



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

June 3, 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
Diamond PWU 22 #11H
API No. 30-015-42809
GPS: Latitude 32.645343 Longitude -104.071826
UL "I", Sec. 21, T19S, R29E
Eddy County, NM
NMOCD Ref. No. NAPP2105355033
Pima Project No.: 1-73**

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 an oil/produced water release that occurred at the Diamond PWU 22 #11H (Diamond). The initial C-141 was submitted on February 17th, 2021 (Appendix C). This incident was assigned Incident ID NAPP2105355033, by the New Mexico Oil Conservation Division (NMOCD).

Site Characterization

The Diamond is located approximately eighteen (18) miles northeast of Carlsbad, NM. This spill site is in Unit I, Section 21, Township 19S, Range 29E, Latitude 32.645343, Longitude -104.071826, 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-Eolian and piedmont deposits (Holocene to middle Pleistocene), interlaced eolian sands and piedmont-slope deposits (QEP). According to the United States Department of Agriculture Natural Resources Conservation Service soil survey, the soil in this area comprises Simona-Bippus complex, 0 to 5 percent slopes (Appendix B). The drainage courses in this area are well-drained. There is a high potential for karst geology in the area of the Diamond (Figure 3).

According to the New Mexico Office of the State Engineer, depth to the nearest groundwater in this area is 60 feet below grade surface (BGS). According to the United States Geological Survey (USGS), the nearest groundwater is between 50 and 100 feet BGS. The closest waterway and is a playa located approximately 5.15 miles to the southeast 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
60'	10,000 mg/kg	2,500 mg/kg	1,000 mg/kg	50 mg/kg	10 mg/kg
High Karst	600 mg/kg	100 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

NAPP2105355033: On February 16th, 2021, ice had built up in the Baird valve causing the well to pressure up, which caused fluid to release out of the stuffing box packing. The release affected the wellpad and pasture to the north and northwest of the wellhead. The released fluids were calculated to be approximately 30 barrels (bbls) of oil and 30 bbls of produced water. Approximately 40 bbls of total fluid was recovered via vacuum truck.

Site Assessment and Soil Sampling Results

On February 22nd, 2021, 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.

2-22-21 Soil Sample Results

NMOCD Table 1 Closure Criteria 19.15.29 NMAC (Depth to Groundwater is 51-100')								
Sample Date 2-22-21		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
BG-1	0	ND	ND	ND	ND	ND	ND	ND
BG-2	0	ND	ND	ND	ND	ND	ND	ND
S1	0-6"	64	1.1	1500	15000	5500	22065	5000
	1'	ND	ND	ND	530	330	860	3600
S2	0-6"	34	0.11	910	15000	6400	22344	3600
	0-6"	0.18	ND	5.5	3100	1900	5006	1400
S3	1'	ND	ND	ND	35	ND	35	97
	2'	ND	ND	ND	32	ND	32	82
	3'	ND	ND	ND	39	ND	39	85
S4	0-6"	ND	ND	ND	1700	960	2660	780
	0-6"	ND	ND	ND	290	190	480	920
S5	1'	ND	ND	ND	62	ND	62	220
	0-6"	ND	ND	ND	370	240	610	670
S7	0-6"	ND	ND	ND	230	150	380	480
	1'	ND	ND	ND	56	ND	56	110
S8	0-6"	ND	ND	ND	49	ND	49	140

ND- Analyte Not Detected

Remediation Activities

On March 17th, 2021, Pima mobilized personnel and equipment to conduct remedial activities. We tilled and worked the entire affected area on the pad to a depth of 12"-18", then treated with a bio-remediation chemical solution. This process was repeated twice more to make sure all the contaminated soil could be neutralized with this treatment. The pasture that was affected by an overspray was treated topically with a bio-remediation chemical solution. Photographic documentation can be found in Appendix D.

On March 19th, 2021, Pima returned to the site to complete the delineation process. The laboratory results of this sampling event can be found in the following data table.

3-19-21 Soil Sample Results

NMOCD Table 1 Closure Criteria 19.15.29 NMAC (Depth to Groundwater is >100')								
Devon Energy - Diamond PWU 22 #11H								
Date 3-19-21		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
N Wall	1	ND	ND	ND	ND	ND	0	--
S Wall	1	ND	ND	ND	ND	ND	0	--
E Wall-1	1	ND	ND	ND	ND	ND	0	--
E Wall-2	1	ND	ND	ND	ND	ND	0	--
W Wall-1	1	ND	ND	ND	ND	ND	0	--
W Wall-2	1	ND	ND	ND	ND	ND	0	--

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 - Diamond PWU 22 #11H								
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	1'	ND	ND	ND	ND	ND	ND	ND
CS-2	6"	ND	ND	ND	ND	ND	ND	ND
CS-3	6"	ND	ND	ND	ND	ND	ND	ND
CS-4	6"	ND	ND	ND	ND	ND	ND	ND
CS-5	6"	ND	ND	ND	ND	ND	ND	19
CS-6	6"	ND	0.00203	ND	ND	ND	ND	7.72
CS-7	6"	ND	ND	ND	ND	ND	ND	5.73
CS-8	0-6"	ND	ND	ND	ND	ND	ND	ND
CS-9	0-6"	ND	ND	ND	ND	ND	ND	6.14
CS-10	0-6"	ND	ND	ND	ND	ND	ND	ND

ND – Analyte Not Detected

Complete Laboratory Reports can be found in Appendix E.

Closure Request

After careful review, Pima requests that this incident, NAPP2105355033, 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

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



Pima Environmental Services

Figures:

