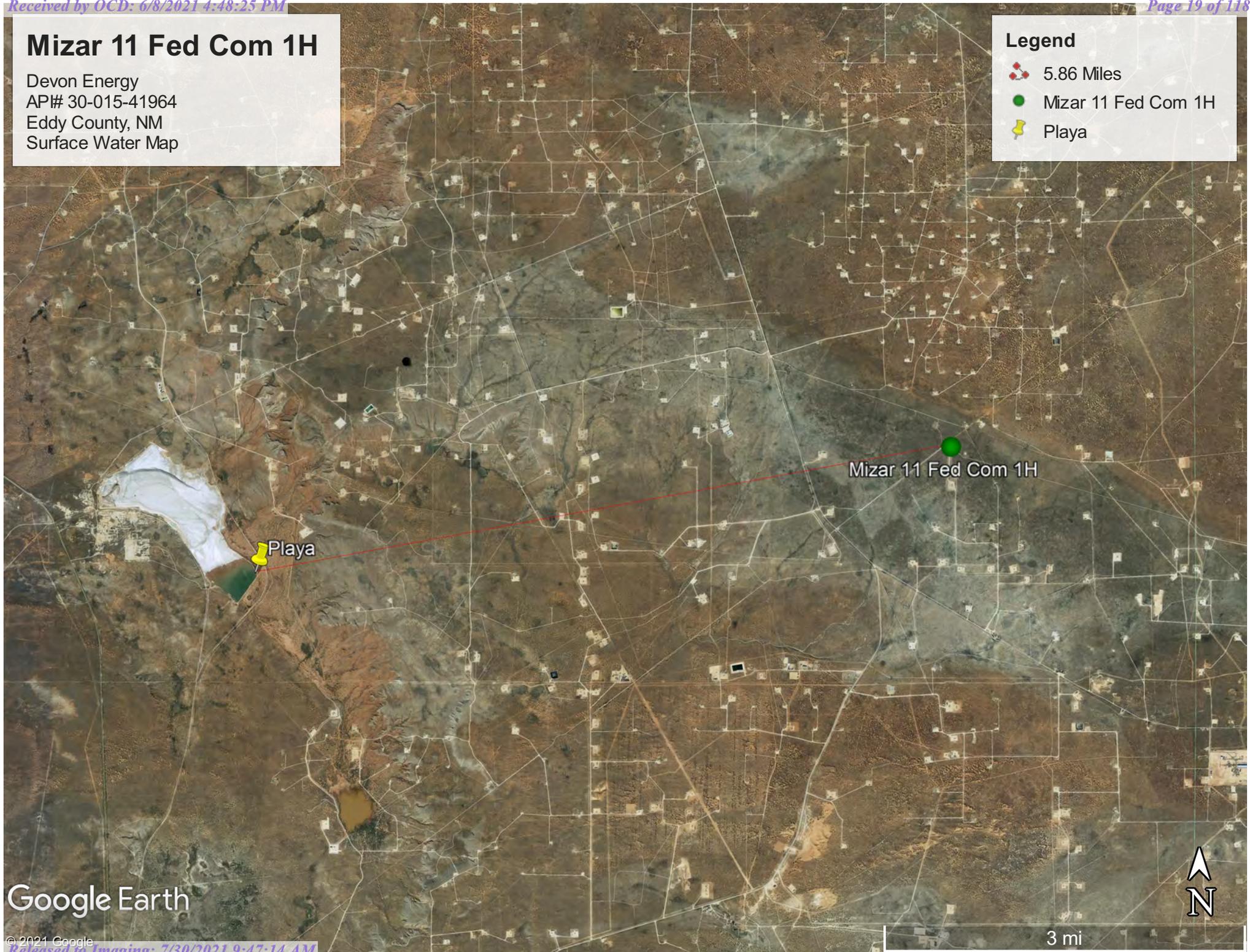
0.71 0.63 nadww01

Mizar 11 Fed Com 1H

Devon Energy
API# 30-015-41964
Eddy County, NM
Surface Water Map

Legend

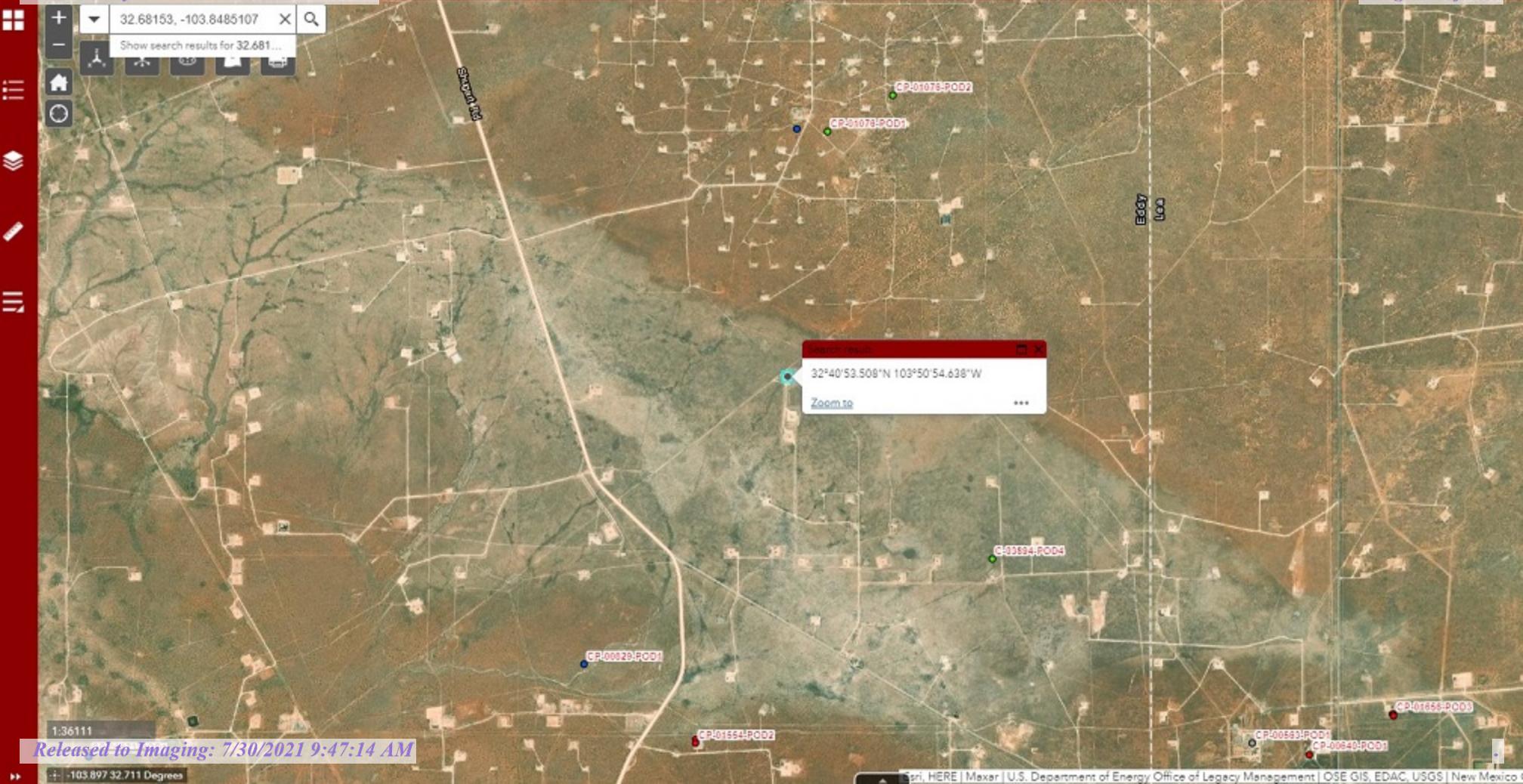
-  5.86 Miles
-  Mizar 11 Fed Com 1H
-  Playa



Google Earth

3 mi





32.68153, -103.8485107

Show search results for 32.681...

32°40'53.508"N 103°50'54.638"W
Zoom to

Released to Imaging: 7/30/2021 9:47:14 AM

-103.897 32.711 Degrees



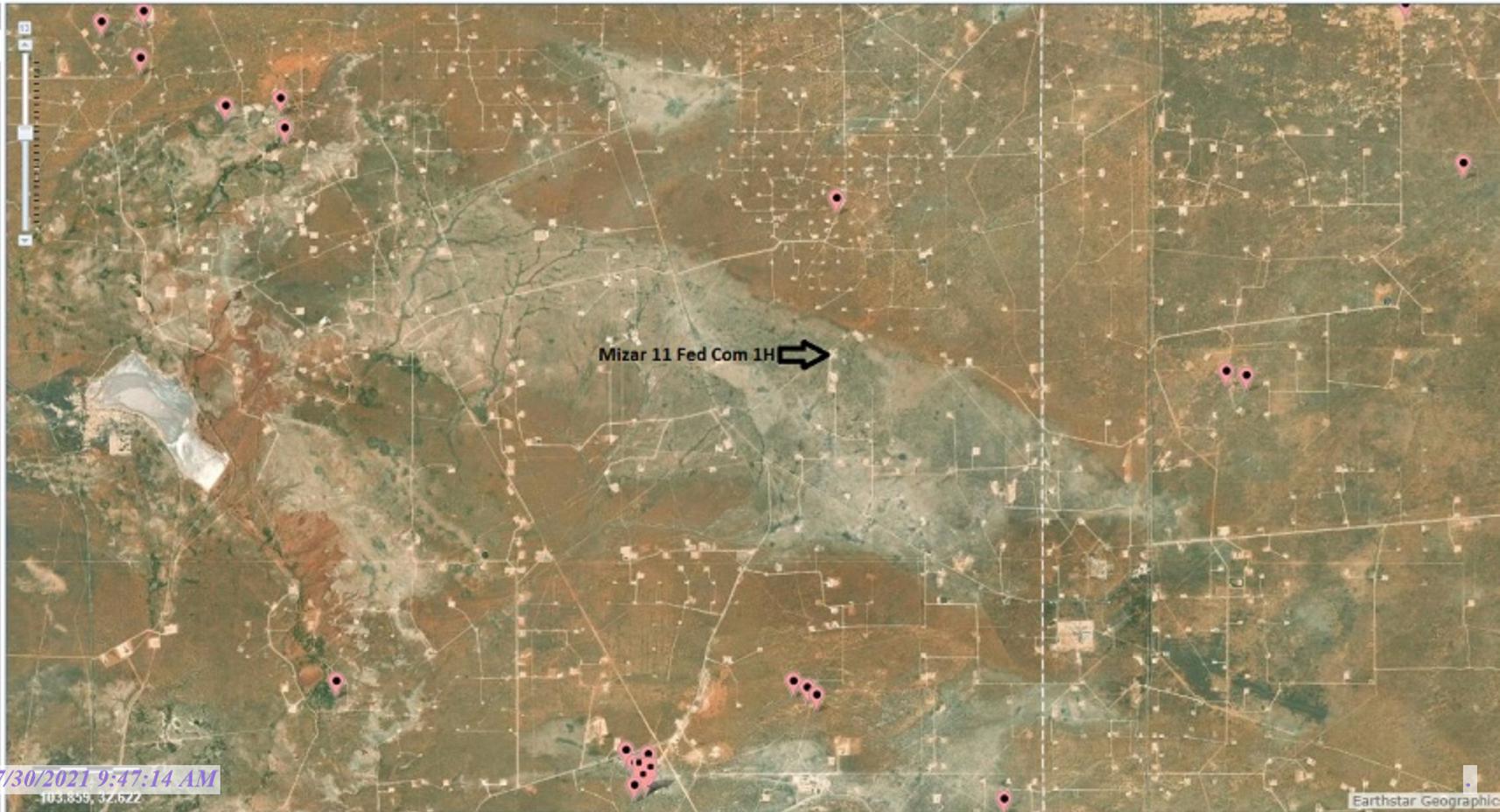
National Water Information System: Mapper

Sites Map

Map Layers

Base Map

- Imagery
- Imagery with Labels
- Streets
- Topographic
- Dark Gray Canvas
- Canvas





Pima Environmental Services

Appendix B

Soil Survey & Geological Data

FEMA Flood Map

Map Unit Description: Simona gravelly fine sandy loam, 0 to 3 percent slopes---Eddy Area,
New Mexico

Eddy Area, New Mexico

SG—Simona gravelly fine sandy loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 1w5w
Elevation: 2,750 to 5,000 feet
Mean annual precipitation: 8 to 16 inches
Mean annual air temperature: 57 to 70 degrees F
Frost-free period: 180 to 230 days
Farmland classification: Not prime farmland

Map Unit Composition

Simona and similar soils: 95 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Simona

Setting

Landform: Alluvial fans, plains
Landform position (three-dimensional): Rise
Down-slope shape: Linear, convex
Across-slope shape: Linear
Parent material: Mixed alluvium and/or eolian sands

Typical profile

H1 - 0 to 19 inches: gravelly fine sandy loam
H2 - 19 to 23 inches: indurated

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 7 to 20 inches to petrocalcic
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water capacity: Very low (about 2.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Ecological site: R042XC002NM - Shallow Sandy

Map Unit Description: Simona gravelly fine sandy loam, 0 to 3 percent slopes---Eddy Area,
New Mexico