1 - Location Map

2 - Topo Map

3 - Karst Map

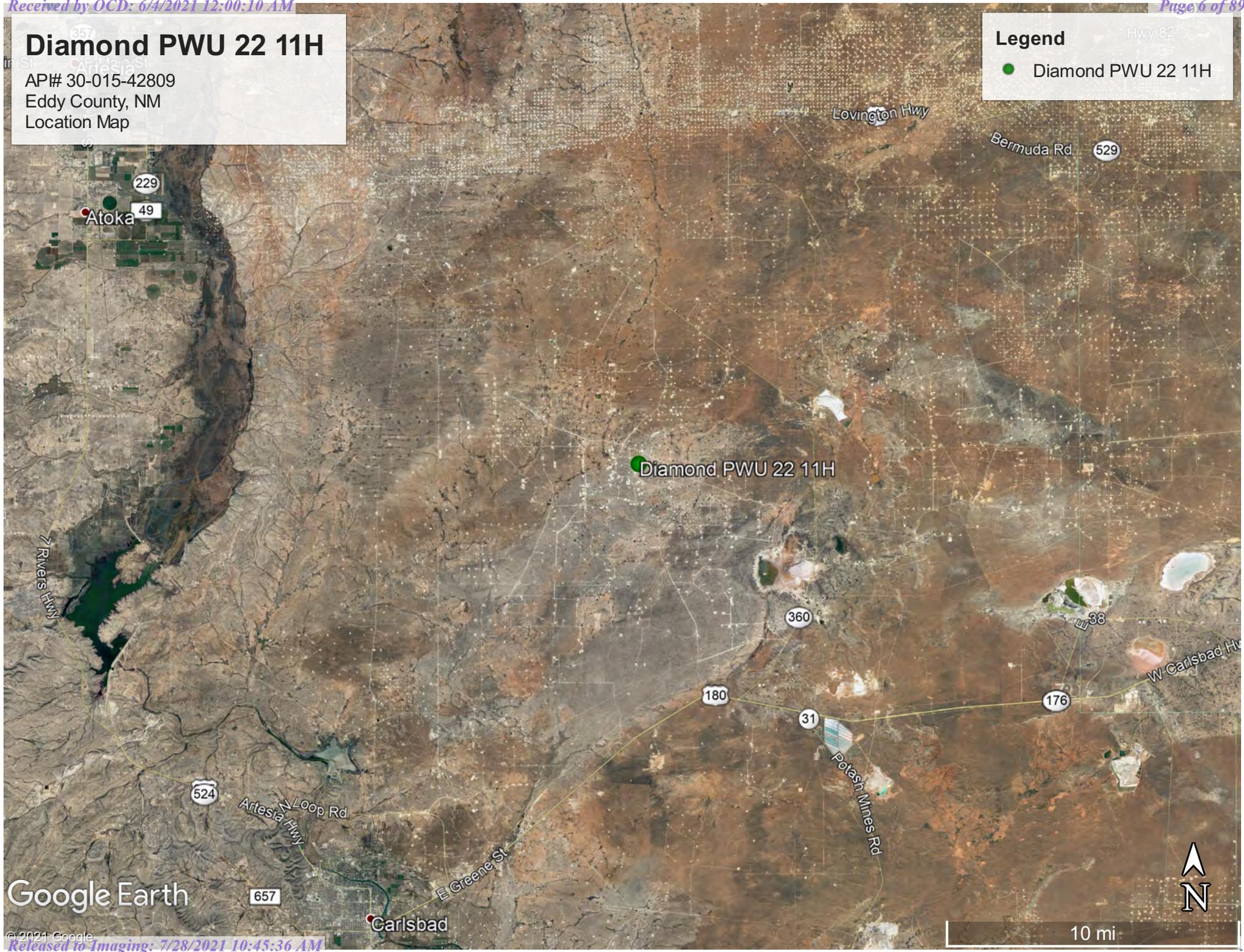
4 - Site Map

5 – Confirmation Site Map

Diamond PWU 22 11H
 AP# 30-015-42809
 Eddy County, NM
 Location Map

Legend

- Diamond PWU 22 11H



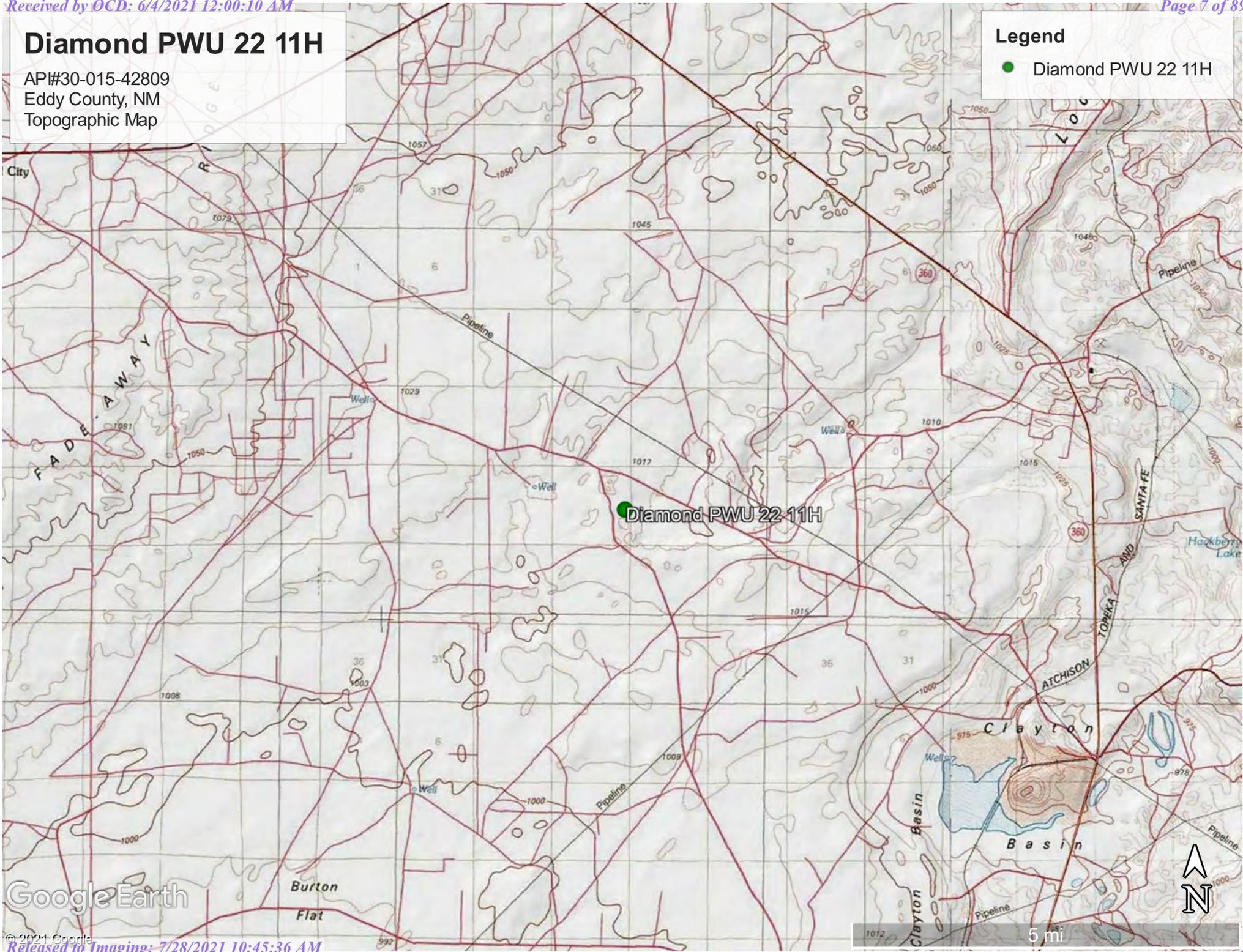
Google Earth

Diamond PWU 22 11H

API#30-015-42809
Eddy County, NM
Topographic Map

Legend

● Diamond PWU 22 11H

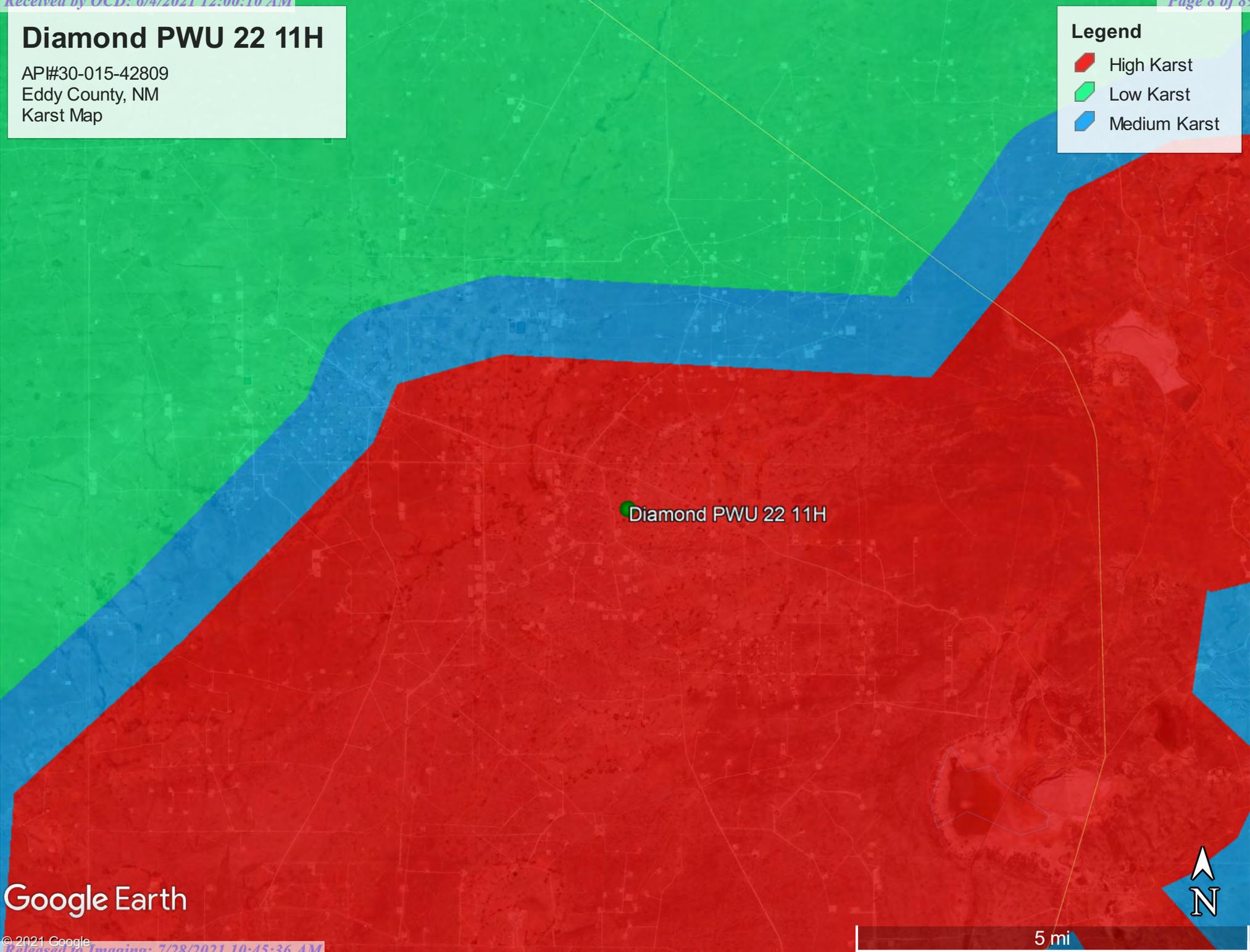


Google Earth

Diamond PWU 22 11H
API#30-015-42809
Eddy County, NM
Karst Map

Legend

-  High Karst
-  Low Karst
-  Medium Karst



Google Earth

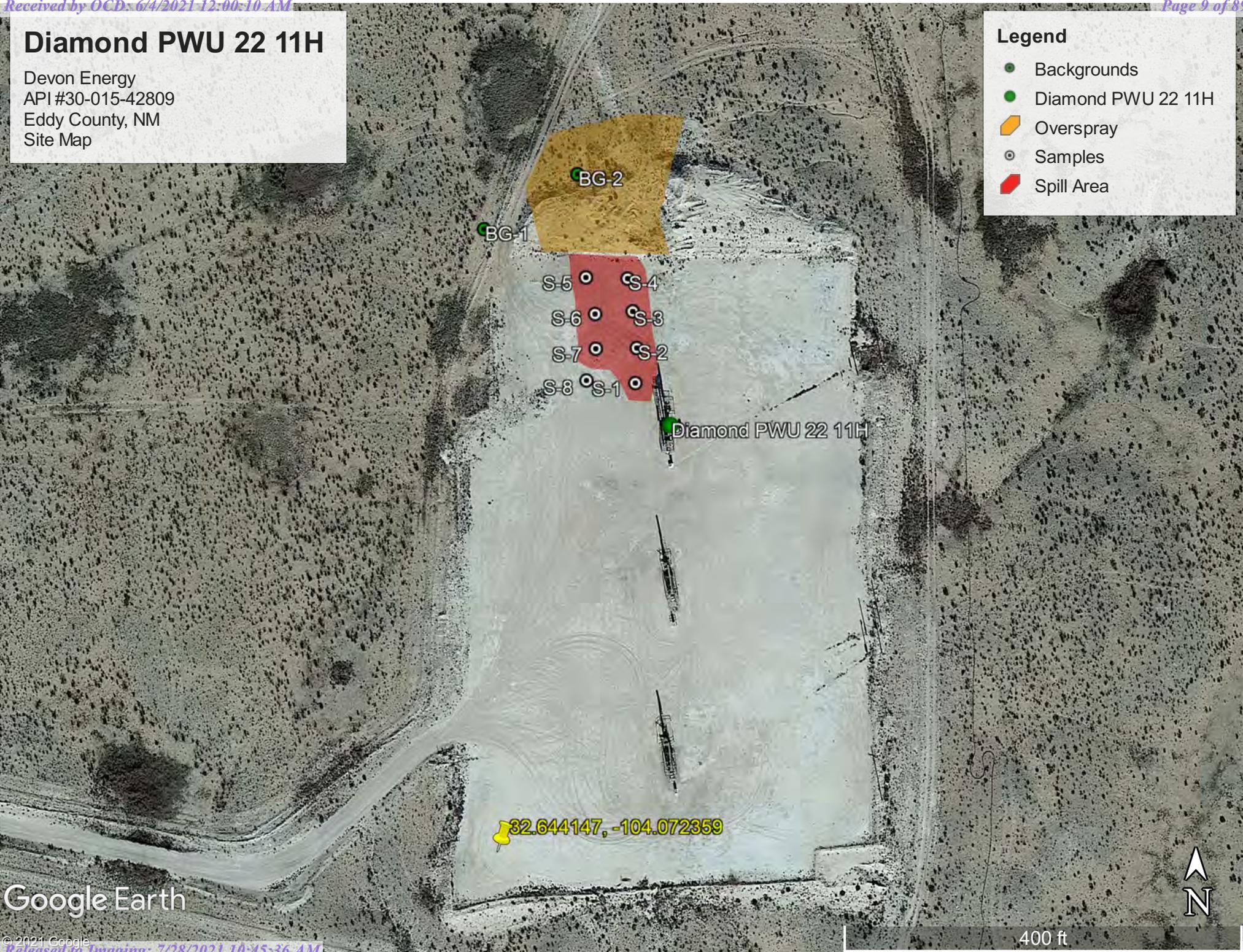


Diamond PWU 22 11H

Devon Energy
API #30-015-42809
Eddy County, NM
Site Map

Legend

- Backgrounds
- Diamond PWU 22 11H
- Overspray
- Samples
- Spill Area



Google Earth

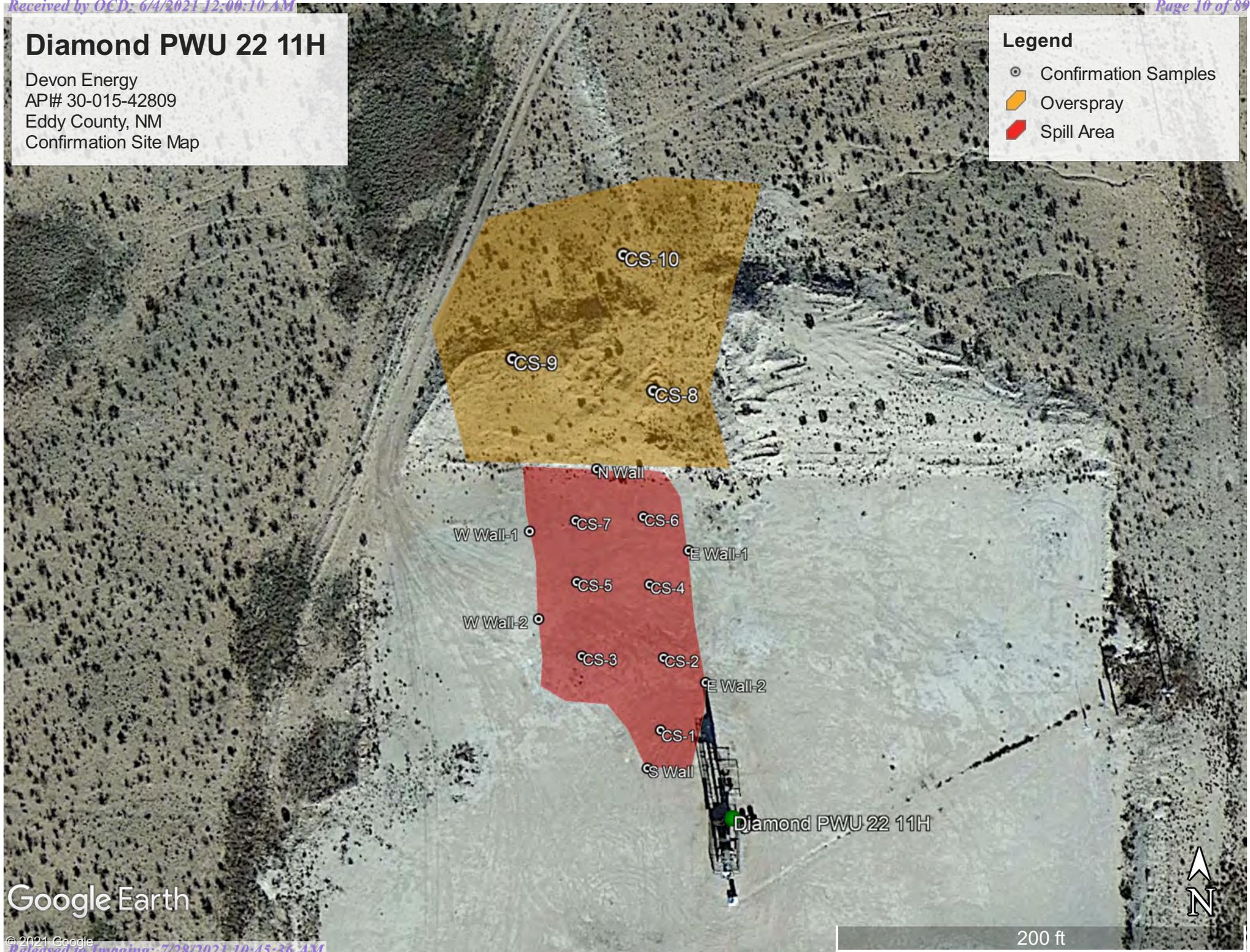
400 ft



Diamond PWU 22 11H
 Devon Energy
 AP# 30-015-42809
 Eddy County, NM
 Confirmation Site Map

Legend

- ⊙ Confirmation Samples
- 🟡 Overspray
- 🔴 Spill Area



Google Earth





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Appendix A

Water Surveys:

OSE

USGS

Surface Water Map



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 00741	CP	ED	ED	1	3	2	34	19S	29E	588030	3609533*	1906	230	60	170
CP 00681	CP	ED	ED	1	1	3	34	19S	29E	587230	3609127*	2143			
CP 00698 POD1	CP	ED	ED		3	1	03	20S	29E	587393	3608010	3263			