Hydric soil rating: No

Minor Components

Simona

Percent of map unit: 4 percent

Ecological site: R042XC002NM - Shallow Sandy

Hydric soil rating: No

Playa

Percent of map unit: 1 percent

Landform: Playas

Landform position (three-dimensional): Talf

Down-slope shape: Concave, convex

Across-slope shape: Concave, linear

Ecological site: R042XC017NM - Bottomland

Hydric soil rating: Yes

Data Source Information

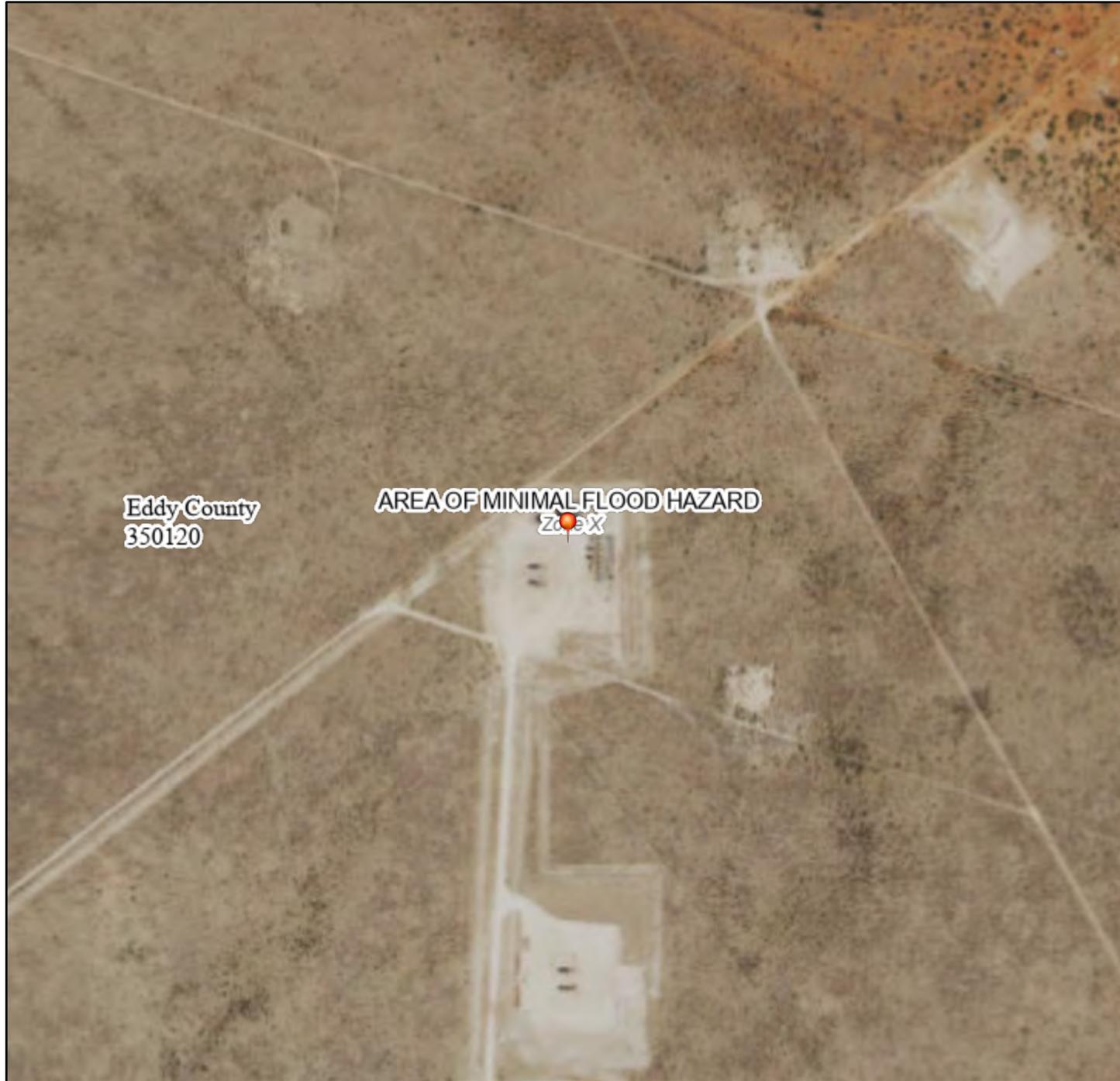
Soil Survey Area: Eddy Area, New Mexico

Survey Area Data: Version 16, Jun 8, 2020

National Flood Hazard Layer FIRMette



103°51'12"W 32°41'10"N



Legend

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

- | | | |
|------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SPECIAL FLOOD HAZARD AREAS | | Without Base Flood Elevation (BFE)
<i>Zone A, V, A99</i> |
| | | With BFE or Depth <i>Zone AE, AO, AH, VE, AR</i> |
| | | Regulatory Floodway |
| OTHER AREAS OF FLOOD HAZARD | | 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile <i>Zone X</i> |
| | | Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i> |
| | | Area with Reduced Flood Risk due to Levee. See Notes. <i>Zone X</i> |
| | | Area with Flood Risk due to Levee <i>Zone D</i> |
| OTHER AREAS | | NO SCREEN Area of Minimal Flood Hazard <i>Zone X</i> |
| | | Effective LOMRs |
| GENERAL STRUCTURES | | Area of Undetermined Flood Hazard <i>Zone D</i> |
| | | Channel, Culvert, or Storm Sewer |
| | | Levee, Dike, or Floodwall |
| OTHER FEATURES | | 20.2 Cross Sections with 1% Annual Chance Water Surface Elevation |
| | | 17.5 Coastal Transect |
| | | Base Flood Elevation Line (BFE) |
| | | Limit of Study |
| | | Jurisdiction Boundary |
| | | Coastal Transect Baseline |
| MAP PANELS | | Digital Data Available |
| | | No Digital Data Available |
| | | Unmapped |
- The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.





Pima Environmental Services

Appendix C

C-141's:

Initial

Final

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

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

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

Incident ID	NAPP2035734383
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Devon Energy Production	OGRID 6137
Contact Name Wesley Mathews	Contact Telephone 575-748-0176
Contact email Wesley.Mathews@dvn.com	Incident #
Contact mailing address 6488 Seven Rivers Highway	

Location of Release Source

Latitude 32.68153 Longitude -103.8485107
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Mizer 11 Fed Com #1H	Site Type Oil Well
Date Release Discovered 12-18-20	API# 30-015-41964

Unit Letter	Section	Township	Range	County
D	11	19S	31E	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)

<input checked="" type="checkbox"/> Crude Oil	Volume Released (9.35 bbls)	Volume Recovered (9 bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Was this a major release as defined by 19.15.29.7(A) NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> 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: Chris Jones Title: Environmental Professional Signature:  Date: 12-22-20 email: chris@pimaoil.com Telephone: 575-964-7740
<u>OCD Only</u> Received by: _____ Date: _____

Incident ID	NAPP2035734383
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?	>100 (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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

Page 4

Incident ID	NAPP2035734383
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: Wes Mathews Title: EHS Professional

Signature: *Wesley Mathews* Date: 6/4/2021

email: wesley.mathews@dvn.com Telephone: 575-513-8608

OCD Only

Received by: _____ Date: _____

Incident ID	NAPP2035734383
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: Wes Mathews Title: EHS Professional

Signature: *Wesley Mathews* Date: 6/4/2021

email: wesley.mathews@dvn.com Telephone: 575-513-8608

OCD Only

Received by: _____ Date: _____

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: _____ Date: _____

Printed Name: _____ Title: _____



Pima Environmental Services

Appendix D

Photographic Documentation



SITE PHOTOGRAPHS















Pima Environmental Services

Appendix E

Laboratory Reports

Analytical Report

Lab Order **2012B90**

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S-1 0-6"

Project: Mizar 11 Fed Com 1H

Collection Date: 12/22/2020

Lab ID: 2012B90-001

Matrix: SOIL

Received Date: 12/24/2020 9:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: BRM
Diesel Range Organics (DRO)	10	9.8		mg/Kg	1	12/29/2020 11:06:57 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/29/2020 11:06:57 AM
Surr: DNOP	60.5	30.4-154		%Rec	1	12/29/2020 11:06:57 AM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	1400	60		mg/Kg	20	12/30/2020 3:30:14 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	12/30/2020 1:45:51 AM
Toluene	ND	0.049		mg/Kg	1	12/30/2020 1:45:51 AM
Ethylbenzene	ND	0.049		mg/Kg	1	12/30/2020 1:45:51 AM
Xylenes, Total	ND	0.099		mg/Kg	1	12/30/2020 1:45:51 AM
Surr: 1,2-Dichloroethane-d4	97.2	70-130		%Rec	1	12/30/2020 1:45:51 AM
Surr: 4-Bromofluorobenzene	97.0	70-130		%Rec	1	12/30/2020 1:45:51 AM
Surr: Dibromofluoromethane	103	70-130		%Rec	1	12/30/2020 1:45:51 AM
Surr: Toluene-d8	94.2	70-130		%Rec	1	12/30/2020 1:45:51 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/30/2020 1:45:51 AM
Surr: BFB	107	70-130		%Rec	1	12/30/2020 1:45:51 AM

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

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

Analytical Report

Lab Order **2012B90**

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S-2 0-6"

Project: Mizar 11 Fed Com 1H

Collection Date: 12/22/2020

Lab ID: 2012B90-002

Matrix: SOIL

Received Date: 12/24/2020 9:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: BRM
Diesel Range Organics (DRO)	14	9.7		mg/Kg	1	12/29/2020 12:19:17 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/29/2020 12:19:17 PM
Surr: DNOP	78.5	30.4-154		%Rec	1	12/29/2020 12:19:17 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	5900	300		mg/Kg	100	12/30/2020 10:48:14 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	12/30/2020 3:11:20 AM
Toluene	ND	0.049		mg/Kg	1	12/30/2020 3:11:20 AM
Ethylbenzene	ND	0.049		mg/Kg	1	12/30/2020 3:11:20 AM
Xylenes, Total	ND	0.098		mg/Kg	1	12/30/2020 3:11:20 AM
Surr: 1,2-Dichloroethane-d4	97.8	70-130		%Rec	1	12/30/2020 3:11:20 AM
Surr: 4-Bromofluorobenzene	96.1	70-130		%Rec	1	12/30/2020 3:11:20 AM
Surr: Dibromofluoromethane	99.9	70-130		%Rec	1	12/30/2020 3:11:20 AM
Surr: Toluene-d8	92.9	70-130		%Rec	1	12/30/2020 3:11:20 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/30/2020 3:11:20 AM
Surr: BFB	109	70-130		%Rec	1	12/30/2020 3:11:20 AM

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

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

Analytical Report

Lab Order **2012B90**

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S-3 0-6"

Project: Mizar 11 Fed Com 1H

Collection Date: 12/22/2020

Lab ID: 2012B90-003

Matrix: SOIL

Received Date: 12/24/2020 9:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/29/2020 12:43:15 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/29/2020 12:43:15 PM
Surr: DNOP	101	30.4-154		%Rec	1	12/29/2020 12:43:15 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	2800	150		mg/Kg	50	12/30/2020 11:00:39 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	12/30/2020 4:36:48 AM
Toluene	ND	0.049		mg/Kg	1	12/30/2020 4:36:48 AM
Ethylbenzene	ND	0.049		mg/Kg	1	12/30/2020 4:36:48 AM
Xylenes, Total	ND	0.099		mg/Kg	1	12/30/2020 4:36:48 AM
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	12/30/2020 4:36:48 AM
Surr: 4-Bromofluorobenzene	95.6	70-130		%Rec	1	12/30/2020 4:36:48 AM
Surr: Dibromofluoromethane	107	70-130		%Rec	1	12/30/2020 4:36:48 AM
Surr: Toluene-d8	95.0	70-130		%Rec	1	12/30/2020 4:36:48 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/30/2020 4:36:48 AM
Surr: BFB	108	70-130		%Rec	1	12/30/2020 4:36:48 AM

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

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

Analytical Report

Lab Order **2012B90**

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S-4 0-6"

Project: Mizar 11 Fed Com 1H

Collection Date: 12/22/2020

Lab ID: 2012B90-004

Matrix: SOIL

Received Date: 12/24/2020 9:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/29/2020 1:07:14 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/29/2020 1:07:14 PM
Surr: DNOP	86.4	30.4-154		%Rec	1	12/29/2020 1:07:14 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	2500	150		mg/Kg	50	12/30/2020 11:13:04 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	12/30/2020 5:05:18 AM
Toluene	ND	0.050		mg/Kg	1	12/30/2020 5:05:18 AM
Ethylbenzene	ND	0.050		mg/Kg	1	12/30/2020 5:05:18 AM
Xylenes, Total	ND	0.099		mg/Kg	1	12/30/2020 5:05:18 AM
Surr: 1,2-Dichloroethane-d4	100	70-130		%Rec	1	12/30/2020 5:05:18 AM
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	12/30/2020 5:05:18 AM
Surr: Dibromofluoromethane	103	70-130		%Rec	1	12/30/2020 5:05:18 AM
Surr: Toluene-d8	94.1	70-130		%Rec	1	12/30/2020 5:05:18 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: JMR
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/30/2020 5:05:18 AM
Surr: BFB	111	70-130		%Rec	1	12/30/2020 5:05:18 AM

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

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

Analytical Report

Lab Order **2012B90**

Hall Environmental Analysis Laboratory, Inc.

Date Reported:

CLIENT: Pima Environmental Services LLC

Client Sample ID: S-4 1'

Project: Mizar 11 Fed Com 1H

Collection Date: 12/22/2020

Lab ID: 2012B90-005

Matrix: SOIL

Received Date: 12/24/2020 9:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	12/29/2020 1:31:19 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/29/2020 1:31:19 PM
Surr: DNOP	95.4	30.4-154		%Rec	1	12/29/2020 1:31:19 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	1100	60		mg/Kg	20	12/30/2020 5:09:29 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
Benzene	ND	0.024		mg/Kg	1	12/30/2020 5:33:59 AM
Toluene	ND	0.049		mg/Kg	1	12/30/2020 5:33:59 AM
Ethylbenzene	ND	0.049		mg/Kg	1	12/30/2020 5:33:59 AM
Xylenes, Total	ND	0.098		mg/Kg	1	12/30/2020 5:33:59 AM
Surr: 1,2-Dichloroethane-d4	99.6	70-130		%Rec	1	12/30/2020 5:33:59 AM
Surr: 4-Bromofluorobenzene	95.7	70-130		%Rec	1	12/30/2020 5:33:59 AM
Surr: Dibromofluoromethane	100	70-130		%Rec	1	12/30/2020 5:33:59 AM
Surr: Toluene-d8	94.1	70-130		%Rec	1	12/30/2020 5:33:59 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/30/2020 5:33:59 AM
Surr: BFB	109	70-130		%Rec	1	12/30/2020 5:33:59 AM

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

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

Analytical Report

Lab Order **2012B90**

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S-5 0-6"

Project: Mizar 11 Fed Com 1H

Collection Date: 12/22/2020

Lab ID: 2012B90-006

Matrix: SOIL

Received Date: 12/24/2020 9:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: BRM
Diesel Range Organics (DRO)	14	9.4		mg/Kg	1	12/29/2020 1:55:16 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/29/2020 1:55:16 PM
Surr: DNOP	70.2	30.4-154		%Rec	1	12/29/2020 1:55:16 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	1300	60		mg/Kg	20	12/30/2020 5:21:53 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	12/30/2020 6:02:37 AM
Toluene	ND	0.049		mg/Kg	1	12/30/2020 6:02:37 AM
Ethylbenzene	ND	0.049		mg/Kg	1	12/30/2020 6:02:37 AM
Xylenes, Total	ND	0.098		mg/Kg	1	12/30/2020 6:02:37 AM
Surr: 1,2-Dichloroethane-d4	97.0	70-130		%Rec	1	12/30/2020 6:02:37 AM
Surr: 4-Bromofluorobenzene	95.9	70-130		%Rec	1	12/30/2020 6:02:37 AM
Surr: Dibromofluoromethane	99.8	70-130		%Rec	1	12/30/2020 6:02:37 AM
Surr: Toluene-d8	95.1	70-130		%Rec	1	12/30/2020 6:02:37 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/30/2020 6:02:37 AM
Surr: BFB	105	70-130		%Rec	1	12/30/2020 6:02:37 AM

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

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

Analytical Report

Lab Order **2012B90**

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S-6 0-6"

Project: Mizar 11 Fed Com 1H

Collection Date: 12/22/2020

Lab ID: 2012B90-007

Matrix: SOIL

Received Date: 12/24/2020 9:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: BRM
Diesel Range Organics (DRO)	3300	97		mg/Kg	10	12/29/2020 2:19:06 PM
Motor Oil Range Organics (MRO)	2200	490		mg/Kg	10	12/29/2020 2:19:06 PM
Surr: DNOP	0	30.4-154	S	%Rec	10	12/29/2020 2:19:06 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	5600	300		mg/Kg	100	12/30/2020 11:25:29 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	12/30/2020 6:31:06 AM
Toluene	ND	0.049		mg/Kg	1	12/30/2020 6:31:06 AM
Ethylbenzene	0.069	0.049		mg/Kg	1	12/30/2020 6:31:06 AM
Xylenes, Total	0.19	0.098		mg/Kg	1	12/30/2020 6:31:06 AM
Surr: 1,2-Dichloroethane-d4	98.8	70-130		%Rec	1	12/30/2020 6:31:06 AM
Surr: Dibromofluoromethane	101	70-130		%Rec	1	12/30/2020 6:31:06 AM
Surr: Toluene-d8	95.3	70-130		%Rec	1	12/30/2020 6:31:06 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: JMR
Gasoline Range Organics (GRO)	9.8	4.9		mg/Kg	1	12/30/2020 6:31:06 AM
Surr: BFB	113	70-130		%Rec	1	12/30/2020 6:31:06 AM

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

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

Analytical Report

Lab Order **2012B90**

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S-7 0-6"

Project: Mizar 11 Fed Com 1H

Collection Date: 12/22/2020

Lab ID: 2012B90-008

Matrix: SOIL

Received Date: 12/24/2020 9:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: BRM
Diesel Range Organics (DRO)	47	9.3		mg/Kg	1	12/29/2020 2:43:06 PM
Motor Oil Range Organics (MRO)	63	47		mg/Kg	1	12/29/2020 2:43:06 PM
Surr: DNOP	84.4	30.4-154		%Rec	1	12/29/2020 2:43:06 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	1500	60		mg/Kg	20	12/30/2020 6:11:30 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	12/30/2020 6:59:31 AM
Toluene	ND	0.049		mg/Kg	1	12/30/2020 6:59:31 AM
Ethylbenzene	ND	0.049		mg/Kg	1	12/30/2020 6:59:31 AM
Xylenes, Total	ND	0.098		mg/Kg	1	12/30/2020 6:59:31 AM
Surr: 1,2-Dichloroethane-d4	105	70-130		%Rec	1	12/30/2020 6:59:31 AM
Surr: 4-Bromofluorobenzene	96.4	70-130		%Rec	1	12/30/2020 6:59:31 AM
Surr: Dibromofluoromethane	108	70-130		%Rec	1	12/30/2020 6:59:31 AM
Surr: Toluene-d8	93.7	70-130		%Rec	1	12/30/2020 6:59:31 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/30/2020 3:46:05 PM
Surr: BFB	106	70-130		%Rec	1	12/30/2020 3:46:05 PM

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

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

Analytical Report

Lab Order **2012B90**

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S-8 0-6"

Project: Mizar 11 Fed Com 1H

Collection Date: 12/22/2020

Lab ID: 2012B90-009

Matrix: SOIL

Received Date: 12/24/2020 9:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: BRM
Diesel Range Organics (DRO)	2000	97		mg/Kg	10	12/29/2020 3:07:14 PM
Motor Oil Range Organics (MRO)	1800	490		mg/Kg	10	12/29/2020 3:07:14 PM
Surr: DNOP	0	30.4-154	S	%Rec	10	12/29/2020 3:07:14 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	6900	300		mg/Kg	100	12/30/2020 6:32:38 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
Benzene	ND	0.024		mg/Kg	1	12/30/2020 4:14:48 PM
Toluene	ND	0.049		mg/Kg	1	12/30/2020 4:14:48 PM
Ethylbenzene	ND	0.049		mg/Kg	1	12/30/2020 4:14:48 PM
Xylenes, Total	ND	0.097		mg/Kg	1	12/30/2020 4:14:48 PM
Surr: 1,2-Dichloroethane-d4	99.3	70-130		%Rec	1	12/30/2020 4:14:48 PM
Surr: 4-Bromofluorobenzene	97.3	70-130		%Rec	1	12/30/2020 4:14:48 PM
Surr: Dibromofluoromethane	104	70-130		%Rec	1	12/30/2020 4:14:48 PM
Surr: Toluene-d8	94.6	70-130		%Rec	1	12/30/2020 4:14:48 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/30/2020 4:14:48 PM
Surr: BFB	108	70-130		%Rec	1	12/30/2020 4:14:48 PM

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

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

Analytical Report

Lab Order **2012B90**

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S-9 0-6"

Project: Mizar 11 Fed Com 1H

Collection Date: 12/22/2020

Lab ID: 2012B90-010

Matrix: SOIL

Received Date: 12/24/2020 9:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: BRM
Diesel Range Organics (DRO)	28	9.8		mg/Kg	1	12/29/2020 3:31:16 PM
Motor Oil Range Organics (MRO)	60	49		mg/Kg	1	12/29/2020 3:31:16 PM
Surr: DNOP	95.8	30.4-154		%Rec	1	12/29/2020 3:31:16 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	3800	150		mg/Kg	50	12/30/2020 6:45:03 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	12/30/2020 5:12:06 PM
Toluene	ND	0.050		mg/Kg	1	12/30/2020 5:12:06 PM
Ethylbenzene	ND	0.050		mg/Kg	1	12/30/2020 5:12:06 PM
Xylenes, Total	ND	0.10		mg/Kg	1	12/30/2020 5:12:06 PM
Surr: 1,2-Dichloroethane-d4	99.7	70-130		%Rec	1	12/30/2020 5:12:06 PM
Surr: 4-Bromofluorobenzene	96.8	70-130		%Rec	1	12/30/2020 5:12:06 PM
Surr: Dibromofluoromethane	104	70-130		%Rec	1	12/30/2020 5:12:06 PM
Surr: Toluene-d8	95.1	70-130		%Rec	1	12/30/2020 5:12:06 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: JMR
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/30/2020 5:12:06 PM
Surr: BFB	109	70-130		%Rec	1	12/30/2020 5:12:06 PM

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

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

Analytical Report

Lab Order **2012B90**

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S-10 0-6"

Project: Mizar 11 Fed Com 1H

Collection Date: 12/22/2020

Lab ID: 2012B90-011

Matrix: SOIL

Received Date: 12/24/2020 9:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: BRM
Diesel Range Organics (DRO)	94	9.9		mg/Kg	1	12/29/2020 3:55:22 PM
Motor Oil Range Organics (MRO)	280	50		mg/Kg	1	12/29/2020 3:55:22 PM
Surr: DNOP	117	30.4-154		%Rec	1	12/29/2020 3:55:22 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	1800	60		mg/Kg	20	12/30/2020 12:45:12 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	12/30/2020 5:40:42 PM
Toluene	ND	0.050		mg/Kg	1	12/30/2020 5:40:42 PM
Ethylbenzene	ND	0.050		mg/Kg	1	12/30/2020 5:40:42 PM
Xylenes, Total	ND	0.10		mg/Kg	1	12/30/2020 5:40:42 PM
Surr: 1,2-Dichloroethane-d4	99.5	70-130		%Rec	1	12/30/2020 5:40:42 PM
Surr: 4-Bromofluorobenzene	96.0	70-130		%Rec	1	12/30/2020 5:40:42 PM
Surr: Dibromofluoromethane	102	70-130		%Rec	1	12/30/2020 5:40:42 PM
Surr: Toluene-d8	94.0	70-130		%Rec	1	12/30/2020 5:40:42 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: JMR
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/30/2020 5:40:42 PM
Surr: BFB	108	70-130		%Rec	1	12/30/2020 5:40:42 PM

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

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

Analytical Report

Lab Order **2012B90**

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S-11 0-6"

Project: Mizar 11 Fed Com 1H

Collection Date: 12/22/2020

Lab ID: 2012B90-012

Matrix: SOIL

Received Date: 12/24/2020 9:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: BRM
Diesel Range Organics (DRO)	68	9.9		mg/Kg	1	12/29/2020 4:19:22 PM
Motor Oil Range Organics (MRO)	110	49		mg/Kg	1	12/29/2020 4:19:22 PM
Surr: DNOP	106	30.4-154		%Rec	1	12/29/2020 4:19:22 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	5700	300		mg/Kg	100	12/30/2020 6:57:28 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	12/30/2020 6:09:16 PM
Toluene	ND	0.049		mg/Kg	1	12/30/2020 6:09:16 PM
Ethylbenzene	ND	0.049		mg/Kg	1	12/30/2020 6:09:16 PM
Xylenes, Total	ND	0.098		mg/Kg	1	12/30/2020 6:09:16 PM
Surr: 1,2-Dichloroethane-d4	100	70-130		%Rec	1	12/30/2020 6:09:16 PM
Surr: 4-Bromofluorobenzene	98.3	70-130		%Rec	1	12/30/2020 6:09:16 PM
Surr: Dibromofluoromethane	102	70-130		%Rec	1	12/30/2020 6:09:16 PM
Surr: Toluene-d8	93.6	70-130		%Rec	1	12/30/2020 6:09:16 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/30/2020 6:09:16 PM
Surr: BFB	108	70-130		%Rec	1	12/30/2020 6:09:16 PM

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

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

Analytical Report

Lab Order **2012B90**

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S-12 0-6"

Project: Mizar 11 Fed Com 1H

Collection Date: 12/22/2020

Lab ID: 2012B90-013

Matrix: SOIL

Received Date: 12/24/2020 9:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: BRM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/29/2020 4:43:21 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/29/2020 4:43:21 PM
Surr: DNOP	52.1	30.4-154		%Rec	1	12/29/2020 4:43:21 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	190	60		mg/Kg	20	12/30/2020 1:34:49 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	12/30/2020 6:37:53 PM
Toluene	ND	0.049		mg/Kg	1	12/30/2020 6:37:53 PM
Ethylbenzene	ND	0.049		mg/Kg	1	12/30/2020 6:37:53 PM
Xylenes, Total	ND	0.098		mg/Kg	1	12/30/2020 6:37:53 PM
Surr: 1,2-Dichloroethane-d4	96.1	70-130		%Rec	1	12/30/2020 6:37:53 PM
Surr: 4-Bromofluorobenzene	97.2	70-130		%Rec	1	12/30/2020 6:37:53 PM
Surr: Dibromofluoromethane	100	70-130		%Rec	1	12/30/2020 6:37:53 PM
Surr: Toluene-d8	97.4	70-130		%Rec	1	12/30/2020 6:37:53 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/30/2020 6:37:53 PM
Surr: BFB	110	70-130		%Rec	1	12/30/2020 6:37:53 PM

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

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

Analytical Report

Lab Order **2012B90**

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S-12 1'

Project: Mizar 11 Fed Com 1H

Collection Date: 12/22/2020

Lab ID: 2012B90-014

Matrix: SOIL

Received Date: 12/24/2020 9:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	12/29/2020 5:07:17 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/29/2020 5:07:17 PM
Surr: DNOP	104	30.4-154		%Rec	1	12/29/2020 5:07:17 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	87	61		mg/Kg	20	12/30/2020 1:47:14 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	12/30/2020 7:06:26 PM
Toluene	ND	0.050		mg/Kg	1	12/30/2020 7:06:26 PM
Ethylbenzene	ND	0.050		mg/Kg	1	12/30/2020 7:06:26 PM
Xylenes, Total	ND	0.10		mg/Kg	1	12/30/2020 7:06:26 PM
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	12/30/2020 7:06:26 PM
Surr: 4-Bromofluorobenzene	97.6	70-130		%Rec	1	12/30/2020 7:06:26 PM
Surr: Dibromofluoromethane	104	70-130		%Rec	1	12/30/2020 7:06:26 PM
Surr: Toluene-d8	95.5	70-130		%Rec	1	12/30/2020 7:06:26 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: JMR
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/30/2020 7:06:26 PM
Surr: BFB	112	70-130		%Rec	1	12/30/2020 7:06:26 PM

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

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

Analytical Report

Lab Order **2012B90**

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: Bg-1

Project: Mizar 11 Fed Com 1H

Collection Date: 12/22/2020

Lab ID: 2012B90-015

Matrix: SOIL

Received Date: 12/24/2020 9:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: BRM
Diesel Range Organics (DRO)	630	96		mg/Kg	10	12/29/2020 5:31:28 PM
Motor Oil Range Organics (MRO)	1100	480		mg/Kg	10	12/29/2020 5:31:28 PM
Surr: DNOP	0	30.4-154	S	%Rec	10	12/29/2020 5:31:28 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	150	60		mg/Kg	20	12/30/2020 1:59:38 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	12/30/2020 7:34:54 PM
Toluene	ND	0.050		mg/Kg	1	12/30/2020 7:34:54 PM
Ethylbenzene	ND	0.050		mg/Kg	1	12/30/2020 7:34:54 PM
Xylenes, Total	ND	0.099		mg/Kg	1	12/30/2020 7:34:54 PM
Surr: 1,2-Dichloroethane-d4	97.0	70-130		%Rec	1	12/30/2020 7:34:54 PM
Surr: 4-Bromofluorobenzene	97.9	70-130		%Rec	1	12/30/2020 7:34:54 PM
Surr: Dibromofluoromethane	103	70-130		%Rec	1	12/30/2020 7:34:54 PM
Surr: Toluene-d8	93.3	70-130		%Rec	1	12/30/2020 7:34:54 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: JMR
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/30/2020 7:34:54 PM
Surr: BFB	107	70-130		%Rec	1	12/30/2020 7:34:54 PM

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

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

Analytical Report

Lab Order **2012B90**

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: Bg-2

Project: Mizar 11 Fed Com 1H

Collection Date: 12/22/2020

Lab ID: 2012B90-016

Matrix: SOIL

Received Date: 12/24/2020 9:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	12/29/2020 5:55:26 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/29/2020 5:55:26 PM
Surr: DNOP	73.4	30.4-154		%Rec	1	12/29/2020 5:55:26 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	12/30/2020 2:12:02 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	12/30/2020 8:03:24 PM
Toluene	ND	0.050		mg/Kg	1	12/30/2020 8:03:24 PM
Ethylbenzene	ND	0.050		mg/Kg	1	12/30/2020 8:03:24 PM
Xylenes, Total	ND	0.099		mg/Kg	1	12/30/2020 8:03:24 PM
Surr: 1,2-Dichloroethane-d4	99.2	70-130		%Rec	1	12/30/2020 8:03:24 PM
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	12/30/2020 8:03:24 PM
Surr: Dibromofluoromethane	103	70-130		%Rec	1	12/30/2020 8:03:24 PM
Surr: Toluene-d8	96.0	70-130		%Rec	1	12/30/2020 8:03:24 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: JMR
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/30/2020 8:03:24 PM
Surr: BFB	112	70-130		%Rec	1	12/30/2020 8:03:24 PM

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

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

Analytical Report

Lab Order **2012B90**

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: Bg-3

Project: Mizar 11 Fed Com 1H

Collection Date: 12/22/2020

Lab ID: 2012B90-017

Matrix: SOIL

Received Date: 12/24/2020 9:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	12/29/2020 6:19:35 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/29/2020 6:19:35 PM
Surr: DNOP	73.2	30.4-154		%Rec	1	12/29/2020 6:19:35 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	12/30/2020 2:24:27 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	12/30/2020 8:31:55 PM
Toluene	ND	0.049		mg/Kg	1	12/30/2020 8:31:55 PM
Ethylbenzene	ND	0.049		mg/Kg	1	12/30/2020 8:31:55 PM
Xylenes, Total	ND	0.098		mg/Kg	1	12/30/2020 8:31:55 PM
Surr: 1,2-Dichloroethane-d4	98.3	70-130		%Rec	1	12/30/2020 8:31:55 PM
Surr: 4-Bromofluorobenzene	99.2	70-130		%Rec	1	12/30/2020 8:31:55 PM
Surr: Dibromofluoromethane	105	70-130		%Rec	1	12/30/2020 8:31:55 PM
Surr: Toluene-d8	93.4	70-130		%Rec	1	12/30/2020 8:31:55 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/30/2020 8:31:55 PM
Surr: BFB	110	70-130		%Rec	1	12/30/2020 8:31:55 PM

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

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



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

March 04, 2021

CHRIS JONES

PIMA ENVIROMENTAL

1601 N TURNER STE. 500

HOBBS, NM 88240

RE: MIZAR 11 FED COM 1H

Enclosed are the results of analyses for samples received by the laboratory on 03/02/21 16:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. 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 accredited 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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

PIMA ENVIROMENTAL
 CHRIS JONES
 1601 N TURNER STE. 500
 HOBBS NM, 88240
 Fax To:

Received:	03/02/2021	Sampling Date:	03/02/2021
Reported:	03/04/2021	Sampling Type:	Soil
Project Name:	MIZAR 11 FED COM 1H	Sampling Condition:	** (See Notes)
Project Number:	63	Sample Received By:	Tamara Oldaker
Project Location:	DEVON-EDDY CO., NM		

Sample ID: S 1 - B (H210507-01)

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	496	16.0	03/04/2021	ND	416	104	400	8.00	

Sample ID: S 2 - B (H210507-02)

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	03/04/2021	ND	416	104	400	8.00	

Sample ID: S 3 - B (H210507-03)

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	784	16.0	03/04/2021	ND	416	104	400	8.00	

Sample ID: S 4 - B (H210507-04)

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	400	16.0	03/04/2021	ND	416	104	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

PIMA ENVIROMENTAL
 CHRIS JONES
 1601 N TURNER STE. 500
 HOBBS NM, 88240
 Fax To:

Received:	03/02/2021	Sampling Date:	03/02/2021
Reported:	03/04/2021	Sampling Type:	Soil
Project Name:	MIZAR 11 FED COM 1H	Sampling Condition:	** (See Notes)
Project Number:	63	Sample Received By:	Tamara Oldaker
Project Location:	DEVON-EDDY CO., NM		

Sample ID: S 5 - B (H210507-05)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	03/04/2021	ND	416	104	400	0.00	

Sample ID: S 7 - B (H210507-06)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1650	16.0	03/04/2021	ND	416	104	400	0.00	

Sample ID: S 9 - B (H210507-07)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	368	16.0	03/04/2021	ND	416	104	400	0.00	

Sample ID: S 12 - B (H210507-08)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	352	16.0	03/04/2021	ND	416	104	400	0.00	

Sample ID: S 13 - B (H210507-09)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	304	16.0	03/04/2021	ND	416	104	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

PIMA ENVIROMENTAL
 CHRIS JONES
 1601 N TURNER STE. 500
 HOBBS NM, 88240
 Fax To:

Received:	03/02/2021	Sampling Date:	03/02/2021
Reported:	03/04/2021	Sampling Type:	Soil
Project Name:	MIZAR 11 FED COM 1H	Sampling Condition:	** (See Notes)
Project Number:	63	Sample Received By:	Tamara Oldaker
Project Location:	DEVON-EDDY CO., NM		

Sample ID: S 14 - B (H210507-10)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	304	16.0	03/04/2021	ND	416	104	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager



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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

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*=Accredited Analyte

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: Pima ENVIRONMENTAL
Project Manager: Chris JONES
Address: 1601 N. TURNER Ste 500
City: Hobbs State: NM Zip: 88240
Phone #: 575-631-6977 Fax #:
Project #: 63 Project Owner: DEVON
Project Name: MIZARIL FED Com IH
Project Location: EDDY COUNTY
Sampler Name: MARK NEWCOMB
BILL TO: P.O. #: 20916992
Company: DEVON
Attn: Wes Matthews
Address:
City:
State: Zip:
Phone #:
Fax #:

Table with columns: Lab I.D., Sample I.D., (G)RAB OR (C)OMP., # CONTAINERS, MATRIX (GROUNDWATER, WASTEWATER, SOIL, OIL, SLUDGE, OTHER), PRESERV. (ACID/BASE, ICE / COOL, OTHER), SAMPLING (DATE, TIME). Includes handwritten entries for Lab I.D. H210507 and samples 1-10.