CP 00830 POD1	CP	LE	LE		2	1	04	20S	29E	586118	3608193*	3277	120		
CP 00739 POD1	CP	ED	ED	3	4	4	35	19S	29E	590068	3608622	3870	200	110	90

Average Depth to Water: **85 feet**

Minimum Depth: **60 feet**

Maximum Depth: **110 feet**

Record Count: 5

UTMNAD83 Radius Search (in meters):

Easting (X): 587245.47

Northing (Y): 3611270.81

Radius: 4000

*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.

2/12/21 9:04 AM

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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- [Full News](#) 
- **NOTICE: Feb 10, 2021 17:30ET - 18:23ET Data Transmissions were impacted by an unplanned system maintenance outage. Data are now processing.**

Groundwater levels for the Nation

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

Search Results -- 1 sites found

site_no list =

- 323900104052901

Minimum number of levels = 1

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

USGS 323900104052901 19S.29E.20.24111 RATLSNAKE

Available data for this site

Groundwater: Field measurements

GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°39'00", Longitude 104°05'29" NAD27

Land-surface elevation 3,306 feet above NAVD88

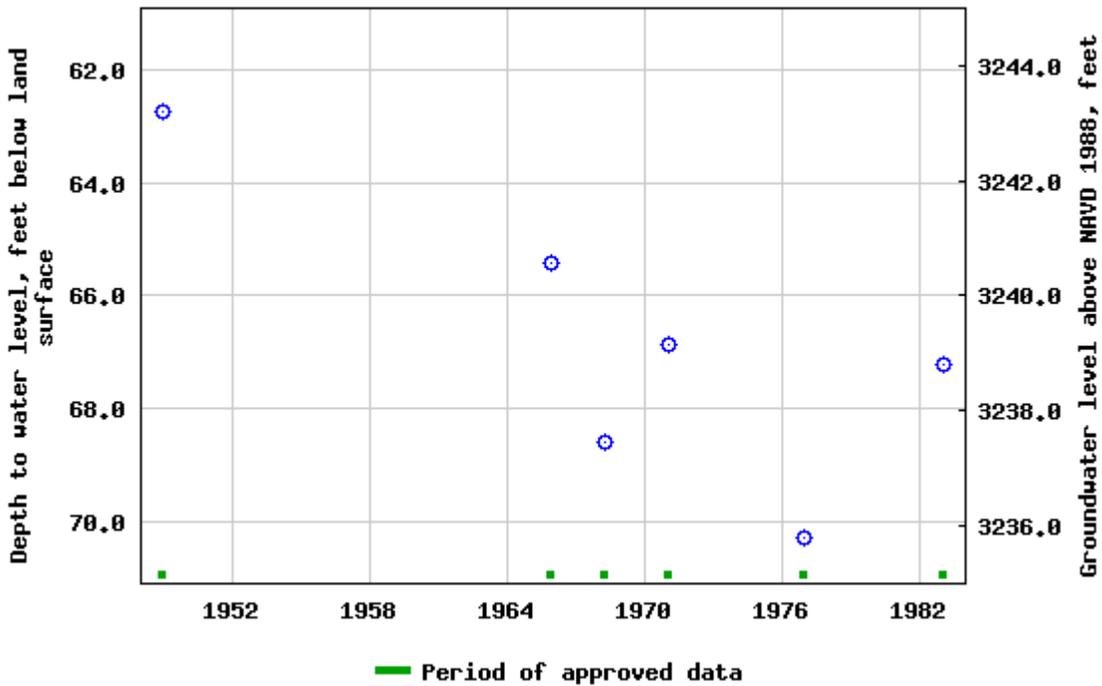
This well is completed in the Other aquifers (N9999OTHER) national aquifer.