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses.

Relinquished By: [Signature] Date: 3/2/21 Time: 1:15
Received By: [Signature]
Verbal Result: [] Yes [] No Add'l Phone #:
REMARKS: Bill to Devon
Delivered By: (Circle One) Observed Temp. °C 13.5 Sample Condition Cool Intact [] Yes [] No
CHECKED BY: (Initials) TO-
Turnaround Time: Standard [] Rush [] Bacteria (only) Sample Condition Cool Intact Observed Temp. °C

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsonm.com



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

March 04, 2021

CHRIS JONES

PIMA ENVIROMENTAL

1601 N TURNER STE. 500

HOBBS, NM 88240

RE: MIZAR 11 FED COM 1H

Enclosed are the results of analyses for samples received by the laboratory on 03/02/21 16:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. 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 accredited 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,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

PIMA ENVIROMENTAL
 CHRIS JONES
 1601 N TURNER STE. 500
 HOBBS NM, 88240
 Fax To:

Received:	03/02/2021	Sampling Date:	03/02/2021
Reported:	03/04/2021	Sampling Type:	Soil
Project Name:	MIZAR 11 FED COM 1H	Sampling Condition:	** (See Notes)
Project Number:	63	Sample Received By:	Tamara Oldaker
Project Location:	DEVON-EDDY CO., NM		

Sample ID: S 6 - B (H210506-01)

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	432	16.0	03/04/2021	ND	416	104	400	8.00	
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	03/03/2021	ND	211	105	200	0.535	
DRO >C10-C28*	<10.0	10.0	03/03/2021	ND	213	107	200	1.49	
EXT DRO >C28-C36	<10.0	10.0	03/03/2021	ND					
<i>Surrogate: 1-Chlorooctane</i>		76.3 %	44.3-144						
<i>Surrogate: 1-Chlorooctadecane</i>		75.3 %	42.2-156						

Sample ID: S 8 - B (H210506-02)

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	03/04/2021	ND	416	104	400	8.00	
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	03/03/2021	ND	211	105	200	0.535	
DRO >C10-C28*	<10.0	10.0	03/03/2021	ND	213	107	200	1.49	
EXT DRO >C28-C36	<10.0	10.0	03/03/2021	ND					
<i>Surrogate: 1-Chlorooctane</i>		76.3 %	44.3-144						
<i>Surrogate: 1-Chlorooctadecane</i>		77.4 %	42.2-156						

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

PIMA ENVIROMENTAL
 CHRIS JONES
 1601 N TURNER STE. 500
 HOBBS NM, 88240
 Fax To:

Received:	03/02/2021	Sampling Date:	03/02/2021
Reported:	03/04/2021	Sampling Type:	Soil
Project Name:	MIZAR 11 FED COM 1H	Sampling Condition:	** (See Notes)
Project Number:	63	Sample Received By:	Tamara Oldaker
Project Location:	DEVON-EDDY CO., NM		

Sample ID: S 10 - B (H210506-03)

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	03/04/2021	ND	416	104	400	8.00	
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	03/03/2021	ND	211	105	200	0.535	
DRO >C10-C28*	<10.0	10.0	03/03/2021	ND	213	107	200	1.49	
EXT DRO >C28-C36	<10.0	10.0	03/03/2021	ND					
<i>Surrogate: 1-Chlorooctane</i>	<i>75.9 %</i>	<i>44.3-144</i>							
<i>Surrogate: 1-Chlorooctadecane</i>	<i>76.4 %</i>	<i>42.2-156</i>							

Sample ID: S 11 - B (H210506-04)

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	03/04/2021	ND	416	104	400	8.00	
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	03/03/2021	ND	211	105	200	0.535	
DRO >C10-C28*	<10.0	10.0	03/03/2021	ND	213	107	200	1.49	
EXT DRO >C28-C36	<10.0	10.0	03/03/2021	ND					
<i>Surrogate: 1-Chlorooctane</i>	<i>73.8 %</i>	<i>44.3-144</i>							
<i>Surrogate: 1-Chlorooctadecane</i>	<i>75.1 %</i>	<i>42.2-156</i>							

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

PIMA ENVIROMENTAL
 CHRIS JONES
 1601 N TURNER STE. 500
 HOBBS NM, 88240
 Fax To:

Received:	03/02/2021	Sampling Date:	03/02/2021
Reported:	03/04/2021	Sampling Type:	Soil
Project Name:	MIZAR 11 FED COM 1H	Sampling Condition:	** (See Notes)
Project Number:	63	Sample Received By:	Tamara Oldaker
Project Location:	DEVON-EDDY CO., NM		

Sample ID: S 6 / S 7 - B 4' (H210506-05)

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	03/04/2021	ND	416	104	400	8.00	

Sample ID: S 15 - B (H210506-06)

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	03/04/2021	ND	416	104	400	8.00	

Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

- 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 LCS/D recovery and/or RPD values.
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

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <u>Dima Environmental</u>				BILL TO				ANALYSIS REQUEST							
Project Manager: <u>Chris Jones</u>				P.O. #: <u>20916992</u>											
Address: <u>1601 N. Turner Ste 500</u>				Company: <u>Devon</u>											
City: <u>Hobbs</u>		State: <u>NM</u> Zip: <u>88240</u>		Attn: <u>Wes Matthews</u>											
Phone #: <u>575-631-6977</u>		Fax #:		Address:											
Project #: <u>63</u>		Project Owner: <u>DEVON</u>		City:											
Project Name: <u>MIZAR II FED COM 3H</u>				State: Zip:											
Project Location: <u>EDDY COUNTY</u>				Phone #:											
Sampler Name: <u>MARK NEWCOMB</u>				Fax #:											
FOR LAB USE ONLY															
Lab I.D.		Sample I.D.		# CONTAINERS	MATRIX			PRESERV.		SAMPLING					
				(G)RAB OR (C)OMP.	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME
<u>H210506</u>															
<u>1</u>		<u>56-B</u>		<u>6</u>										<u>3/2/21</u>	
<u>2</u>		<u>58-B</u>													
<u>3</u>		<u>510-B</u>													
<u>4</u>		<u>511-B</u>													
<u>5</u>		<u>56/57-B 4'</u>													
<u>6</u>		<u>515-B</u>		<u>✓</u>		<u>✓</u>									

TPH
chloride
chloride only

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Relinquished By: <u>[Signature]</u>		Date: <u>3-2-21</u>		Received By: <u>[Signature]</u>		Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:	
Time: <u>1615</u>		Date:		Received By:		All Results are emailed. Please provide Email address:	
Relinquished By:		Date:		Received By:		REMARKS:	
Time:		Date:		Received By:		<u>Bill to Devon</u>	
Delivered By: (Circle One)		Observed Temp. °C <u>13.5</u>		Sample Condition Cool Intact		Turnaround Time: <u>Standard</u> <input checked="" type="checkbox"/> <u>Rush</u> <input type="checkbox"/>	
Sampler - UPS - Bus - Other:		Corrected Temp. °C		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Bacteria (only) Sample Condition Cool Intact Observed Temp. °C	
FORM-006 R 3.1 06/04/20				CHECKED BY: (Initials) <u>[Signature]</u>		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
						Thermometer ID #113 Correction Factor None	
						Corrected Temp. °C	

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com



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

March 10, 2021

TOM BYNUM

PIMA ENVIROMENTAL

1601 N TURNER STE. 500

HOBBS, NM 88240

RE: MIZAR 11 FED COM 1H

Enclosed are the results of analyses for samples received by the laboratory on 03/08/21 11:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. 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 accredited 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,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

PIMA ENVIROMENTAL
TOM BYNUM
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received:	03/08/2021	Sampling Date:	03/03/2021
Reported:	03/10/2021	Sampling Type:	Soil
Project Name:	MIZAR 11 FED COM 1H	Sampling Condition:	Cool & Intact
Project Number:	63	Sample Received By:	Tamara Oldaker
Project Location:	DEVON-EDDY CO., NM		

Sample ID: BG - 1 (H210551-01)

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	03/09/2021	ND	1.94	96.9	2.00	3.83	
Toluene*	<0.050	0.050	03/09/2021	ND	2.05	102	2.00	1.60	
Ethylbenzene*	<0.050	0.050	03/09/2021	ND	2.05	102	2.00	2.20	
Total Xylenes*	<0.150	0.150	03/09/2021	ND	6.44	107	6.00	2.14	
Total BTEX	<0.300	0.300	03/09/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 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	<16.0	16.0	03/10/2021	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	03/09/2021	ND	188	93.8	200	0.797	
DRO >C10-C28*	<10.0	10.0	03/09/2021	ND	223	112	200	3.11	
EXT DRO >C28-C36	<10.0	10.0	03/09/2021	ND					

Surrogate: 1-Chlorooctane 99.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 98.6 % 42.2-156

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* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

PIMA ENVIROMENTAL
TOM BYNUM
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received:	03/08/2021	Sampling Date:	03/03/2021
Reported:	03/10/2021	Sampling Type:	Soil
Project Name:	MIZAR 11 FED COM 1H	Sampling Condition:	Cool & Intact
Project Number:	63	Sample Received By:	Tamara Oldaker
Project Location:	DEVON-EDDY CO., NM		

Sample ID: BG - 2 (H210551-02)

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	03/09/2021	ND	1.94	96.9	2.00	3.83		
Toluene*	<0.050	0.050	03/09/2021	ND	2.05	102	2.00	1.60		
Ethylbenzene*	<0.050	0.050	03/09/2021	ND	2.05	102	2.00	2.20		
Total Xylenes*	<0.150	0.150	03/09/2021	ND	6.44	107	6.00	2.14		
Total BTEX	<0.300	0.300	03/09/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 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	<16.0	16.0	03/10/2021	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	03/09/2021	ND	188	93.8	200	0.797		
DRO >C10-C28*	<10.0	10.0	03/09/2021	ND	223	112	200	3.11		
EXT DRO >C28-C36	<10.0	10.0	03/09/2021	ND						

Surrogate: 1-Chlorooctane 96.0 % 44.3-144

Surrogate: 1-Chlorooctadecane 95.2 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

PIMA ENVIROMENTAL
 TOM BYNUM
 1601 N TURNER STE. 500
 HOBBS NM, 88240
 Fax To:

Received:	03/08/2021	Sampling Date:	03/03/2021
Reported:	03/10/2021	Sampling Type:	Soil
Project Name:	MIZAR 11 FED COM 1H	Sampling Condition:	Cool & Intact
Project Number:	63	Sample Received By:	Tamara Oldaker
Project Location:	DEVON-EDDY CO., NM		

Sample ID: BG - 3 (H210551-03)

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	03/09/2021	ND	1.94	96.9	2.00	3.83	
Toluene*	<0.050	0.050	03/09/2021	ND	2.05	102	2.00	1.60	
Ethylbenzene*	<0.050	0.050	03/09/2021	ND	2.05	102	2.00	2.20	
Total Xylenes*	<0.150	0.150	03/09/2021	ND	6.44	107	6.00	2.14	
Total BTEX	<0.300	0.300	03/09/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 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	<16.0	16.0	03/10/2021	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	03/09/2021	ND	188	93.8	200	0.797	
DRO >C10-C28*	<10.0	10.0	03/09/2021	ND	223	112	200	3.11	
EXT DRO >C28-C36	<10.0	10.0	03/09/2021	ND					

Surrogate: 1-Chlorooctane 99.4 % 44.3-144

Surrogate: 1-Chlorooctadecane 98.0 % 42.2-156

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

PIMA ENVIROMENTAL
 TOM BYNUM
 1601 N TURNER STE. 500
 HOBBS NM, 88240
 Fax To:

Received:	03/08/2021	Sampling Date:	03/03/2021
Reported:	03/10/2021	Sampling Type:	Soil
Project Name:	MIZAR 11 FED COM 1H	Sampling Condition:	Cool & Intact
Project Number:	63	Sample Received By:	Tamara Oldaker
Project Location:	DEVON-EDDY CO., NM		

Sample ID: S - 3 - 2' (H210551-04)

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/10/2021	ND	416	104	400	3.92	

Sample ID: S - 6 - 1' (H210551-05)

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	03/10/2021	ND	416	104	400	3.92	

Sample ID: S - 7 - 4' (H210551-06)

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	03/10/2021	ND	416	104	400	3.92	

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- 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

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



Environment Testing
America

ANALYTICAL REPORT

Eurofins Xenco, Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-715-1
Client Project/Site: Mizar 11 Fed Com 1H

For:
EOR/Ridgeway Arizona Oil Corp
575 N Dairy Ashford
Suite 210
Houston, Texas 77079

Attn: Tom Byrum

Authorized for release by:
5/28/2021 4:46:34 PM

Holly Taylor, Project Manager
(806)794-1296
holly.taylor@eurofinset.com



LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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- 2
- 3
- 4
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- 9
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- 11
- 12
- 13
- 14

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Mizar 11 Fed Com 1H

Laboratory Job ID: 890-715-1

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	15
QC Sample Results	17
QC Association Summary	26
Lab Chronicle	30
Certification Summary	34
Method Summary	35
Sample Summary	36
Chain of Custody	37
Receipt Checklists	40

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Definitions/Glossary

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Mizar 11 Fed Com 1H

Job ID: 890-715-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Eurofins Xenco, Carlsbad

Case Narrative

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Mizar 11 Fed Com 1H

Job ID: 890-715-1

Job ID: 890-715-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-715-1

Receipt

The samples were received on 5/21/2021 1:48 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 24.2°C

Receipt Exceptions

The following samples analyzed for method 8021 were received and analyzed from an unpreserved bulk soil jar: CS1 (890-715-1), CS2 (890-715-2), CS3 (890-715-3), CS4 (890-715-4), CS5 (890-715-5), CS6 (890-715-6), CS7 (890-715-7), CS8 (890-715-8), CS9 (890-715-9), CS10 (890-715-10), CS11 (890-715-11), CS12 (890-715-12), CS13 (890-715-13) and CS14 (890-715-14).
BTEX8021

The following samples were received at the laboratory without a sample collection time documented on the chain of custody: CS1 (890-715-1), CS2 (890-715-2), CS3 (890-715-3), CS4 (890-715-4), CS5 (890-715-5), CS6 (890-715-6), CS7 (890-715-7), CS8 (890-715-8), CS9 (890-715-9), CS10 (890-715-10), CS11 (890-715-11), CS12 (890-715-12), CS13 (890-715-13) and CS14 (890-715-14). The client was contacted, and the laboratory was instructed to use a sample collection time of 12:00am. Samples logged as 00:00

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-3457 and analytical batch 880-3460 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Internal standard responses were outside of acceptance limits for the following samples: CS2 (890-715-2), CS4 (890-715-4), CS5 (890-715-5), CS6 (890-715-6) and CS9 (890-715-9). The sample(s) shows evidence of matrix interference.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.



Client Sample Results

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Mizar 11 Fed Com 1H

Job ID: 890-715-1

Client Sample ID: CS1

Lab Sample ID: 890-715-1

Date Collected: 05/21/21 00:00

Matrix: Solid

Date Received: 05/21/21 13:48

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/25/21 10:00	05/25/21 20:18	1
Toluene	<0.00201	U	0.00201	mg/Kg		05/24/21 13:00	05/25/21 08:57	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		05/24/21 13:00	05/25/21 08:57	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		05/24/21 13:00	05/25/21 08:57	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		05/24/21 13:00	05/25/21 08:57	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		05/24/21 13:00	05/25/21 08:57	1
Total BTEX	<0.00402	U	0.00402	mg/Kg		05/24/21 13:00	05/25/21 08:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130	05/24/21 13:00	05/25/21 08:57	1
1,4-Difluorobenzene (Surr)	101		70 - 130	05/24/21 13:00	05/25/21 08:57	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		05/24/21 16:09	05/25/21 14:32	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/24/21 16:09	05/25/21 14:32	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/24/21 16:09	05/25/21 14:32	1
Total TPH	<49.9	U	49.9	mg/Kg		05/24/21 16:09	05/25/21 14:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130	05/24/21 16:09	05/25/21 14:32	1
o-Terphenyl	110		70 - 130	05/24/21 16:09	05/25/21 14:32	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.33		5.01	mg/Kg			05/26/21 15:00	1

Client Sample ID: CS2

Lab Sample ID: 890-715-2

Date Collected: 05/21/21 00:00

Matrix: Solid

Date Received: 05/21/21 13:48

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		05/25/21 10:00	05/25/21 20:38	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/24/21 13:00	05/25/21 09:17	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/24/21 13:00	05/25/21 09:17	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		05/24/21 13:00	05/25/21 09:17	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/24/21 13:00	05/25/21 09:17	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		05/24/21 13:00	05/25/21 09:17	1
Total BTEX	<0.00399	U	0.00399	mg/Kg		05/24/21 13:00	05/25/21 09:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130	05/24/21 13:00	05/25/21 09:17	1
1,4-Difluorobenzene (Surr)	97		70 - 130	05/24/21 13:00	05/25/21 09:17	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		05/24/21 16:09	05/25/21 15:38	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Mizar 11 Fed Com 1H

Job ID: 890-715-1

Client Sample ID: CS2

Lab Sample ID: 890-715-2

Date Collected: 05/21/21 00:00

Matrix: Solid

Date Received: 05/21/21 13:48

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		05/24/21 16:09	05/25/21 15:38	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		05/24/21 16:09	05/25/21 15:38	1
Total TPH	<49.8	U	49.8	mg/Kg		05/24/21 16:09	05/25/21 15:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130			05/24/21 16:09	05/25/21 15:38	1
o-Terphenyl	96		70 - 130			05/24/21 16:09	05/25/21 15:38	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.49		5.01	mg/Kg			05/26/21 15:05	1

Client Sample ID: CS3

Lab Sample ID: 890-715-3

Date Collected: 05/21/21 00:00

Matrix: Solid

Date Received: 05/21/21 13:48

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/25/21 10:00	05/25/21 20:58	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/25/21 10:00	05/25/21 20:58	1
Ethylbenzene	<0.00200	U **	0.00200	mg/Kg		05/25/21 10:00	05/25/21 20:58	1
m-Xylene & p-Xylene	<0.00399	U **	0.00399	mg/Kg		05/25/21 10:00	05/25/21 20:58	1
o-Xylene	<0.00200	U **	0.00200	mg/Kg		05/25/21 10:00	05/25/21 20:58	1
Xylenes, Total	<0.00399	U **	0.00399	mg/Kg		05/25/21 10:00	05/25/21 20:58	1
Total BTEX	<0.00399	U	0.00399	mg/Kg		05/25/21 10:00	05/25/21 20:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130			05/25/21 10:00	05/25/21 20:58	1
1,4-Difluorobenzene (Surr)	99		70 - 130			05/25/21 10:00	05/25/21 20:58	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		05/24/21 16:09	05/25/21 15:59	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		05/24/21 16:09	05/25/21 15:59	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		05/24/21 16:09	05/25/21 15:59	1
Total TPH	<49.8	U	49.8	mg/Kg		05/24/21 16:09	05/25/21 15:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130			05/24/21 16:09	05/25/21 15:59	1
o-Terphenyl	95		70 - 130			05/24/21 16:09	05/25/21 15:59	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.54		5.03	mg/Kg			05/26/21 15:09	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Mizar 11 Fed Com 1H

Job ID: 890-715-1

Client Sample ID: CS4

Lab Sample ID: 890-715-4

Date Collected: 05/21/21 00:00

Matrix: Solid

Date Received: 05/21/21 13:48

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		05/25/21 10:00	05/25/21 21:19	1
Toluene	<0.00201	U	0.00201	mg/Kg		05/25/21 10:00	05/25/21 21:19	1
Ethylbenzene	<0.00201	U **	0.00201	mg/Kg		05/25/21 10:00	05/25/21 21:19	1
m-Xylene & p-Xylene	<0.00402	U **	0.00402	mg/Kg		05/25/21 10:00	05/25/21 21:19	1
o-Xylene	<0.00201	U **	0.00201	mg/Kg		05/25/21 10:00	05/25/21 21:19	1
Xylenes, Total	<0.00402	U **	0.00402	mg/Kg		05/25/21 10:00	05/25/21 21:19	1
Total BTEX	<0.00402	U	0.00402	mg/Kg		05/25/21 10:00	05/25/21 21:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130	05/25/21 10:00	05/25/21 21:19	1
1,4-Difluorobenzene (Surr)	87		70 - 130	05/25/21 10:00	05/25/21 21:19	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		05/24/21 16:09	05/25/21 16:21	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/24/21 16:09	05/25/21 16:21	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/24/21 16:09	05/25/21 16:21	1
Total TPH	<49.9	U	49.9	mg/Kg		05/24/21 16:09	05/25/21 16:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130	05/24/21 16:09	05/25/21 16:21	1
o-Terphenyl	105		70 - 130	05/24/21 16:09	05/25/21 16:21	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13.9		5.02	mg/Kg			05/26/21 15:14	1

Client Sample ID: CS5

Lab Sample ID: 890-715-5

Date Collected: 05/21/21 00:00

Matrix: Solid

Date Received: 05/21/21 13:48

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		05/25/21 10:00	05/25/21 21:39	1
Toluene	<0.00199	U	0.00199	mg/Kg		05/25/21 10:00	05/25/21 21:39	1
Ethylbenzene	<0.00199	U **	0.00199	mg/Kg		05/25/21 10:00	05/25/21 21:39	1
m-Xylene & p-Xylene	<0.00398	U **	0.00398	mg/Kg		05/25/21 10:00	05/25/21 21:39	1
o-Xylene	<0.00199	U **	0.00199	mg/Kg		05/25/21 10:00	05/25/21 21:39	1
Xylenes, Total	<0.00398	U **	0.00398	mg/Kg		05/25/21 10:00	05/25/21 21:39	1
Total BTEX	<0.00398	U	0.00398	mg/Kg		05/25/21 10:00	05/25/21 21:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	05/25/21 10:00	05/25/21 21:39	1
1,4-Difluorobenzene (Surr)	98		70 - 130	05/25/21 10:00	05/25/21 21:39	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		05/24/21 16:09	05/25/21 16:43	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Mizar 11 Fed Com 1H

Job ID: 890-715-1

Client Sample ID: CS5

Lab Sample ID: 890-715-5

Date Collected: 05/21/21 00:00

Matrix: Solid

Date Received: 05/21/21 13:48

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		05/24/21 16:09	05/25/21 16:43	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		05/24/21 16:09	05/25/21 16:43	1
Total TPH	<49.8	U	49.8	mg/Kg		05/24/21 16:09	05/25/21 16:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130			05/24/21 16:09	05/25/21 16:43	1
o-Terphenyl	112		70 - 130			05/24/21 16:09	05/25/21 16:43	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.53		4.98	mg/Kg			05/26/21 19:18	1

Client Sample ID: CS6

Lab Sample ID: 890-715-6

Date Collected: 05/21/21 00:00

Matrix: Solid

Date Received: 05/21/21 13:48

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/25/21 13:08	05/25/21 22:00	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/25/21 13:08	05/25/21 22:00	1
Ethylbenzene	<0.00200	U **	0.00200	mg/Kg		05/25/21 13:08	05/25/21 22:00	1
m-Xylene & p-Xylene	<0.00399	U **	0.00399	mg/Kg		05/25/21 13:08	05/25/21 22:00	1
o-Xylene	<0.00200	U **	0.00200	mg/Kg		05/25/21 13:08	05/25/21 22:00	1
Xylenes, Total	<0.00399	U **	0.00399	mg/Kg		05/25/21 13:08	05/25/21 22:00	1
Total BTEX	<0.00399	U	0.00399	mg/Kg		05/25/21 13:08	05/25/21 22:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130			05/25/21 13:08	05/25/21 22:00	1
1,4-Difluorobenzene (Surr)	100		70 - 130			05/25/21 13:08	05/25/21 22:00	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		05/24/21 16:09	05/25/21 17:04	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/24/21 16:09	05/25/21 17:04	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/24/21 16:09	05/25/21 17:04	1
Total TPH	<49.9	U	49.9	mg/Kg		05/24/21 16:09	05/25/21 17:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130			05/24/21 16:09	05/25/21 17:04	1
o-Terphenyl	102		70 - 130			05/24/21 16:09	05/25/21 17:04	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.33		4.99	mg/Kg			05/26/21 19:32	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Mizar 11 Fed Com 1H

Job ID: 890-715-1

Client Sample ID: CS7

Lab Sample ID: 890-715-7

Date Collected: 05/21/21 00:00

Matrix: Solid

Date Received: 05/21/21 13:48

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/25/21 10:00	05/25/21 22:20	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/25/21 10:00	05/25/21 22:20	1
Ethylbenzene	<0.00200	U **	0.00200	mg/Kg		05/25/21 10:00	05/25/21 22:20	1
m-Xylene & p-Xylene	<0.00401	U **	0.00401	mg/Kg		05/25/21 10:00	05/25/21 22:20	1
o-Xylene	<0.00200	U **	0.00200	mg/Kg		05/25/21 10:00	05/25/21 22:20	1
Xylenes, Total	<0.00401	U **	0.00401	mg/Kg		05/25/21 10:00	05/25/21 22:20	1
Total BTEX	<0.00401	U	0.00401	mg/Kg		05/25/21 10:00	05/25/21 22:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	05/25/21 10:00	05/25/21 22:20	1
1,4-Difluorobenzene (Surr)	97		70 - 130	05/25/21 10:00	05/25/21 22:20	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		05/24/21 16:09	05/25/21 17:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/24/21 16:09	05/25/21 17:26	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/24/21 16:09	05/25/21 17:26	1
Total TPH	<50.0	U	50.0	mg/Kg		05/24/21 16:09	05/25/21 17:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	05/24/21 16:09	05/25/21 17:26	1
o-Terphenyl	96		70 - 130	05/24/21 16:09	05/25/21 17:26	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.97	U	4.97	mg/Kg			05/26/21 19:37	1

Client Sample ID: CS8

Lab Sample ID: 890-715-8

Date Collected: 05/21/21 00:00

Matrix: Solid

Date Received: 05/21/21 13:48

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/25/21 10:00	05/25/21 22:40	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/25/21 10:00	05/25/21 22:40	1
Ethylbenzene	<0.00200	U **	0.00200	mg/Kg		05/25/21 10:00	05/25/21 22:40	1
m-Xylene & p-Xylene	<0.00399	U **	0.00399	mg/Kg		05/25/21 10:00	05/25/21 22:40	1
o-Xylene	<0.00200	U **	0.00200	mg/Kg		05/25/21 10:00	05/25/21 22:40	1
Xylenes, Total	<0.00399	U **	0.00399	mg/Kg		05/25/21 10:00	05/25/21 22:40	1
Total BTEX	<0.00399	U	0.00399	mg/Kg		05/25/21 10:00	05/25/21 22:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	05/25/21 10:00	05/25/21 22:40	1
1,4-Difluorobenzene (Surr)	99		70 - 130	05/25/21 10:00	05/25/21 22:40	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		05/24/21 16:09	05/25/21 17:51	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Mizar 11 Fed Com 1H

Job ID: 890-715-1

Client Sample ID: CS8

Lab Sample ID: 890-715-8

Date Collected: 05/21/21 00:00

Matrix: Solid

Date Received: 05/21/21 13:48

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/24/21 16:09	05/25/21 17:51	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/24/21 16:09	05/25/21 17:51	1
Total TPH	<49.9	U	49.9	mg/Kg		05/24/21 16:09	05/25/21 17:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130			05/24/21 16:09	05/25/21 17:51	1
o-Terphenyl	105		70 - 130			05/24/21 16:09	05/25/21 17:51	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24.6		4.97	mg/Kg			05/26/21 19:42	1

Client Sample ID: CS9

Lab Sample ID: 890-715-9

Date Collected: 05/21/21 00:00

Matrix: Solid

Date Received: 05/21/21 13:48

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		05/25/21 10:00	05/25/21 23:01	1
Toluene	<0.00199	U	0.00199	mg/Kg		05/25/21 10:00	05/25/21 23:01	1
Ethylbenzene	<0.00199	U **	0.00199	mg/Kg		05/25/21 10:00	05/25/21 23:01	1
m-Xylene & p-Xylene	<0.00398	U **	0.00398	mg/Kg		05/25/21 10:00	05/25/21 23:01	1
o-Xylene	<0.00199	U **	0.00199	mg/Kg		05/25/21 10:00	05/25/21 23:01	1
Xylenes, Total	<0.00398	U **	0.00398	mg/Kg		05/25/21 10:00	05/25/21 23:01	1
Total BTEX	<0.00398	U	0.00398	mg/Kg		05/25/21 10:00	05/25/21 23:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130			05/25/21 10:00	05/25/21 23:01	1
1,4-Difluorobenzene (Surr)	96		70 - 130			05/25/21 10:00	05/25/21 23:01	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		05/24/21 16:09	05/25/21 18:13	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/24/21 16:09	05/25/21 18:13	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/24/21 16:09	05/25/21 18:13	1
Total TPH	<50.0	U	50.0	mg/Kg		05/24/21 16:09	05/25/21 18:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130			05/24/21 16:09	05/25/21 18:13	1
o-Terphenyl	102		70 - 130			05/24/21 16:09	05/25/21 18:13	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.98	U	4.98	mg/Kg			05/26/21 19:47	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Mizar 11 Fed Com 1H

Job ID: 890-715-1

Client Sample ID: CS10

Date Collected: 05/21/21 00:00

Date Received: 05/21/21 13:48

Lab Sample ID: 890-715-10

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/25/21 10:00	05/25/21 23:21	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/25/21 10:00	05/25/21 23:21	1
Ethylbenzene	<0.00200	U **	0.00200	mg/Kg		05/25/21 10:00	05/25/21 23:21	1
m-Xylene & p-Xylene	<0.00400	U **	0.00400	mg/Kg		05/25/21 10:00	05/25/21 23:21	1
o-Xylene	<0.00200	U **	0.00200	mg/Kg		05/25/21 10:00	05/25/21 23:21	1
Xylenes, Total	<0.00400	U **	0.00400	mg/Kg		05/25/21 10:00	05/25/21 23:21	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		05/25/21 10:00	05/25/21 23:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	05/25/21 10:00	05/25/21 23:21	1
1,4-Difluorobenzene (Surr)	94		70 - 130	05/25/21 10:00	05/25/21 23:21	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		05/24/21 16:09	05/25/21 18:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/24/21 16:09	05/25/21 18:35	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/24/21 16:09	05/25/21 18:35	1
Total TPH	<50.0	U	50.0	mg/Kg		05/24/21 16:09	05/25/21 18:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	125		70 - 130	05/24/21 16:09	05/25/21 18:35	1
o-Terphenyl	118		70 - 130	05/24/21 16:09	05/25/21 18:35	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.62		4.96	mg/Kg			05/26/21 20:02	1

Client Sample ID: CS11

Date Collected: 05/21/21 00:00

Date Received: 05/21/21 13:48

Lab Sample ID: 890-715-11

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		05/25/21 10:23	05/25/21 20:38	1
Toluene	<0.00202	U F1	0.00202	mg/Kg		05/25/21 10:23	05/25/21 20:38	1
Ethylbenzene	<0.00202	U F1	0.00202	mg/Kg		05/25/21 10:23	05/25/21 20:38	1
m-Xylene & p-Xylene	<0.00403	U F1	0.00403	mg/Kg		05/25/21 10:23	05/25/21 20:38	1
o-Xylene	<0.00202	U F1	0.00202	mg/Kg		05/25/21 10:23	05/25/21 20:38	1
Xylenes, Total	<0.00403	U F1	0.00403	mg/Kg		05/25/21 10:23	05/25/21 20:38	1
Total BTEX	<0.00403	U F1 F2	0.00403	mg/Kg		05/25/21 10:23	05/25/21 20:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	05/25/21 10:23	05/25/21 20:38	1
1,4-Difluorobenzene (Surr)	86		70 - 130	05/25/21 10:23	05/25/21 20:38	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		05/24/21 16:09	05/25/21 19:18	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Mizar 11 Fed Com 1H

Job ID: 890-715-1

Client Sample ID: CS11

Date Collected: 05/21/21 00:00

Date Received: 05/21/21 13:48

Lab Sample ID: 890-715-11

Matrix: Solid

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		05/24/21 16:09	05/25/21 19:18	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		05/24/21 16:09	05/25/21 19:18	1
Total TPH	<49.8	U	49.8	mg/Kg		05/24/21 16:09	05/25/21 19:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130			05/24/21 16:09	05/25/21 19:18	1
o-Terphenyl	106		70 - 130			05/24/21 16:09	05/25/21 19:18	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	38.0		5.00	mg/Kg			05/26/21 20:07	1