This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

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

USGS 323900104052901 19S.29E.20.24111 RATLSNAKE



Breaks in the plot represent a gap of at least one year between field measurements.
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Title: Groundwater for USA: Water Levels

URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>



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

Page Last Modified: 2021-02-12 11:06:14 EST

0.66 0.58 nadww02



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Search USGS

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 =

- 323853104023101

Minimum number of levels = 1

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

USGS 323853104023101 19S.29E.23.23322

Available data for this site

Groundwater: Field measurements

GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°38'53", Longitude 104°02'31" NAD27

Land-surface elevation 3,273 feet above NAVD88

The depth of the well is 85 feet below land surface.

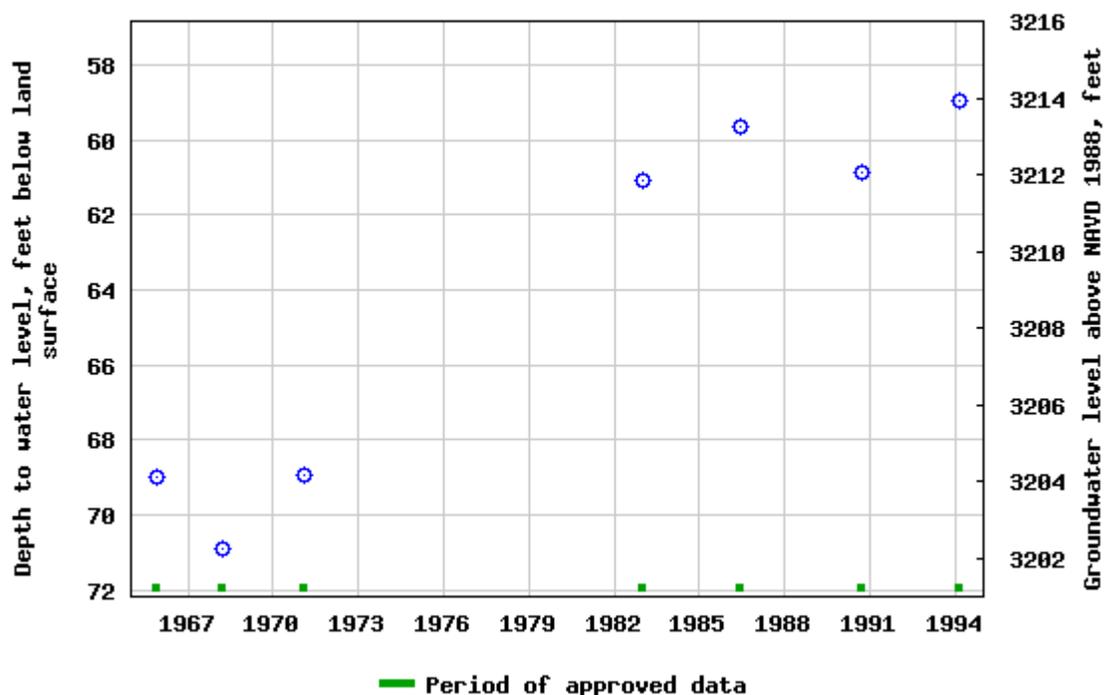
This well is completed in the Other aquifers (N9999OTHER) national aquifer.

This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

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

USGS 323853104023101 19S.29E.23.23322



Breaks in the plot represent a gap of at least one year between field measurements.
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Title: Groundwater for USA: Water Levels

URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>



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

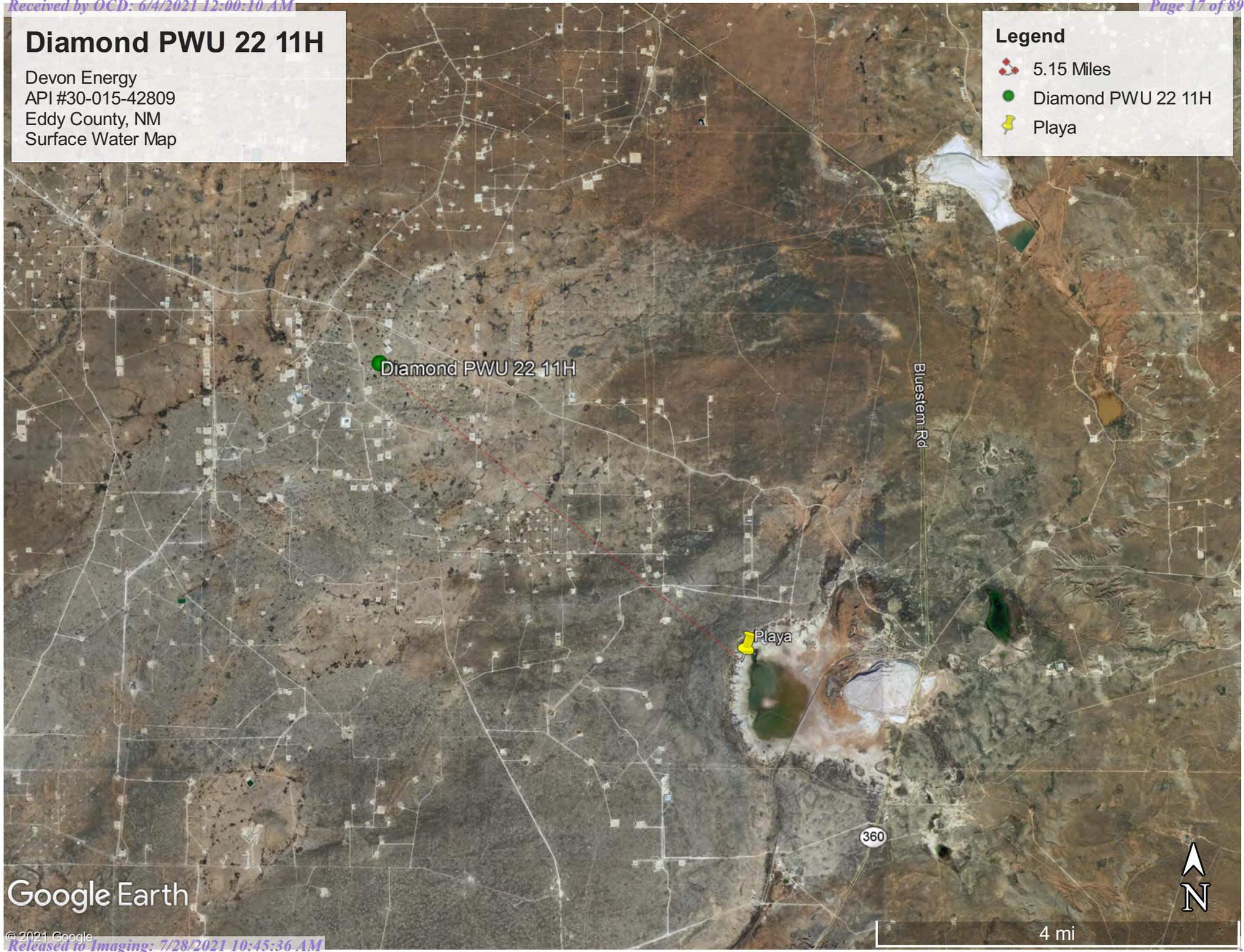
Page Last Modified: 2021-02-12 11:07:31 EST

0.64 0.56 nadww02

Diamond PWU 22 11H
 Devon Energy
 API #30-015-42809
 Eddy County, NM
 Surface Water Map

Legend

-  5.15 Miles
-  Diamond PWU 22 11H
-  Playa



Google Earth

4 mi



Pima Environmental Services

Appendix B

Soil Survey & Geological Data

FEMA Flood Map

Map Unit Description: Reeves-Gypsum land complex, 0 to 3 percent slopes---Eddy Area, New Mexico

Eddy Area, New Mexico

RG—Reeves-Gypsum land complex, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 1w5f
Elevation: 1,250 to 5,000 feet
Mean annual precipitation: 10 to 25 inches
Mean annual air temperature: 57 to 70 degrees F
Frost-free period: 190 to 235 days
Farmland classification: Not prime farmland

Map Unit Composition

Reeves and similar soils: 55 percent
Gypsum land: 30 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Reeves

Setting

Landform: Hills, plains, ridges
Landform position (two-dimensional): Backslope, footslope, shoulder, toeslope
Landform position (three-dimensional): Crest, nose slope, side slope, head slope
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Residuum weathered from gypsum

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 32 inches: clay loam
H3 - 32 to 60 inches: gypsiferous material

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: 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: 25 percent
Gypsum, maximum content: 80 percent
Maximum salinity: Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water capacity: Low (about 4.3 inches)

Map Unit Description: Reeves-Gypsum land complex, 0 to 3 percent slopes---Eddy Area, New Mexico

Interpretive groups

Land capability classification (irrigated): 3s
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: B
Ecological site: R042XC007NM - Loamy
Hydric soil rating: No

Description of Gypsum Land

Setting

Landform: Hills, plains, ridges
Landform position (two-dimensional): Backslope, footslope, shoulder, toeslope
Landform position (three-dimensional): Crest, nose slope, side slope, head slope
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Residuum weathered from gypsum

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8s
Hydric soil rating: No

Minor Components

Cottonwood

Percent of map unit: 5 percent
Ecological site: R042XC033NM - Salty Bottomland
Hydric soil rating: No

Reagan

Percent of map unit: 5 percent
Ecological site: R042XC007NM - Loamy
Hydric soil rating: No

Largo

Percent of map unit: 5 percent
Ecological site: R042XC007NM - Loamy
Hydric soil rating: No

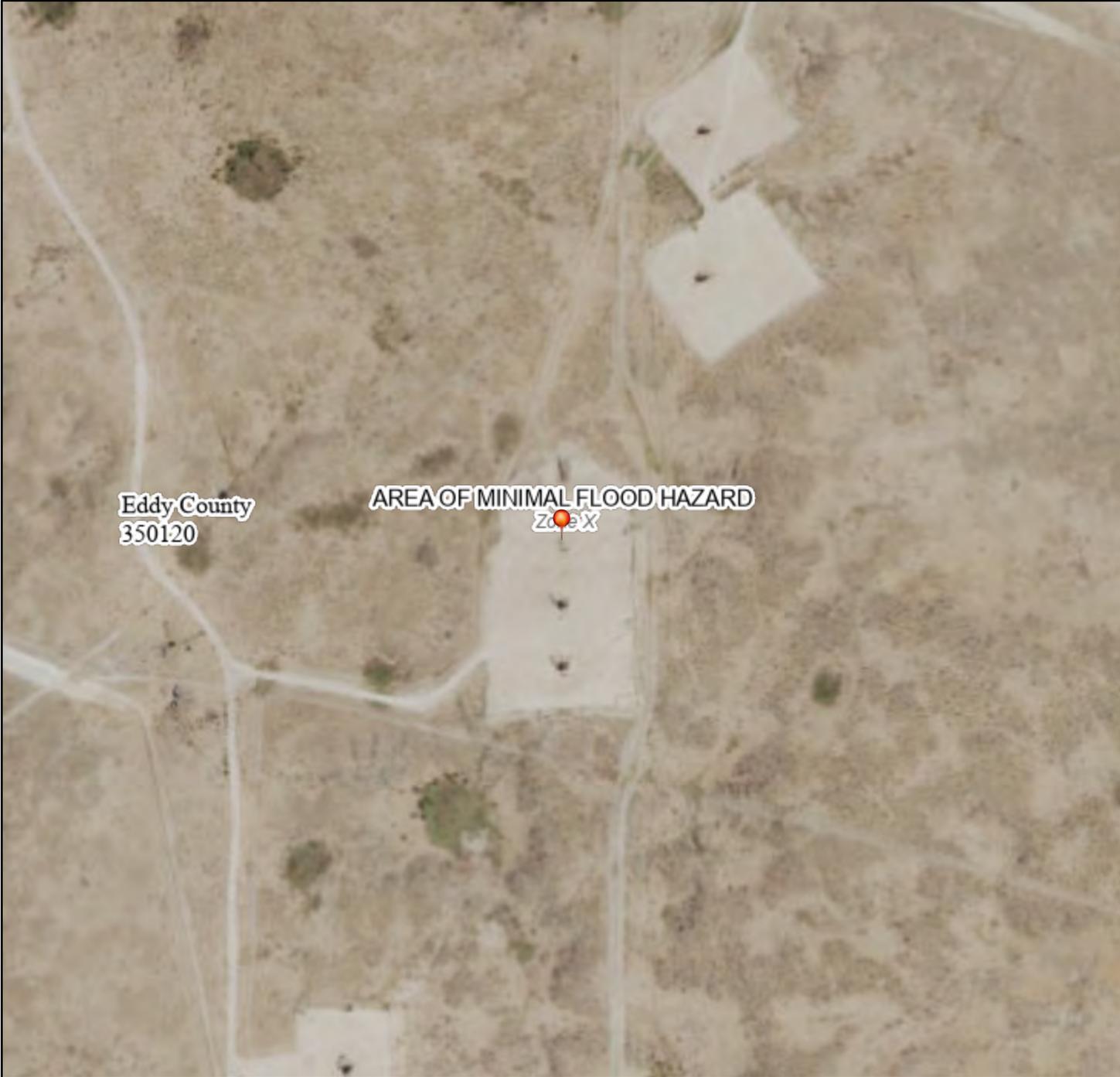
Data Source Information

Soil Survey Area: Eddy Area, New Mexico
Survey Area Data: Version 16, Jun 8, 2020

National Flood Hazard Layer FIRMette



104°4'37"W 32°38'58"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
		Area of Undetermined Flood Hazard <i>Zone D</i>
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall

OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance
		17.5 Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
OTHER FEATURES		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature

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.	



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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **2/25/2021 at 5:15 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



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

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

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

Incident ID	NAPP2105355033
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	OGRID
Contact Name	Contact Telephone
Contact email	Incident # (assigned by OCD)
Contact mailing address	

Location of Release Source

Latitude _____ Longitude _____
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Site Type
Date Release Discovered	API# (if applicable)

Unit Letter	Section	Township	Range	County

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 type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of total dissolved solids (TDS) 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

State of New Mexico
Oil Conservation Division

Page 2

Incident ID	NAPP2105355033
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? <input type="checkbox"/> Yes <input 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 type="checkbox"/> The source of the release has been stopped. <input type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input 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: _____ Title: _____ Signature: <u>Kendra DeHoyos</u> Date: _____ email: _____ Telephone: _____
<u>OCD Only</u> Received by: _____ Date: _____

Incident ID	NAPP2105355033
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?	<u>>100</u> (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 checked="" type="checkbox"/> Yes <input 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	NAPP2105355033
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: 6/1/2021

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

OCD Only

Received by: _____ Date: _____

Incident ID	NAPP2105355033
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: 6/1/2021

email: wesley.mathews@dvn.com Telephone: 575-613-8608

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















Pima Environmental Services

Appendix E

Laboratory Reports

Analytical Report

Lab Order **2102B03**

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: BG-1

Project: Diamond PWU 22 11H

Collection Date: 2/22/2021 9:00:00 AM

Lab ID: 2102B03-001

Matrix: SOIL

Received Date: 2/25/2021 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	17	9.0		mg/Kg	1	2/27/2021 2:02:09 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	2/27/2021 2:02:09 PM
Surr: DNOP	125	70-130		%Rec	1	2/27/2021 2:02:09 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/27/2021 7:32:00 PM
Surr: BFB	89.3	75.3-105		%Rec	1	2/27/2021 7:32:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	2/27/2021 7:32:00 PM
Toluene	ND	0.049		mg/Kg	1	2/27/2021 7:32:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	2/27/2021 7:32:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	2/27/2021 7:32:00 PM
Surr: 4-Bromofluorobenzene	96.1	80-120		%Rec	1	2/27/2021 7:32:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	59		mg/Kg	20	3/2/2021 3:36:02 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	J 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 **2102B03**

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: BG-2

Project: Diamond PWU 22 11H

Collection Date: 2/22/2021 9:10:00 AM

Lab ID: 2102B03-002

Matrix: SOIL

Received Date: 2/25/2021 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	2/27/2021 2:11:56 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/27/2021 2:11:56 PM
Surr: DNOP	114	70-130		%Rec	1	2/27/2021 2:11:56 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/27/2021 7:52:00 PM
Surr: BFB	88.0	75.3-105		%Rec	1	2/27/2021 7:52:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	2/27/2021 7:52:00 PM
Toluene	ND	0.050		mg/Kg	1	2/27/2021 7:52:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	2/27/2021 7:52:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	2/27/2021 7:52:00 PM
Surr: 4-Bromofluorobenzene	95.9	80-120		%Rec	1	2/27/2021 7:52:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	3/2/2021 4:38:06 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	J 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 **2102B03**

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S1 0"-6"

Project: Diamond PWU 22 11H

Collection Date: 2/22/2021 9:20:00 AM

Lab ID: 2102B03-003

Matrix: SOIL

Received Date: 2/25/2021 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	15000	470		mg/Kg	50	3/2/2021 3:24:50 AM
Motor Oil Range Organics (MRO)	5500	2300		mg/Kg	50	3/2/2021 3:24:50 AM
Surr: DNOP	0	70-130	S	%Rec	50	3/2/2021 3:24:50 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	1500	25		mg/Kg	5	2/27/2021 8:12:00 PM
Surr: BFB	426	75.3-105	S	%Rec	5	2/27/2021 8:12:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	1.1	0.12		mg/Kg	5	2/27/2021 8:12:00 PM
Toluene	16	0.25		mg/Kg	5	2/27/2021 8:12:00 PM
Ethylbenzene	11	0.25		mg/Kg	5	2/27/2021 8:12:00 PM
Xylenes, Total	64	0.50		mg/Kg	5	2/27/2021 8:12:00 PM
Surr: 4-Bromofluorobenzene	201	80-120	S	%Rec	5	2/27/2021 8:12:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	5000	150		mg/Kg	50	3/2/2021 3:48:02 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	J 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 2102B03

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S1 1'

Project: Diamond PWU 22 11H

Collection Date: 2/22/2021 9:30:00 AM

Lab ID: 2102B03-004

Matrix: SOIL

Received Date: 2/25/2021 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	530	9.6		mg/Kg	1	3/2/2021 10:36:58 AM
Motor Oil Range Organics (MRO)	330	48		mg/Kg	1	3/2/2021 10:36:58 AM
Surr: DNOP	218	70-130	S	%Rec	1	3/2/2021 10:36:58 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/1/2021 5:01:00 PM
Surr: BFB	122	75.3-105	S	%Rec	1	3/1/2021 5:01:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	3/1/2021 5:01:00 PM
Toluene	ND	0.050		mg/Kg	1	3/1/2021 5:01:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	3/1/2021 5:01:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	3/1/2021 5:01:00 PM
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	3/1/2021 5:01:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	3600	150		mg/Kg	50	3/2/2021 4:25:15 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	J	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		