Client Sample ID: CS12

Date Collected: 05/21/21 00:00

Date Received: 05/21/21 13:48

Lab Sample ID: 890-715-12

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		05/25/21 10:23	05/25/21 21:03	1
Toluene	<0.00201	U	0.00201	mg/Kg		05/25/21 10:23	05/25/21 21:03	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		05/25/21 10:23	05/25/21 21:03	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		05/25/21 10:23	05/25/21 21:03	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		05/25/21 10:23	05/25/21 21:03	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		05/25/21 10:23	05/25/21 21:03	1
Total BTEX	<0.00402	U	0.00402	mg/Kg		05/25/21 10:23	05/25/21 21:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130			05/25/21 10:23	05/25/21 21:03	1
1,4-Difluorobenzene (Surr)	95		70 - 130			05/25/21 10:23	05/25/21 21:03	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		05/24/21 16:09	05/25/21 19:40	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/24/21 16:09	05/25/21 19:40	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/24/21 16:09	05/25/21 19:40	1
Total TPH	<49.9	U	49.9	mg/Kg		05/24/21 16:09	05/25/21 19:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130			05/24/21 16:09	05/25/21 19:40	1
o-Terphenyl	97		70 - 130			05/24/21 16:09	05/25/21 19:40	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.65		4.99	mg/Kg			05/26/21 20:11	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Mizar 11 Fed Com 1H

Job ID: 890-715-1

Client Sample ID: CS13

Lab Sample ID: 890-715-13

Date Collected: 05/21/21 00:00

Matrix: Solid

Date Received: 05/21/21 13:48

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/25/21 10:23	05/25/21 21:29	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/25/21 10:23	05/25/21 21:29	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/25/21 10:23	05/25/21 21:29	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		05/25/21 10:23	05/25/21 21:29	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/25/21 10:23	05/25/21 21:29	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		05/25/21 10:23	05/25/21 21:29	1
Total BTEX	<0.00399	U	0.00399	mg/Kg		05/25/21 10:23	05/25/21 21:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	05/25/21 10:23	05/25/21 21:29	1
1,4-Difluorobenzene (Surr)	91		70 - 130	05/25/21 10:23	05/25/21 21:29	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		05/24/21 16:09	05/25/21 20:01	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/24/21 16:09	05/25/21 20:01	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/24/21 16:09	05/25/21 20:01	1
Total TPH	<49.9	U	49.9	mg/Kg		05/24/21 16:09	05/25/21 20:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130	05/24/21 16:09	05/25/21 20:01	1
o-Terphenyl	112		70 - 130	05/24/21 16:09	05/25/21 20:01	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.3		5.02	mg/Kg			05/26/21 20:16	1

Client Sample ID: CS14

Lab Sample ID: 890-715-14

Date Collected: 05/21/21 00:00

Matrix: Solid

Date Received: 05/21/21 13:48

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		05/25/21 10:23	05/25/21 21:54	1
Toluene	<0.00199	U	0.00199	mg/Kg		05/25/21 10:23	05/25/21 21:54	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		05/25/21 10:23	05/25/21 21:54	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		05/25/21 10:23	05/25/21 21:54	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		05/25/21 10:23	05/25/21 21:54	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		05/25/21 10:23	05/25/21 21:54	1
Total BTEX	<0.00398	U	0.00398	mg/Kg		05/25/21 10:23	05/25/21 21:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130	05/25/21 10:23	05/25/21 21:54	1
1,4-Difluorobenzene (Surr)	84		70 - 130	05/25/21 10:23	05/25/21 21:54	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		05/24/21 16:09	05/25/21 20:23	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: EOR/Ridgeway Arizona Oil Corp
 Project/Site: Mizar 11 Fed Com 1H

Job ID: 890-715-1

Client Sample ID: CS14

Lab Sample ID: 890-715-14

Date Collected: 05/21/21 00:00

Matrix: Solid

Date Received: 05/21/21 13:48

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/24/21 16:09	05/25/21 20:23	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/24/21 16:09	05/25/21 20:23	1
Total TPH	<49.9	U	49.9	mg/Kg		05/24/21 16:09	05/25/21 20:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	05/24/21 16:09	05/25/21 20:23	1
o-Terphenyl	98		70 - 130	05/24/21 16:09	05/25/21 20:23	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.05		5.02	mg/Kg			05/26/21 20:21	1

Surrogate Summary

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Mizar 11 Fed Com 1H

Job ID: 890-715-1

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
820-756-A-11-G MS	Matrix Spike	110	94
820-756-A-11-H MSD	Matrix Spike Duplicate	132 S1+	87
820-756-A-11-J MS	Matrix Spike	117	2 S1-
820-756-A-11-K MSD	Matrix Spike Duplicate	105	97
890-715-1	CS1	122	101
890-715-2	CS2	124	97
890-715-3	CS3	118	99
890-715-4	CS4	124	87
890-715-5	CS5	118	98
890-715-6	CS6	124	100
890-715-7	CS7	114	97
890-715-8	CS8	113	99
890-715-9	CS9	122	96
890-715-10	CS10	113	94
890-715-11	CS11	114	86
890-715-11 MS	CS11	89	102
890-715-11 MSD	CS11	100	103
890-715-12	CS12	106	95
890-715-13	CS13	99	91
890-715-14	CS14	91	84
LCS 880-3389/1-A	Lab Control Sample	107	92
LCS 880-3415/1-A	Lab Control Sample	129	84
LCS 880-3457/1-A	Lab Control Sample	98	98
LCSD 880-3389/2-A	Lab Control Sample Dup	99	88
LCSD 880-3415/2-A	Lab Control Sample Dup	105	98
LCSD 880-3457/2-A	Lab Control Sample Dup	92	90
MB 880-3388/8	Method Blank	107	93
MB 880-3389/5-A	Method Blank	108	91
MB 880-3415/5-A	Method Blank	109	94
MB 880-3457/5-A	Method Blank	69 S1-	79
MB 880-3460/8	Method Blank	69 S1-	81

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-715-1	CS1	113	110
890-715-1 MS	CS1	105	94
890-715-1 MSD	CS1	103	93
890-715-2	CS2	100	96
890-715-3	CS3	97	95
890-715-4	CS4	106	105
890-715-5	CS5	116	112
890-715-6	CS6	104	102

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Surrogate Summary

Client: EOR/Ridgeway Arizona Oil Corp
 Project/Site: Mizar 11 Fed Com 1H

Job ID: 890-715-1

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-715-7	CS7	97	96
890-715-8	CS8	102	105
890-715-9	CS9	101	102
890-715-10	CS10	125	118
890-715-11	CS11	112	106
890-715-12	CS12	98	97
890-715-13	CS13	116	112
890-715-14	CS14	100	98
LCS 880-3429/2-A	Lab Control Sample	110	107
LCSD 880-3429/3-A	Lab Control Sample Dup	115	106
MB 880-3429/1-A	Method Blank	101	107

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

QC Sample Results

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Mizar 11 Fed Com 1H

Job ID: 890-715-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-3388/8

Matrix: Solid

Analysis Batch: 3388

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg			05/24/21 13:36	1
Toluene	<0.00200	U	0.00200	mg/Kg			05/24/21 13:36	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg			05/24/21 13:36	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg			05/24/21 13:36	1
o-Xylene	<0.00200	U	0.00200	mg/Kg			05/24/21 13:36	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg			05/24/21 13:36	1
Total BTEX	<0.00400	U	0.00400	mg/Kg			05/24/21 13:36	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130		05/24/21 13:36	1
1,4-Difluorobenzene (Surr)	93		70 - 130		05/24/21 13:36	1

Lab Sample ID: MB 880-3389/5-A

Matrix: Solid

Analysis Batch: 3388

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3389

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/24/21 13:00	05/25/21 01:12	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/24/21 13:00	05/25/21 01:12	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/24/21 13:00	05/25/21 01:12	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		05/24/21 13:00	05/25/21 01:12	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/24/21 13:00	05/25/21 01:12	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/24/21 13:00	05/25/21 01:12	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		05/24/21 13:00	05/25/21 01:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	05/24/21 13:00	05/25/21 01:12	1
1,4-Difluorobenzene (Surr)	91		70 - 130	05/24/21 13:00	05/25/21 01:12	1

Lab Sample ID: LCS 880-3389/1-A

Matrix: Solid

Analysis Batch: 3388

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3389

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08576		mg/Kg		86	70 - 130
Toluene	0.100	0.1109		mg/Kg		111	70 - 130
Ethylbenzene	0.100	0.1129		mg/Kg		113	70 - 130
m-Xylene & p-Xylene	0.200	0.2336		mg/Kg		117	70 - 130
o-Xylene	0.100	0.1165		mg/Kg		117	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	92		70 - 130

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QC Sample Results

Client: EOR/Ridgeway Arizona Oil Corp
 Project/Site: Mizar 11 Fed Com 1H

Job ID: 890-715-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-3389/2-A
 Matrix: Solid
 Analysis Batch: 3388

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 3389

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08076		mg/Kg		81	70 - 130	6	35
Toluene	0.100	0.1080		mg/Kg		108	70 - 130	3	35
Ethylbenzene	0.100	0.1103		mg/Kg		110	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.2257		mg/Kg		113	70 - 130	3	35
o-Xylene	0.100	0.1098		mg/Kg		110	70 - 130	6	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	88		70 - 130

Lab Sample ID: 820-756-A-11-G MS
 Matrix: Solid
 Analysis Batch: 3388

Client Sample ID: Matrix Spike
 Prep Type: Total/NA
 Prep Batch: 3389

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U F1	0.100	0.08179		mg/Kg		82	70 - 130
Toluene	<0.00200	U	0.100	0.08622		mg/Kg		86	70 - 130
Ethylbenzene	<0.00200	U	0.100	0.09371		mg/Kg		94	70 - 130
m-Xylene & p-Xylene	<0.00400	U	0.200	0.1810		mg/Kg		90	70 - 130
o-Xylene	<0.00200	U	0.100	0.1066		mg/Kg		106	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: 820-756-A-11-H MSD
 Matrix: Solid
 Analysis Batch: 3388

Client Sample ID: Matrix Spike Duplicate
 Prep Type: Total/NA
 Prep Batch: 3389

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U F1	0.0998	0.06302	F1	mg/Kg		63	70 - 130	26	35
Toluene	<0.00200	U	0.0998	0.08004		mg/Kg		80	70 - 130	7	35
Ethylbenzene	<0.00200	U	0.0998	0.09836		mg/Kg		99	70 - 130	5	35
m-Xylene & p-Xylene	<0.00400	U	0.200	0.1964		mg/Kg		98	70 - 130	8	35
o-Xylene	<0.00200	U	0.0998	0.1187		mg/Kg		119	70 - 130	11	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	132	S1+	70 - 130
1,4-Difluorobenzene (Surr)	87		70 - 130

Lab Sample ID: MB 880-3415/5-A
 Matrix: Solid
 Analysis Batch: 3452

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 3415

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/25/21 10:00	05/25/21 14:53	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/25/21 10:00	05/25/21 14:53	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/25/21 10:00	05/25/21 14:53	1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Mizar 11 Fed Com 1H

Job ID: 890-715-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 880-3415/5-A

Matrix: Solid

Analysis Batch: 3452

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3415

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		05/25/21 10:00	05/25/21 14:53	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/25/21 10:00	05/25/21 14:53	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/25/21 10:00	05/25/21 14:53	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		05/25/21 10:00	05/25/21 14:53	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	109		70 - 130	05/25/21 10:00	05/25/21 14:53	1
1,4-Difluorobenzene (Surr)	94		70 - 130	05/25/21 10:00	05/25/21 14:53	1

Lab Sample ID: LCS 880-3415/1-A

Matrix: Solid

Analysis Batch: 3452

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3415

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Benzene	0.100	0.07949		mg/Kg		79	70 - 130
Toluene	0.100	0.1205		mg/Kg		120	70 - 130
Ethylbenzene	0.100	0.1323	*+	mg/Kg		132	70 - 130
m-Xylene & p-Xylene	0.200	0.2835	*+	mg/Kg		142	70 - 130
o-Xylene	0.100	0.1411	*+	mg/Kg		141	70 - 130

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	129		70 - 130
1,4-Difluorobenzene (Surr)	84		70 - 130

Lab Sample ID: LCSD 880-3415/2-A

Matrix: Solid

Analysis Batch: 3452

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 3415

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec. Limits	RPD	
		Result	Qualifier					RPD	Limit
Benzene	0.100	0.1048		mg/Kg		105	70 - 130	27	35
Toluene	0.100	0.1178		mg/Kg		118	70 - 130	2	35
Ethylbenzene	0.100	0.1202		mg/Kg		120	70 - 130	10	35
m-Xylene & p-Xylene	0.200	0.2452		mg/Kg		123	70 - 130	14	35
o-Xylene	0.100	0.1206		mg/Kg		121	70 - 130	16	35

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 820-756-A-11-J MS

Matrix: Solid

Analysis Batch: 3452

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 3415

Analyte	Sample Sample		Spike Added	MS MS		Unit	D	%Rec	%Rec. Limits
	Result	Qualifier		Result	Qualifier				
Benzene	<0.00199	U	0.101	0.07367		mg/Kg		73	70 - 130
Toluene	<0.00199	U	0.101	0.09159		mg/Kg		91	70 - 130
Ethylbenzene	<0.00199	U *+	0.101	0.1031		mg/Kg		102	70 - 130
m-Xylene & p-Xylene	<0.00398	U *+	0.202	0.2080		mg/Kg		103	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Mizar 11 Fed Com 1H

Job ID: 890-715-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 820-756-A-11-J MS

Matrix: Solid

Analysis Batch: 3452

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 3415

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
o-Xylene	<0.00199	U *	0.101	0.1060		mg/Kg		105	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	117		70 - 130
1,4-Difluorobenzene (Surr)	2	S1-	70 - 130

Lab Sample ID: 820-756-A-11-K MSD

Matrix: Solid

Analysis Batch: 3452

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 3415

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.101	0.09317		mg/Kg		92	70 - 130	23	35
Toluene	<0.00199	U	0.101	0.1051		mg/Kg		104	70 - 130	14	35
Ethylbenzene	<0.00199	U *	0.101	0.1054		mg/Kg		105	70 - 130	2	35
m-Xylene & p-Xylene	<0.00398	U *	0.202	0.2165		mg/Kg		107	70 - 130	4	35
o-Xylene	<0.00199	U *	0.101	0.1061		mg/Kg		105	70 - 130	0	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: MB 880-3457/5-A

Matrix: Solid

Analysis Batch: 3460

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3457

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/25/21 10:23	05/25/21 20:13	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/25/21 10:23	05/25/21 20:13	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/25/21 10:23	05/25/21 20:13	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		05/25/21 10:23	05/25/21 20:13	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/25/21 10:23	05/25/21 20:13	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/25/21 10:23	05/25/21 20:13	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		05/25/21 10:23	05/25/21 20:13	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	69	S1-	70 - 130	05/25/21 10:23	05/25/21 20:13	1
1,4-Difluorobenzene (Surr)	79		70 - 130	05/25/21 10:23	05/25/21 20:13	1

Lab Sample ID: LCS 880-3457/1-A

Matrix: Solid

Analysis Batch: 3460

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3457

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09732		mg/Kg		97	70 - 130
Toluene	0.100	0.09447		mg/Kg		94	70 - 130
Ethylbenzene	0.100	0.08807		mg/Kg		88	70 - 130
m-Xylene & p-Xylene	0.200	0.1773		mg/Kg		89	70 - 130
o-Xylene	0.100	0.08905		mg/Kg		89	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Mizar 11 Fed Com 1H

Job ID: 890-715-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: LCSD 880-3457/2-A
Matrix: Solid
Analysis Batch: 3460Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 3457

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
							Limits	RPD		
Benzene	0.100	0.08744		mg/Kg		87	70 - 130	11	35	
Toluene	0.100	0.07677		mg/Kg		77	70 - 130	21	35	
Ethylbenzene	0.100	0.07086		mg/Kg		71	70 - 130	22	35	
m-Xylene & p-Xylene	0.200	0.1404		mg/Kg		70	70 - 130	23	35	
o-Xylene	0.100	0.07541		mg/Kg		75	70 - 130	17	35	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	92		70 - 130
1,4-Difluorobenzene (Surr)	90		70 - 130