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Analytical Report

Lab Order **2102B03**

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S2 0"-6"

Project: Diamond PWU 22 11H

Collection Date: 2/22/2021 9:40:00 AM

Lab ID: 2102B03-005

Matrix: SOIL

Received Date: 2/25/2021 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	15000	450		mg/Kg	50	3/2/2021 3:43:39 AM
Motor Oil Range Organics (MRO)	6400	2200		mg/Kg	50	3/2/2021 3:43:39 AM
Surr: DNOP	0	70-130	S	%Rec	50	3/2/2021 3:43:39 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	910	50		mg/Kg	10	3/1/2021 5:21:00 PM
Surr: BFB	248	75.3-105	S	%Rec	10	3/1/2021 5:21:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	0.11	0.025		mg/Kg	1	2/27/2021 8:52:00 PM
Toluene	3.5	0.050		mg/Kg	1	2/27/2021 8:52:00 PM
Ethylbenzene	4.0	0.050		mg/Kg	1	2/27/2021 8:52:00 PM
Xylenes, Total	34	1.0		mg/Kg	10	3/1/2021 5:21:00 PM
Surr: 4-Bromofluorobenzene	321	80-120	S	%Rec	1	2/27/2021 8:52:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	3600	150		mg/Kg	50	3/2/2021 4:37:39 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	J 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 **2102B03**

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S3 0"-6"

Project: Diamond PWU 22 11H

Collection Date: 2/22/2021 9:50:00 AM

Lab ID: 2102B03-006

Matrix: SOIL

Received Date: 2/25/2021 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	3100	99		mg/Kg	10	3/2/2021 11:48:14 AM
Motor Oil Range Organics (MRO)	1900	500		mg/Kg	10	3/2/2021 11:48:14 AM
Surr: DNOP	0	70-130	S	%Rec	10	3/2/2021 11:48:14 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	5.5	4.9		mg/Kg	1	3/1/2021 5:41:00 PM
Surr: BFB	114	75.3-105	S	%Rec	1	3/1/2021 5:41:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	3/1/2021 5:41:00 PM
Toluene	ND	0.049		mg/Kg	1	3/1/2021 5:41:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	3/1/2021 5:41:00 PM
Xylenes, Total	0.18	0.098		mg/Kg	1	3/1/2021 5:41:00 PM
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	3/1/2021 5:41:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	1400	60		mg/Kg	20	3/1/2021 5:20:45 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	J 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 **2102B03**

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S3 1'

Project: Diamond PWU 22 11H

Collection Date: 2/22/2021 10:00:00 AM

Lab ID: 2102B03-007

Matrix: SOIL

Received Date: 2/25/2021 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	35	9.8		mg/Kg	1	2/27/2021 7:33:58 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/27/2021 7:33:58 PM
Surr: DNOP	106	70-130		%Rec	1	2/27/2021 7:33:58 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/27/2021 11:12:00 PM
Surr: BFB	83.3	75.3-105		%Rec	1	2/27/2021 11:12:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	2/27/2021 11:12:00 PM
Toluene	ND	0.050		mg/Kg	1	2/27/2021 11:12:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	2/27/2021 11:12:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	2/27/2021 11:12:00 PM
Surr: 4-Bromofluorobenzene	92.5	80-120		%Rec	1	2/27/2021 11:12:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	97	60		mg/Kg	20	3/1/2021 5:33:10 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	J 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 2102B03

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S3 2'

Project: Diamond PWU 22 11H

Collection Date: 2/22/2021 10:10:00 AM

Lab ID: 2102B03-008

Matrix: SOIL

Received Date: 2/25/2021 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	32	9.5		mg/Kg	1	2/27/2021 8:02:36 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/27/2021 8:02:36 PM
Surr: DNOP	89.1	70-130		%Rec	1	2/27/2021 8:02:36 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/28/2021 12:12:00 AM
Surr: BFB	85.6	75.3-105		%Rec	1	2/28/2021 12:12:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	2/28/2021 12:12:00 AM
Toluene	ND	0.048		mg/Kg	1	2/28/2021 12:12:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	2/28/2021 12:12:00 AM
Xylenes, Total	ND	0.096		mg/Kg	1	2/28/2021 12:12:00 AM
Surr: 4-Bromofluorobenzene	92.9	80-120		%Rec	1	2/28/2021 12:12:00 AM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	82	60		mg/Kg	20	3/1/2021 5:45:34 PM

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

Qualifiers:

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

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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Analytical Report

Lab Order **2102B03**

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S3 3'

Project: Diamond PWU 22 11H

Collection Date: 2/22/2021 10:20:00 AM

Lab ID: 2102B03-009

Matrix: SOIL

Received Date: 2/25/2021 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	39	9.6		mg/Kg	1	2/27/2021 8:12:10 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/27/2021 8:12:10 PM
Surr: DNOP	95.5	70-130		%Rec	1	2/27/2021 8:12:10 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/28/2021 1:12:00 AM
Surr: BFB	84.7	75.3-105		%Rec	1	2/28/2021 1:12:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	2/28/2021 1:12:00 AM
Toluene	ND	0.049		mg/Kg	1	2/28/2021 1:12:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	2/28/2021 1:12:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	2/28/2021 1:12:00 AM
Surr: 4-Bromofluorobenzene	92.5	80-120		%Rec	1	2/28/2021 1:12:00 AM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	85	60		mg/Kg	20	3/1/2021 5:57:59 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	J 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 **2102B03**

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S4 0"-6"

Project: Diamond PWU 22 11H

Collection Date: 2/22/2021 10:30:00 AM

Lab ID: 2102B03-010

Matrix: SOIL

Received Date: 2/25/2021 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	1700	99		mg/Kg	10	3/2/2021 4:02:30 AM
Motor Oil Range Organics (MRO)	960	500		mg/Kg	10	3/2/2021 4:02:30 AM
Surr: DNOP	0	70-130	S	%Rec	10	3/2/2021 4:02:30 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/28/2021 1:32:00 AM
Surr: BFB	92.8	75.3-105		%Rec	1	2/28/2021 1:32:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	2/28/2021 1:32:00 AM
Toluene	ND	0.048		mg/Kg	1	2/28/2021 1:32:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	2/28/2021 1:32:00 AM
Xylenes, Total	ND	0.095		mg/Kg	1	2/28/2021 1:32:00 AM
Surr: 4-Bromofluorobenzene	96.2	80-120		%Rec	1	2/28/2021 1:32:00 AM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	780	60		mg/Kg	20	3/1/2021 6:10:24 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	J 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 **2102B03**

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S5 0"-6"

Project: Diamond PWU 22 11H

Collection Date: 2/22/2021 10:40:00 AM

Lab ID: 2102B03-011

Matrix: SOIL

Received Date: 2/25/2021 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	290	9.2		mg/Kg	1	3/2/2021 2:19:10 AM
Motor Oil Range Organics (MRO)	190	46		mg/Kg	1	3/2/2021 2:19:10 AM
Surr: DNOP	108	70-130		%Rec	1	3/2/2021 2:19:10 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/28/2021 1:51:00 AM
Surr: BFB	86.9	75.3-105		%Rec	1	2/28/2021 1:51:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	2/28/2021 1:51:00 AM
Toluene	ND	0.049		mg/Kg	1	2/28/2021 1:51:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	2/28/2021 1:51:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	2/28/2021 1:51:00 AM
Surr: 4-Bromofluorobenzene	94.1	80-120		%Rec	1	2/28/2021 1:51:00 AM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	920	60		mg/Kg	20	3/1/2021 6:22:48 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	J 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 **2102B03**

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S5 1'

Project: Diamond PWU 22 11H

Collection Date: 2/22/2021 10:50:00 AM

Lab ID: 2102B03-012

Matrix: SOIL

Received Date: 2/25/2021 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	62	9.2		mg/Kg	1	2/27/2021 8:40:53 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/27/2021 8:40:53 PM
Surr: DNOP	98.6	70-130		%Rec	1	2/27/2021 8:40:53 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/28/2021 2:11:00 AM
Surr: BFB	82.8	75.3-105		%Rec	1	2/28/2021 2:11:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	2/28/2021 2:11:00 AM
Toluene	ND	0.048		mg/Kg	1	2/28/2021 2:11:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	2/28/2021 2:11:00 AM
Xylenes, Total	ND	0.096		mg/Kg	1	2/28/2021 2:11:00 AM
Surr: 4-Bromofluorobenzene	92.1	80-120		%Rec	1	2/28/2021 2:11:00 AM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	220	60		mg/Kg	20	3/1/2021 6:35:13 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	J 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 **2102B03**

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S6 0"-6"

Project: Diamond PWU 22 11H

Collection Date: 2/22/2021 11:00:00 AM

Lab ID: 2102B03-013

Matrix: SOIL

Received Date: 2/25/2021 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	370	9.5		mg/Kg	1	2/27/2021 8:50:28 PM
Motor Oil Range Organics (MRO)	240	48		mg/Kg	1	2/27/2021 8:50:28 PM
Surr: DNOP	111	70-130		%Rec	1	2/27/2021 8:50:28 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/28/2021 2:31:00 AM
Surr: BFB	88.5	75.3-105		%Rec	1	2/28/2021 2:31:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	2/28/2021 2:31:00 AM
Toluene	ND	0.050		mg/Kg	1	2/28/2021 2:31:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	2/28/2021 2:31:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	2/28/2021 2:31:00 AM
Surr: 4-Bromofluorobenzene	95.0	80-120		%Rec	1	2/28/2021 2:31:00 AM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	670	60		mg/Kg	20	3/1/2021 6:47:37 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	J 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 **2102B03**

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S7 0"-6"