Lab Sample ID: 890-715-11 MS
Matrix: Solid
Analysis Batch: 3460Client Sample ID: CS11
Prep Type: Total/NA
Prep Batch: 3457

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
									Limits	RPD		
Benzene	<0.00202	U	0.100	0.07000		mg/Kg		70	70 - 130			
Toluene	<0.00202	U F1	0.100	0.05818	F1	mg/Kg		58	70 - 130			
Ethylbenzene	<0.00202	U F1	0.100	0.05709	F1	mg/Kg		57	70 - 130			
m-Xylene & p-Xylene	<0.00403	U F1	0.200	0.1066	F1	mg/Kg		53	70 - 130			
o-Xylene	<0.00202	U F1	0.100	0.06050	F1	mg/Kg		60	70 - 130			

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	89		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: 890-715-11 MSD
Matrix: Solid
Analysis Batch: 3460Client Sample ID: CS11
Prep Type: Total/NA
Prep Batch: 3457

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
									Limits	RPD		
Benzene	<0.00202	U	0.0998	0.09873		mg/Kg		99	70 - 130	34	35	
Toluene	<0.00202	U F1	0.0998	0.06591	F1	mg/Kg		66	70 - 130	12	35	
Ethylbenzene	<0.00202	U F1	0.0998	0.07136		mg/Kg		72	70 - 130	22	35	
m-Xylene & p-Xylene	<0.00403	U F1	0.200	0.1340	F1	mg/Kg		67	70 - 130	23	35	
o-Xylene	<0.00202	U F1	0.0998	0.07390		mg/Kg		74	70 - 130	20	35	

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

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QC Sample Results

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Mizar 11 Fed Com 1H

Job ID: 890-715-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 880-3460/8

Matrix: Solid

Analysis Batch: 3460

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg			05/25/21 14:43	1
Toluene	<0.00200	U	0.00200	mg/Kg			05/25/21 14:43	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg			05/25/21 14:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg			05/25/21 14:43	1
o-Xylene	<0.00200	U	0.00200	mg/Kg			05/25/21 14:43	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg			05/25/21 14:43	1
Total BTEX	<0.00400	U	0.00400	mg/Kg			05/25/21 14:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	69	S1-	70 - 130		05/25/21 14:43	1
1,4-Difluorobenzene (Surr)	81		70 - 130		05/25/21 14:43	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-3429/1-A

Matrix: Solid

Analysis Batch: 3438

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3429

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		05/24/21 16:09	05/25/21 13:27	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/24/21 16:09	05/25/21 13:27	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/24/21 16:09	05/25/21 13:27	1
Total TPH	<50.0	U	50.0	mg/Kg		05/24/21 16:09	05/25/21 13:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	05/24/21 16:09	05/25/21 13:27	1
o-Terphenyl	107		70 - 130	05/24/21 16:09	05/25/21 13:27	1

Lab Sample ID: LCS 880-3429/2-A

Matrix: Solid

Analysis Batch: 3438

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3429

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	831.1		mg/Kg		83	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1099		mg/Kg		110	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	110		70 - 130
o-Terphenyl	107		70 - 130

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QC Sample Results

Client: EOR/Ridgeway Arizona Oil Corp
 Project/Site: Mizar 11 Fed Com 1H

Job ID: 890-715-1

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 880-3429/3-A
 Matrix: Solid
 Analysis Batch: 3438

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 3429

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit	
Gasoline Range Organics (GRO)-C6-C10	1000	850.2		mg/Kg		85	70 - 130	2	20	
Diesel Range Organics (Over C10-C28)	1000	1106		mg/Kg		111	70 - 130	1	20	
		LCSD	LCSD							
Surrogate		%Recovery	Qualifier	Limits						
1-Chlorooctane		115		70 - 130						
o-Terphenyl		106		70 - 130						

Lab Sample ID: 890-715-1 MS
 Matrix: Solid
 Analysis Batch: 3438

Client Sample ID: CS1
 Prep Type: Total/NA
 Prep Batch: 3429

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	878.0		mg/Kg		85	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	996	1186		mg/Kg		119	70 - 130		
		MS	MS								
Surrogate		%Recovery	Qualifier	Limits							
1-Chlorooctane		105		70 - 130							
o-Terphenyl		94		70 - 130							

Lab Sample ID: 890-715-1 MSD
 Matrix: Solid
 Analysis Batch: 3438

Client Sample ID: CS1
 Prep Type: Total/NA
 Prep Batch: 3429

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	874.8		mg/Kg		85	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<49.9	U	996	1162		mg/Kg		117	70 - 130	2	20
		MSD	MSD								
Surrogate		%Recovery	Qualifier	Limits							
1-Chlorooctane		103		70 - 130							
o-Terphenyl		93		70 - 130							

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-3419/1-A
 Matrix: Solid
 Analysis Batch: 3480

Client Sample ID: Method Blank
 Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			05/26/21 12:47	1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: EOR/Ridgeway Arizona Oil Corp
 Project/Site: Mizar 11 Fed Com 1H

Job ID: 890-715-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-3419/2-A
Matrix: Solid
Analysis Batch: 3480

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	250.0		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-3419/3-A
Matrix: Solid
Analysis Batch: 3480

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	250.1		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 890-714-A-5-C MS
Matrix: Solid
Analysis Batch: 3480

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	19.0		250	265.2		mg/Kg		98	90 - 110

Lab Sample ID: 890-714-A-5-D MSD
Matrix: Solid
Analysis Batch: 3480

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	19.0		250	265.3		mg/Kg		99	90 - 110	0	20

Lab Sample ID: MB 880-3424/1-A
Matrix: Solid
Analysis Batch: 3485

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			05/26/21 19:03	1

Lab Sample ID: LCS 880-3424/2-A
Matrix: Solid
Analysis Batch: 3485

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	254.3		mg/Kg		102	90 - 110

Lab Sample ID: LCSD 880-3424/3-A
Matrix: Solid
Analysis Batch: 3485

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	254.1		mg/Kg		102	90 - 110	0	20

Lab Sample ID: 890-715-5 MS
Matrix: Solid
Analysis Batch: 3485

Client Sample ID: CS5
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	5.53		249	255.5		mg/Kg		100	90 - 110

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QC Sample Results

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Mizar 11 Fed Com 1H

Job ID: 890-715-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-715-5 MSD
Matrix: Solid
Analysis Batch: 3485

Client Sample ID: CS5
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	5.53		249	255.5		mg/Kg		100	90 - 110	0	20

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

QC Association Summary

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Mizar 11 Fed Com 1H

Job ID: 890-715-1

GC VOA

Analysis Batch: 3388

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-715-1	CS1	Total/NA	Solid	8021B	3389
890-715-2	CS2	Total/NA	Solid	8021B	3389
MB 880-3388/8	Method Blank	Total/NA	Solid	8021B	
MB 880-3389/5-A	Method Blank	Total/NA	Solid	8021B	3389
LCS 880-3389/1-A	Lab Control Sample	Total/NA	Solid	8021B	3389
LCSD 880-3389/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	3389
820-756-A-11-G MS	Matrix Spike	Total/NA	Solid	8021B	3389
820-756-A-11-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	3389

Prep Batch: 3389

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-715-1	CS1	Total/NA	Solid	5035	
890-715-2	CS2	Total/NA	Solid	5035	
MB 880-3389/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-3389/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-3389/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
820-756-A-11-G MS	Matrix Spike	Total/NA	Solid	5035	
820-756-A-11-H MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 3415

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-715-1	CS1	Total/NA	Solid	5035	
890-715-2	CS2	Total/NA	Solid	5035	
890-715-3	CS3	Total/NA	Solid	5035	
890-715-4	CS4	Total/NA	Solid	5035	
890-715-5	CS5	Total/NA	Solid	5035	
890-715-6	CS6	Total/NA	Solid	5035	
890-715-7	CS7	Total/NA	Solid	5035	
890-715-8	CS8	Total/NA	Solid	5035	
890-715-9	CS9	Total/NA	Solid	5035	
890-715-10	CS10	Total/NA	Solid	5035	
MB 880-3415/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-3415/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-3415/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
820-756-A-11-J MS	Matrix Spike	Total/NA	Solid	5035	
820-756-A-11-K MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 3452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-715-1	CS1	Total/NA	Solid	8021B	3415
890-715-2	CS2	Total/NA	Solid	8021B	3415
890-715-3	CS3	Total/NA	Solid	8021B	3415
890-715-4	CS4	Total/NA	Solid	8021B	3415
890-715-5	CS5	Total/NA	Solid	8021B	3415
890-715-6	CS6	Total/NA	Solid	8021B	3415
890-715-7	CS7	Total/NA	Solid	8021B	3415
890-715-8	CS8	Total/NA	Solid	8021B	3415
890-715-9	CS9	Total/NA	Solid	8021B	3415
890-715-10	CS10	Total/NA	Solid	8021B	3415
MB 880-3415/5-A	Method Blank	Total/NA	Solid	8021B	3415
LCS 880-3415/1-A	Lab Control Sample	Total/NA	Solid	8021B	3415

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QC Association Summary

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Mizar 11 Fed Com 1H

Job ID: 890-715-1

GC VOA (Continued)

Analysis Batch: 3452 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-3415/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	3415
820-756-A-11-J MS	Matrix Spike	Total/NA	Solid	8021B	3415
820-756-A-11-K MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	3415

Prep Batch: 3457

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-715-11	CS11	Total/NA	Solid	5035	
890-715-12	CS12	Total/NA	Solid	5035	
890-715-13	CS13	Total/NA	Solid	5035	
890-715-14	CS14	Total/NA	Solid	5035	
MB 880-3457/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-3457/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-3457/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-715-11 MS	CS11	Total/NA	Solid	5035	
890-715-11 MSD	CS11	Total/NA	Solid	5035	

Analysis Batch: 3460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-715-11	CS11	Total/NA	Solid	8021B	3457
890-715-12	CS12	Total/NA	Solid	8021B	3457
890-715-13	CS13	Total/NA	Solid	8021B	3457
890-715-14	CS14	Total/NA	Solid	8021B	3457
MB 880-3457/5-A	Method Blank	Total/NA	Solid	8021B	3457
MB 880-3460/8	Method Blank	Total/NA	Solid	8021B	3457
LCS 880-3457/1-A	Lab Control Sample	Total/NA	Solid	8021B	3457
LCSD 880-3457/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	3457
890-715-11 MS	CS11	Total/NA	Solid	8021B	3457
890-715-11 MSD	CS11	Total/NA	Solid	8021B	3457

GC Semi VOA

Prep Batch: 3429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-715-1	CS1	Total/NA	Solid	8015NM Prep	
890-715-2	CS2	Total/NA	Solid	8015NM Prep	
890-715-3	CS3	Total/NA	Solid	8015NM Prep	
890-715-4	CS4	Total/NA	Solid	8015NM Prep	
890-715-5	CS5	Total/NA	Solid	8015NM Prep	
890-715-6	CS6	Total/NA	Solid	8015NM Prep	
890-715-7	CS7	Total/NA	Solid	8015NM Prep	
890-715-8	CS8	Total/NA	Solid	8015NM Prep	
890-715-9	CS9	Total/NA	Solid	8015NM Prep	
890-715-10	CS10	Total/NA	Solid	8015NM Prep	
890-715-11	CS11	Total/NA	Solid	8015NM Prep	
890-715-12	CS12	Total/NA	Solid	8015NM Prep	
890-715-13	CS13	Total/NA	Solid	8015NM Prep	
890-715-14	CS14	Total/NA	Solid	8015NM Prep	
MB 880-3429/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-3429/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-3429/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-715-1 MS	CS1	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Mizar 11 Fed Com 1H

Job ID: 890-715-1

GC Semi VOA (Continued)

Prep Batch: 3429 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-715-1 MSD	CS1	Total/NA	Solid	8015NM Prep	

Analysis Batch: 3438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-715-1	CS1	Total/NA	Solid	8015B NM	3429
890-715-2	CS2	Total/NA	Solid	8015B NM	3429
890-715-3	CS3	Total/NA	Solid	8015B NM	3429
890-715-4	CS4	Total/NA	Solid	8015B NM	3429
890-715-5	CS5	Total/NA	Solid	8015B NM	3429
890-715-6	CS6	Total/NA	Solid	8015B NM	3429
890-715-7	CS7	Total/NA	Solid	8015B NM	3429
890-715-8	CS8	Total/NA	Solid	8015B NM	3429
890-715-9	CS9	Total/NA	Solid	8015B NM	3429
890-715-10	CS10	Total/NA	Solid	8015B NM	3429
890-715-11	CS11	Total/NA	Solid	8015B NM	3429
890-715-12	CS12	Total/NA	Solid	8015B NM	3429
890-715-13	CS13	Total/NA	Solid	8015B NM	3429
890-715-14	CS14	Total/NA	Solid	8015B NM	3429
MB 880-3429/1-A	Method Blank	Total/NA	Solid	8015B NM	3429
LCS 880-3429/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	3429
LCSD 880-3429/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	3429
890-715-1 MS	CS1	Total/NA	Solid	8015B NM	3429
890-715-1 MSD	CS1	Total/NA	Solid	8015B NM	3429

HPLC/IC

Leach Batch: 3419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-715-1	CS1	Soluble	Solid	DI Leach	
890-715-2	CS2	Soluble	Solid	DI Leach	
890-715-3	CS3	Soluble	Solid	DI Leach	
890-715-4	CS4	Soluble	Solid	DI Leach	
MB 880-3419/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-3419/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-3419/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-714-A-5-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-714-A-5-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 3424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-715-5	CS5	Soluble	Solid	DI Leach	
890-715-6	CS6	Soluble	Solid	DI Leach	
890-715-7	CS7	Soluble	Solid	DI Leach	
890-715-8	CS8	Soluble	Solid	DI Leach	
890-715-9	CS9	Soluble	Solid	DI Leach	
890-715-10	CS10	Soluble	Solid	DI Leach	
890-715-11	CS11	Soluble	Solid	DI Leach	
890-715-12	CS12	Soluble	Solid	DI Leach	
890-715-13	CS13	Soluble	Solid	DI Leach	
890-715-14	CS14	Soluble	Solid	DI Leach	
MB 880-3424/1-A	Method Blank	Soluble	Solid	DI Leach	

Eurofins Xenco, Carlsbad

QC Association Summary

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Mizar 11 Fed Com 1H

Job ID: 890-715-1

HPLC/IC (Continued)

Leach Batch: 3424 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-3424/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-3424/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-715-5 MS	CS5	Soluble	Solid	DI Leach	
890-715-5 MSD	CS5	Soluble	Solid	DI Leach	

Analysis Batch: 3480

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-715-1	CS1	Soluble	Solid	300.0	3419
890-715-2	CS2	Soluble	Solid	300.0	3419
890-715-3	CS3	Soluble	Solid	300.0	3419
890-715-4	CS4	Soluble	Solid	300.0	3419
MB 880-3419/1-A	Method Blank	Soluble	Solid	300.0	3419
LCS 880-3419/2-A	Lab Control Sample	Soluble	Solid	300.0	3419
LCSD 880-3419/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	3419
890-714-A-5-C MS	Matrix Spike	Soluble	Solid	300.0	3419
890-714-A-5-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	3419

Analysis Batch: 3485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-715-5	CS5	Soluble	Solid	300.0	3424
890-715-6	CS6	Soluble	Solid	300.0	3424
890-715-7	CS7	Soluble	Solid	300.0	3424
890-715-8	CS8	Soluble	Solid	300.0	3424
890-715-9	CS9	Soluble	Solid	300.0	3424
890-715-10	CS10	Soluble	Solid	300.0	3424
890-715-11	CS11	Soluble	Solid	300.0	3424
890-715-12	CS12	Soluble	Solid	300.0	3424
890-715-13	CS13	Soluble	Solid	300.0	3424
890-715-14	CS14	Soluble	Solid	300.0	3424
MB 880-3424/1-A	Method Blank	Soluble	Solid	300.0	3424
LCS 880-3424/2-A	Lab Control Sample	Soluble	Solid	300.0	3424
LCSD 880-3424/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	3424
890-715-5 MS	CS5	Soluble	Solid	300.0	3424
890-715-5 MSD	CS5	Soluble	Solid	300.0	3424

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Mizar 11 Fed Com 1H

Job ID: 890-715-1

Client Sample ID: CS1

Date Collected: 05/21/21 00:00

Date Received: 05/21/21 13:48

Lab Sample ID: 890-715-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	3389	05/24/21 13:00	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3388	05/25/21 08:57	MR	XEN MID
Total/NA	Prep	5035			4.99 g	5 mL	3415	05/25/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3452	05/25/21 20:18	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	3429	05/24/21 16:09	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3438	05/25/21 14:32	AM	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	3419	05/24/21 13:30	SC	XEN MID
Soluble	Analysis	300.0		1	0 mL	1.0 mL	3480	05/26/21 15:00	CH	XEN MID