Project: Diamond PWU 22 11H

Collection Date: 2/22/2021 11:10:00 AM

Lab ID: 2102B03-014

Matrix: SOIL

Received Date: 2/25/2021 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	230	9.7		mg/Kg	1	3/2/2021 12:35:41 PM
Motor Oil Range Organics (MRO)	150	48		mg/Kg	1	3/2/2021 12:35:41 PM
Surr: DNOP	107	70-130		%Rec	1	3/2/2021 12:35:41 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/28/2021 2:51:00 AM
Surr: BFB	85.3	75.3-105		%Rec	1	2/28/2021 2:51:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	2/28/2021 2:51:00 AM
Toluene	ND	0.050		mg/Kg	1	2/28/2021 2:51:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	2/28/2021 2:51:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	2/28/2021 2:51:00 AM
Surr: 4-Bromofluorobenzene	92.7	80-120		%Rec	1	2/28/2021 2:51:00 AM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	480	60		mg/Kg	20	3/1/2021 7:00:01 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	J 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 **2102B03**

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S7 1'

Project: Diamond PWU 22 11H

Collection Date: 2/22/2021 11:20:00 AM

Lab ID: 2102B03-015

Matrix: SOIL

Received Date: 2/25/2021 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	56	9.5		mg/Kg	1	2/27/2021 9:09:40 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/27/2021 9:09:40 PM
Surr: DNOP	89.0	70-130		%Rec	1	2/27/2021 9:09:40 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/28/2021 3:11:00 AM
Surr: BFB	86.5	75.3-105		%Rec	1	2/28/2021 3:11:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	2/28/2021 3:11:00 AM
Toluene	ND	0.049		mg/Kg	1	2/28/2021 3:11:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	2/28/2021 3:11:00 AM
Xylenes, Total	ND	0.097		mg/Kg	1	2/28/2021 3:11:00 AM
Surr: 4-Bromofluorobenzene	92.5	80-120		%Rec	1	2/28/2021 3:11:00 AM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	110	60		mg/Kg	20	3/1/2021 7:12:26 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	J 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 **2102B03**

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S8 0"-6"

Project: Diamond PWU 22 11H

Collection Date: 2/22/2021 11:30:00 AM

Lab ID: 2102B03-016

Matrix: SOIL

Received Date: 2/25/2021 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	49	9.4		mg/Kg	1	2/27/2021 9:19:17 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/27/2021 9:19:17 PM
Surr: DNOP	102	70-130		%Rec	1	2/27/2021 9:19:17 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/28/2021 3:31:00 AM
Surr: BFB	89.7	75.3-105		%Rec	1	2/28/2021 3:31:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	2/28/2021 3:31:00 AM
Toluene	ND	0.047		mg/Kg	1	2/28/2021 3:31:00 AM
Ethylbenzene	ND	0.047		mg/Kg	1	2/28/2021 3:31:00 AM
Xylenes, Total	ND	0.095		mg/Kg	1	2/28/2021 3:31:00 AM
Surr: 4-Bromofluorobenzene	96.9	80-120		%Rec	1	2/28/2021 3:31:00 AM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	140	60		mg/Kg	20	3/1/2021 7:49:39 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	J 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 24, 2021

CHRIS JONES

PIMA ENVIROMENTAL

1601 N TURNER STE. 500

HOBBS, NM 88240

RE: DIAMOND PWU 22 11H

Enclosed are the results of analyses for samples received by the laboratory on 03/19/21 14:58.

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:	03/19/2021	Sampling Date:	03/19/2021
Reported:	03/24/2021	Sampling Type:	Soil
Project Name:	DIAMOND PWU 22 11H	Sampling Condition:	** (See Notes)
Project Number:	#73	Sample Received By:	Jodi Henson
Project Location:	DEVON ENERGY - EDDY CO NM		

Sample ID: NORTH WALL (H210711-01)

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	03/22/2021	ND	184	92.2	200	5.54	
DRO >C10-C28*	<10.0	10.0	03/22/2021	ND	192	96.1	200	4.99	
EXT DRO >C28-C36	<10.0	10.0	03/22/2021	ND					
<hr/>									
Surrogate: 1-Chlorooctane	72.2 %	44.3-144							
Surrogate: 1-Chlorooctadecane	69.1 %	42.2-156							

Sample ID: SOUTH WALL (H210711-02)

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	03/22/2021	ND	184	92.2	200	5.54	
DRO >C10-C28*	<10.0	10.0	03/22/2021	ND	192	96.1	200	4.99	
EXT DRO >C28-C36	<10.0	10.0	03/22/2021	ND					
<hr/>									
Surrogate: 1-Chlorooctane	74.6 %	44.3-144							
Surrogate: 1-Chlorooctadecane	72.7 %	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:	03/19/2021	Sampling Date:	03/19/2021
Reported:	03/24/2021	Sampling Type:	Soil
Project Name:	DIAMOND PWU 22 11H	Sampling Condition:	** (See Notes)
Project Number:	#73	Sample Received By:	Jodi Henson
Project Location:	DEVON ENERGY - EDDY CO NM		

Sample ID: EAST WALL - 1 (H210711-03)

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	03/22/2021	ND	184	92.2	200	5.54	
DRO >C10-C28*	<10.0	10.0	03/22/2021	ND	192	96.1	200	4.99	
EXT DRO >C28-C36	<10.0	10.0	03/22/2021	ND					
<hr/>									
Surrogate: 1-Chlorooctane	76.3 %	44.3-144							
Surrogate: 1-Chlorooctadecane	72.8 %	42.2-156							

Sample ID: EAST WALL - 2 (H210711-04)

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	03/22/2021	ND	184	92.2	200	5.54	
DRO >C10-C28*	<10.0	10.0	03/22/2021	ND	192	96.1	200	4.99	
EXT DRO >C28-C36	<10.0	10.0	03/22/2021	ND					
<hr/>									
Surrogate: 1-Chlorooctane	74.5 %	44.3-144							
Surrogate: 1-Chlorooctadecane	72.4 %	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:	03/19/2021	Sampling Date:	03/19/2021
Reported:	03/24/2021	Sampling Type:	Soil
Project Name:	DIAMOND PWU 22 11H	Sampling Condition:	** (See Notes)
Project Number:	#73	Sample Received By:	Jodi Henson
Project Location:	DEVON ENERGY - EDDY CO NM		

Sample ID: WEST WALL - 1 (H210711-05)

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	03/22/2021	ND	184	92.2	200	5.54	
DRO >C10-C28*	<10.0	10.0	03/22/2021	ND	192	96.1	200	4.99	
EXT DRO >C28-C36	<10.0	10.0	03/22/2021	ND					
<hr/>									
Surrogate: 1-Chlorooctane	69.2 %	44.3-144							
Surrogate: 1-Chlorooctadecane	68.1 %	42.2-156							

Sample ID: WEST WALL - 2 (H210711-06)

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	03/22/2021	ND	184	92.2	200	5.54	
DRO >C10-C28*	<10.0	10.0	03/22/2021	ND	192	96.1	200	4.99	
EXT DRO >C28-C36	<10.0	10.0	03/22/2021	ND					
<hr/>									
Surrogate: 1-Chlorooctane	74.7 %	44.3-144							
Surrogate: 1-Chlorooctadecane	71.3 %	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

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

Cardinal Laboratories

*=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 #500
City: HOBBS State: NM Zip: 88240
Phone #: 575-631-6977 Fax #:
Project #: 73 Project Owner: DEVON
Project Name: DIAMOND PWU 22 11H
Project Location: EDDY COUNTY
Sampler Name: MARK NEWCOMB

Table with columns: Lab I.D., Sample I.D., MATRIX (GROUNDWATER, WASTEWATER, SOIL, OIL, SLUDGE, OTHER), PRESERV., SAMPLING (DATE, TIME). Includes handwritten entries for samples 1-6 and a vertical 'TPH' label.

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: 3/19/21 Time: 14:58 Received By: Jodi Hanson
Verbal Result: [] Yes [] No Add'l Phone #:
REMARKS: Bill to Devon
Delivered By: (Circle One) Observed Temp. °C 7.4 Sample Condition Cool Intact [] Yes [] No [] No [] No
CHECKED BY: [Signature] Turnaround Time: Standard [] Rush [x] Bacteria (only) Sample Condition Cool Intact Observed Temp. °C [] Yes [] No [] Yes [] No Corrected Temp. °C

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



Environment Testing
America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-714-1
Client Project/Site: Diamond PWU 22 114

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

Attn: Chris Jones

Holly Taylor

Authorized for release by:
5/26/2021 6:20:54 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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- 7
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- 14

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Diamond PWU 22 114

Laboratory Job ID: 890-714-1

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Definitions/Glossary

Client: EOR/Ridgeway Arizona Oil Corp
 Project/Site: Diamond PWU 22 114

Job ID: 890-714-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
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.
□	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

Case Narrative

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Diamond PWU 22 114

Job ID: 890-714-1

Job ID: 890-714-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-714-1

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 <FRACTION_METHOD> were received and analyzed from an unpreserved bulk soil jar: CS1 (890-714-1), CS2 (890-714-2), CS3 (890-714-3), CS4 (890-714-4), CS5 (890-714-5), CS6 (890-714-6), CS7 (890-714-7), CS8 (890-714-8), CS9 (890-714-9) and CS10 (890-714-10).
BTEX8021

The following samples were received at the laboratory without a sample collection time documented on the chain of custody: CS1 (890-714-1), CS2 (890-714-2), CS3 (890-714-3), CS4 (890-714-4), CS5 (890-714-5), CS6 (890-714-6), CS7 (890-714-7), CS8 (890-714-8), CS9 (890-714-9) and CS10 (890-714-10). The client was contacted, and the laboratory was instructed to <CHOOSE_ONE> use a sample collection time of 12:00am OR <EXPLANATION_REQUIRED>
Samples logged as 00:00