Client Sample ID: CS2

Date Collected: 05/21/21 00:00

Date Received: 05/21/21 13:48

Lab Sample ID: 890-715-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	3389	05/24/21 13:00	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3388	05/25/21 09:17	MR	XEN MID
Total/NA	Prep	5035			4.96 g	5 mL	3415	05/25/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3452	05/25/21 20:38	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	3429	05/24/21 16:09	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3438	05/25/21 15:38	AM	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	3419	05/24/21 13:30	SC	XEN MID
Soluble	Analysis	300.0		1	0 mL	1.0 mL	3480	05/26/21 15:05	CH	XEN MID

Client Sample ID: CS3

Date Collected: 05/21/21 00:00

Date Received: 05/21/21 13:48

Lab Sample ID: 890-715-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	3415	05/25/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3452	05/25/21 20:58	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	3429	05/24/21 16:09	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3438	05/25/21 15:59	AM	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	3419	05/24/21 13:30	SC	XEN MID
Soluble	Analysis	300.0		1	0 mL	1.0 mL	3480	05/26/21 15:09	CH	XEN MID

Client Sample ID: CS4

Date Collected: 05/21/21 00:00

Date Received: 05/21/21 13:48

Lab Sample ID: 890-715-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	3415	05/25/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3452	05/25/21 21:19	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	3429	05/24/21 16:09	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3438	05/25/21 16:21	AM	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Mizar 11 Fed Com 1H

Job ID: 890-715-1

Client Sample ID: CS4

Date Collected: 05/21/21 00:00

Date Received: 05/21/21 13:48

Lab Sample ID: 890-715-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.98 g	50 mL	3419	05/24/21 13:30	SC	XEN MID
Soluble	Analysis	300.0		1	0 mL	1.0 mL	3480	05/26/21 15:14	CH	XEN MID

Client Sample ID: CS5

Date Collected: 05/21/21 00:00

Date Received: 05/21/21 13:48

Lab Sample ID: 890-715-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	3415	05/25/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3452	05/25/21 21:39	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	3429	05/24/21 16:09	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3438	05/25/21 16:43	AM	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	3424	05/24/21 13:48	SC	XEN MID
Soluble	Analysis	300.0		1			3485	05/26/21 19:18	CH	XEN MID

Client Sample ID: CS6

Date Collected: 05/21/21 00:00

Date Received: 05/21/21 13:48

Lab Sample ID: 890-715-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	3415	05/25/21 13:08	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3452	05/25/21 22:00	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	3429	05/24/21 16:09	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3438	05/25/21 17:04	AM	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	3424	05/24/21 13:48	SC	XEN MID
Soluble	Analysis	300.0		1			3485	05/26/21 19:32	CH	XEN MID

Client Sample ID: CS7

Date Collected: 05/21/21 00:00

Date Received: 05/21/21 13:48

Lab Sample ID: 890-715-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	3415	05/25/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3452	05/25/21 22:20	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	3429	05/24/21 16:09	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3438	05/25/21 17:26	AM	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	3424	05/24/21 13:48	SC	XEN MID
Soluble	Analysis	300.0		1			3485	05/26/21 19:37	CH	XEN MID

Client Sample ID: CS8

Date Collected: 05/21/21 00:00

Date Received: 05/21/21 13:48

Lab Sample ID: 890-715-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	3415	05/25/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3452	05/25/21 22:40	MR	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Mizar 11 Fed Com 1H

Job ID: 890-715-1

Client Sample ID: CS8

Lab Sample ID: 890-715-8

Date Collected: 05/21/21 00:00

Matrix: Solid

Date Received: 05/21/21 13:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	3429	05/24/21 16:09	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3438	05/25/21 17:51	AM	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	3424	05/24/21 13:48	SC	XEN MID
Soluble	Analysis	300.0		1			3485	05/26/21 19:42	CH	XEN MID

Client Sample ID: CS9

Lab Sample ID: 890-715-9

Date Collected: 05/21/21 00:00

Matrix: Solid

Date Received: 05/21/21 13:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	3415	05/25/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3452	05/25/21 23:01	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	3429	05/24/21 16:09	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3438	05/25/21 18:13	AM	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	3424	05/24/21 13:48	SC	XEN MID
Soluble	Analysis	300.0		1			3485	05/26/21 19:47	CH	XEN MID

Client Sample ID: CS10

Lab Sample ID: 890-715-10

Date Collected: 05/21/21 00:00

Matrix: Solid

Date Received: 05/21/21 13:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	3415	05/25/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3452	05/25/21 23:21	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	3429	05/24/21 16:09	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3438	05/25/21 18:35	AM	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	3424	05/24/21 13:48	SC	XEN MID
Soluble	Analysis	300.0		1			3485	05/26/21 20:02	CH	XEN MID

Client Sample ID: CS11

Lab Sample ID: 890-715-11

Date Collected: 05/21/21 00:00

Matrix: Solid

Date Received: 05/21/21 13:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	3457	05/25/21 10:23	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3460	05/25/21 20:38	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	3429	05/24/21 16:09	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3438	05/25/21 19:18	AM	XEN MID
Soluble	Leach	DI Leach			5.00 g	50 mL	3424	05/24/21 13:48	SC	XEN MID
Soluble	Analysis	300.0		1			3485	05/26/21 20:07	CH	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: EOR/Ridgeway Arizona Oil Corp
 Project/Site: Mizar 11 Fed Com 1H

Job ID: 890-715-1

Client Sample ID: CS12

Date Collected: 05/21/21 00:00

Date Received: 05/21/21 13:48

Lab Sample ID: 890-715-12

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	3457	05/25/21 10:23	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3460	05/25/21 21:03	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	3429	05/24/21 16:09	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3438	05/25/21 19:40	AM	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	3424	05/24/21 13:48	SC	XEN MID
Soluble	Analysis	300.0		1			3485	05/26/21 20:11	CH	XEN MID

Client Sample ID: CS13

Date Collected: 05/21/21 00:00

Date Received: 05/21/21 13:48

Lab Sample ID: 890-715-13

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	3457	05/25/21 10:23	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3460	05/25/21 21:29	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	3429	05/24/21 16:09	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3438	05/25/21 20:01	AM	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	3424	05/24/21 13:48	SC	XEN MID
Soluble	Analysis	300.0		1			3485	05/26/21 20:16	CH	XEN MID

Client Sample ID: CS14

Date Collected: 05/21/21 00:00

Date Received: 05/21/21 13:48

Lab Sample ID: 890-715-14

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	3457	05/25/21 10:23	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3460	05/25/21 21:54	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	3429	05/24/21 16:09	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3438	05/25/21 20:23	AM	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	3424	05/24/21 13:48	SC	XEN MID
Soluble	Analysis	300.0		1			3485	05/26/21 20:21	CH	XEN MID

Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Carlsbad

Accreditation/Certification Summary

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Mizar 11 Fed Com 1H

Job ID: 890-715-1

Laboratory: Eurofins Xenco, Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

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Method Summary

Client: EOR/Ridgeway Arizona Oil Corp
 Project/Site: Mizar 11 Fed Com 1H

Job ID: 890-715-1

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440



Sample Summary

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Mizar 11 Fed Com 1H

Job ID: 890-715-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
890-715-1	CS1	Solid	05/21/21 00:00	05/21/21 13:48	
890-715-2	CS2	Solid	05/21/21 00:00	05/21/21 13:48	
890-715-3	CS3	Solid	05/21/21 00:00	05/21/21 13:48	
890-715-4	CS4	Solid	05/21/21 00:00	05/21/21 13:48	
890-715-5	CS5	Solid	05/21/21 00:00	05/21/21 13:48	
890-715-6	CS6	Solid	05/21/21 00:00	05/21/21 13:48	
890-715-7	CS7	Solid	05/21/21 00:00	05/21/21 13:48	
890-715-8	CS8	Solid	05/21/21 00:00	05/21/21 13:48	
890-715-9	CS9	Solid	05/21/21 00:00	05/21/21 13:48	
890-715-10	CS10	Solid	05/21/21 00:00	05/21/21 13:48	
890-715-11	CS11	Solid	05/21/21 00:00	05/21/21 13:48	
890-715-12	CS12	Solid	05/21/21 00:00	05/21/21 13:48	
890-715-13	CS13	Solid	05/21/21 00:00	05/21/21 13:48	
890-715-14	CS14	Solid	05/21/21 00:00	05/21/21 13:48	

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Environment Testing
Xenco

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 1 of 2

Project Manager:	Tom Bynum	Bill to: (if different)	Devon Energy
Company Name:	PIMA	Company Name:	
Address:	1601 Turner St.	Address:	
City, State ZIP:	Hobbs, NM 88220	City, State ZIP:	
Phone:		Email:	Tom@Pimaoil.com

Work Order Comments	
Program:	UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project:	
Reporting:	Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables:	EDD <input type="checkbox"/> ADaPT <input type="checkbox"/> Other:

Project Name:	Mizar II Fed Com IH	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Pres. Code		ANALYSIS REQUEST										Preservative Codes						
Project Number:		Due Date:																			None: NO	DI Water: H ₂ O
Project Location:		TAT starts the day received by the lab, if received by 4:30pm																			Cool: Cool	MeOH: Me
Sampler's Name:	S.O																				HCL: HC	HNO ₃ : HN
PO #:																					H ₂ SO ₄ : H ₂	NaOH: Na
SAMPLE RECEIPT		Temp Blank:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wet Ice:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Parameters BTEX TPH CL										 890-715 Chain of Custody		H ₃ PO ₄ : HP				
Samples Received Intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID:	2 NM-007															NaHSO ₄ : NABIS				
Cooler Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Correction Factor:	-0.2															Na ₂ S ₂ O ₃ : NaSO ₃				
Sample Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Temperature Reading:	24.4															Zn Acetate+NaOH: Zn				
Total Containers:		Corrected Temperature:	24.2															NaOH+Ascorbic Acid: SAPC				
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont																Sample Comments
CS1	Soil	5/21/21			Gr	1																
CS2																						
CS3																						
CS4																						
CS5																						
CS6																						
CS7																						
CS8																						
CS9																						
CS10																						

Total	200.7 / 6010	200.8 / 6020:	8RCRA	13PPM	Texas	11	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	SiO ₂	Na	Sr	Ti	Sn	U	V	Zn			
Circle Method(s) and Metal(s) to be analyzed	TCLP / SPLP 6010		6RCRA				Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Mn	Mo	Ni	Se	Ag	Ti	U				Hg:	1631 / 245.1 / 7470 / 7471										

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	5-21-21 1348 ²			



Environment Testing Xenco

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 2 of 2

Project Manager:	Tom Bynum	Bill to: (if different)	Devon Energy
Company Name:	PIMA	Company Name:	
Address:	1601 Turner St.	Address:	
City, State ZIP:	Hobbs, NM 88220	City, State ZIP:	Tom@Pimaoil.com
Phone:		Email:	

Work Order Comments	
Program:	UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project:	
Reporting:	Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables:	EDD <input type="checkbox"/> ADaPT <input type="checkbox"/> Other: _____

Project Name:		Turn Around		ANALYSIS REQUEST												Preservative Codes					
Mizar II Fed Com 14		<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush														None: NO DI Water: H ₂ O					
Project Number:		Due Date:														Cool: Cool MeOH: Me					
Project Location:		TAT starts the day received by the lab, if received by 4:30pm														HCL: HC HNO ₃ : HN					
Sampler's Name: S.O																H ₂ SO ₄ : H ₂ NaOH: Na					
PO #:																H ₃ PO ₄ : HP					
SAMPLE RECEIPT				Temp Blank:		Wet Ice:		Parameters BTX TPH CL												Sample Comments	
Samples Received Intact:		Yes No		Yes No																	
Cooler Custody Seals:		Yes No N/A		Thermometer ID:																	
Sample Custody Seals:		Yes No N/A		Correction Factor:																	
Total Containers:		Yes No N/A		Temperature Reading:																	
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont														
CS11		Soil	5/21/21			G	1														
CS12																					
CS13																					
CS14																					

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zn
 Circle Method(s) and Metal(s) to be analyzed: TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag TI U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	5-21-21 1345			



Eurofins Xenco, Carlsbad

1089 N Canal St.
Carlsbad NM 88220
Phone 575-988-3199 Fax: 575-988-3199

Chain of Custody Record



eurofins | Environment Testing
America

Client Information (Sub Contract Lab)		Sampler		Lab PM Taylor Holly		Carrier Tracking No(s)		COC No: 890-232 1			
Client Contact: Shipping/Receiving		Phone:		E-Mail: holly.taylor@eurofinset.com		State of Origin: New Mexico		Page: Page 1 of 2			
Company Eurofins Xenco				Accreditations Required (See note) NELAP - Texas				Job #: 890-715-1			
Address: 1211 W Florida Ave, City Midland State, Zip TX, 79701		Due Date Requested 5/27/2021		Analysis Requested						Preservation Codes A HCL M - Hexane B NaOH N None C - Zn Acetate O AsNaO2 D Nitric Acid P Na2O4S E NaHSO4 Q Na2SO3 F MeOH R Na2S2O3 G Amchlor S H2SO4 H - Ascorbic Acid T TSP Dodecahydrate I Ice U Acetone J DI Water V MCAA K EDTA W pH 4-5 L - EDA Z other (specify)	
City Midland		TAT Requested (days)									
State, Zip TX, 79701		PO #:									
Phone: 432-704-5440(Tel)		WO #:									
Email:		Project #: 89000051		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Total Number of Containers			
Project Name: Mizar 11 Fed Com 14		SSOW#:		8021B16036FP_Calc BTEX		300_ORGFM_28DDI_LEACH Chloride		8016MOD_NM/8016NM_S_Prep Full TPH			
Site:		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)			
Sample Identification - Client ID (Lab ID)								Special Instructions/Note			
CS1 (890-715-1)		5/21/21		Mountain		Solid		1			
CS2 (890-715-2)		5/21/21		Mountain		Solid		1			
CS3 (890-715-3)		5/21/21		Mountain		Solid		1			
CS4 (890-715-4)		5/21/21		Mountain		Solid		1			
CS5 (890-715-5)		5/21/21		Mountain		Solid		1			
CS6 (890-715-6)		5/21/21		Mountain		Solid		1			
CS7 (890-715-7)		5/21/21		Mountain		Solid		1			
CS8 (890-715-8)		5/21/21		Mountain		Solid		1			
CS9 (890-715-9)		5/21/21		Mountain		Solid		1			
<p>Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.</p>											
Possible Hazard Identification					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)						
Unconfirmed					<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months						
Deliverable Requested I, II III IV Other (specify)			Primary Deliverable Rank 2		Special Instructions/QC Requirements						
Empty Kit Relinquished by:			Date		Time		Method of Shipment:				
Relinquished by: <i>Over Caf</i>			Date/Time: 5-21-21		Received by: <i>[Signature]</i>		Date/Time: 5-24-21 10:00am		Company		
Relinquished by:			Date/Time:		Received by:		Date/Time:		Company		
Relinquished by:			Date/Time:		Received by:		Date/Time:		Company		
Custody Seals Intact Δ Yes Δ No		Custody Seal No			Cooler Temperature(s) °C and Other Remarks						

Login Sample Receipt Checklist

Client: EOR/Ridgeway Arizona Oil Corp

Job Number: 890-715-1

SDG Number:

Login Number: 715

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Xenco, Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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Login Sample Receipt Checklist

Client: EOR/Ridgeway Arizona Oil Corp

Job Number: 890-715-1

SDG Number:

Login Number: 715

List Number: 2

Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland

List Creation: 05/24/21 10:10 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

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Incident ID	NAPP2035734383
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: Wes Mathews Title: EHS Professional
 Signature: Wesley Mathews Date: 6/4/2021
 email: wesley.mathews@dvn.com Telephone: 575-513-8608

OCD Only

Received by: Robert Hamlet Date: 7/30/2021

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: Robert Hamlet Date: 7/30/2021

Printed Name: Robert Hamlet 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 31058

CONDITIONS

Operator: Pima Environmental Services, LLC 1601 N. Turner Hobbs, NM 88240	OGRID: 329999
	Action Number: 31058
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your closure report and final C-141 for Incident #NAPP2035734383 MIZER 11 FED COM 1H, thank you. This closure is approved.	7/30/2021