GC VOA

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: Diamond PWU 22 114

Job ID: 890-714-1

Client Sample ID: CS1

Lab Sample ID: 890-714-1

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	<0.00198	U	0.00198	mg/Kg		05/24/21 08:38	05/24/21 16:39	1
Toluene	<0.00198	U	0.00198	mg/Kg		05/24/21 08:38	05/24/21 16:39	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		05/24/21 08:38	05/24/21 16:39	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		05/24/21 08:38	05/24/21 16:39	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		05/24/21 08:38	05/24/21 16:39	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		05/24/21 08:38	05/24/21 16:39	1
Total BTEX	<0.00397	U	0.00397	mg/Kg		05/24/21 08:38	05/24/21 16:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	05/24/21 08:38	05/24/21 16:39	1
1,4-Difluorobenzene (Surr)	114		70 - 130	05/24/21 08:38	05/24/21 16:39	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 16:28	05/25/21 04:16	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		05/24/21 16:28	05/25/21 04:16	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		05/24/21 16:28	05/25/21 04:16	1
Total TPH	<49.8	U	49.8	mg/Kg		05/24/21 16:28	05/25/21 04:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130	05/24/21 16:28	05/25/21 04:16	1
o-Terphenyl	103		70 - 130	05/24/21 16:28	05/25/21 04:16	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			05/24/21 17:15	1

Client Sample ID: CS2

Lab Sample ID: 890-714-2

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	<0.00200	U	0.00200	mg/Kg		05/24/21 08:38	05/24/21 17:00	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/24/21 08:38	05/24/21 17:00	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/24/21 08:38	05/24/21 17:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		05/24/21 08:38	05/24/21 17:00	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/24/21 08:38	05/24/21 17:00	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/24/21 08:38	05/24/21 17:00	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		05/24/21 08:38	05/24/21 17:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	05/24/21 08:38	05/24/21 17:00	1
1,4-Difluorobenzene (Surr)	109		70 - 130	05/24/21 08:38	05/24/21 17:00	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 16:28	05/25/21 04:37	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Diamond PWU 22 114

Job ID: 890-714-1

Client Sample ID: CS2

Lab Sample ID: 890-714-2

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)	<49.9	U	49.9	mg/Kg		05/24/21 16:28	05/25/21 04:37	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/24/21 16:28	05/25/21 04:37	1
Total TPH	<49.9	U	49.9	mg/Kg		05/24/21 16:28	05/25/21 04:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130			05/24/21 16:28	05/25/21 04:37	1
o-Terphenyl	103		70 - 130			05/24/21 16:28	05/25/21 04:37	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.03	U	5.03	mg/Kg			05/24/21 17:20	1

Client Sample ID: CS3

Lab Sample ID: 890-714-3

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	<0.00199	U	0.00199	mg/Kg		05/24/21 08:38	05/24/21 17:20	1
Toluene	<0.00199	U	0.00199	mg/Kg		05/24/21 08:38	05/24/21 17:20	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		05/24/21 08:38	05/24/21 17:20	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		05/24/21 08:38	05/24/21 17:20	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		05/24/21 08:38	05/24/21 17:20	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		05/24/21 08:38	05/24/21 17:20	1
Total BTEX	<0.00398	U	0.00398	mg/Kg		05/24/21 08:38	05/24/21 17:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130			05/24/21 08:38	05/24/21 17:20	1
1,4-Difluorobenzene (Surr)	125		70 - 130			05/24/21 08:38	05/24/21 17:20	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	<49.9	U	49.9	mg/Kg		05/24/21 16:28	05/25/21 04:58	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/24/21 16:28	05/25/21 04:58	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/24/21 16:28	05/25/21 04:58	1
Total TPH	<49.9	U	49.9	mg/Kg		05/24/21 16:28	05/25/21 04:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	131	S1+	70 - 130			05/24/21 16:28	05/25/21 04:58	1
o-Terphenyl	124		70 - 130			05/24/21 16:28	05/25/21 04:58	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.04	U	5.04	mg/Kg			05/24/21 17:26	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Diamond PWU 22 114

Job ID: 890-714-1

Client Sample ID: CS4

Lab Sample ID: 890-714-4

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	<0.00198	U	0.00198	mg/Kg		05/24/21 08:38	05/24/21 17:41	1
Toluene	<0.00198	U	0.00198	mg/Kg		05/24/21 08:38	05/24/21 17:41	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		05/24/21 08:38	05/24/21 17:41	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		05/24/21 08:38	05/24/21 17:41	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		05/24/21 08:38	05/24/21 17:41	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		05/24/21 08:38	05/24/21 17:41	1
Total BTEX	<0.00396	U	0.00396	mg/Kg		05/24/21 08:38	05/24/21 17:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	05/24/21 08:38	05/24/21 17:41	1
1,4-Difluorobenzene (Surr)	135	S1+	70 - 130	05/24/21 08:38	05/24/21 17:41	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 16:28	05/25/21 05:19	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/24/21 16:28	05/25/21 05:19	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/24/21 16:28	05/25/21 05:19	1
Total TPH	<49.9	U	49.9	mg/Kg		05/24/21 16:28	05/25/21 05:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130	05/24/21 16:28	05/25/21 05:19	1
o-Terphenyl	103		70 - 130	05/24/21 16:28	05/25/21 05:19	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			05/24/21 17:31	1

Client Sample ID: CS5

Lab Sample ID: 890-714-5

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	<0.00200	U	0.00200	mg/Kg		05/24/21 08:38	05/24/21 18:02	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/24/21 08:38	05/24/21 18:02	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/24/21 08:38	05/24/21 18:02	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		05/24/21 08:38	05/24/21 18:02	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/24/21 08:38	05/24/21 18:02	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/24/21 08:38	05/24/21 18:02	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		05/24/21 08:38	05/24/21 18:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	05/24/21 08:38	05/24/21 18:02	1
1,4-Difluorobenzene (Surr)	95		70 - 130	05/24/21 08:38	05/24/21 18:02	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 16:28	05/25/21 05:39	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: EOR/Ridgeway Arizona Oil Corp
 Project/Site: Diamond PWU 22 114

Job ID: 890-714-1

Client Sample ID: CS5

Lab Sample ID: 890-714-5

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)	<50.0	U	50.0	mg/Kg		05/24/21 16:28	05/25/21 05:39	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/24/21 16:28	05/25/21 05:39	1
Total TPH	<50.0	U	50.0	mg/Kg		05/24/21 16:28	05/25/21 05:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130			05/24/21 16:28	05/25/21 05:39	1
o-Terphenyl	90		70 - 130			05/24/21 16:28	05/25/21 05:39	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19.0		5.00	mg/Kg			05/26/21 14:10	1

Client Sample ID: CS6

Lab Sample ID: 890-714-6

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	0.00203		0.00200	mg/Kg		05/24/21 08:38	05/24/21 18:23	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/24/21 08:38	05/24/21 18:23	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/24/21 08:38	05/24/21 18:23	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		05/24/21 08:38	05/24/21 18:23	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/24/21 08:38	05/24/21 18:23	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		05/24/21 08:38	05/24/21 18:23	1
Total BTEX	<0.00399	U	0.00399	mg/Kg		05/24/21 08:38	05/24/21 18:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130			05/24/21 08:38	05/24/21 18:23	1
1,4-Difluorobenzene (Surr)	117		70 - 130			05/24/21 08:38	05/24/21 18:23	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 16:28	05/25/21 06:00	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/24/21 16:28	05/25/21 06:00	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/24/21 16:28	05/25/21 06:00	1
Total TPH	<50.0	U	50.0	mg/Kg		05/24/21 16:28	05/25/21 06:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130			05/24/21 16:28	05/25/21 06:00	1
o-Terphenyl	90		70 - 130			05/24/21 16:28	05/25/21 06:00	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.72		4.98	mg/Kg			05/26/21 14:25	1

Client Sample Results

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Diamond PWU 22 114

Job ID: 890-714-1

Client Sample ID: CS7

Lab Sample ID: 890-714-7

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		05/24/21 08:38	05/24/21 18:43	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/24/21 08:38	05/24/21 18:43	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/24/21 08:38	05/24/21 18:43	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		05/24/21 08:38	05/24/21 18:43	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/24/21 08:38	05/24/21 18:43	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		05/24/21 08:38	05/24/21 18:43	1
Total BTEX	<0.00399	U	0.00399	mg/Kg		05/24/21 08:38	05/24/21 18:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	05/24/21 08:38	05/24/21 18:43	1
1,4-Difluorobenzene (Surr)	103		70 - 130	05/24/21 08:38	05/24/21 18:43	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 16:28	05/25/21 06:21	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/24/21 16:28	05/25/21 06:21	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/24/21 16:28	05/25/21 06:21	1
Total TPH	<49.9	U	49.9	mg/Kg		05/24/21 16:28	05/25/21 06:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	131	S1+	70 - 130	05/24/21 16:28	05/25/21 06:21	1
o-Terphenyl	125		70 - 130	05/24/21 16:28	05/25/21 06:21	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.73		4.96	mg/Kg			05/26/21 14:30	1

Client Sample ID: CS8

Lab Sample ID: 890-714-8

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	<0.00199	U	0.00199	mg/Kg		05/24/21 08:38	05/24/21 19:04	1
Toluene	<0.00199	U	0.00199	mg/Kg		05/24/21 08:38	05/24/21 19:04	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		05/24/21 08:38	05/24/21 19:04	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		05/24/21 08:38	05/24/21 19:04	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		05/24/21 08:38	05/24/21 19:04	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		05/24/21 08:38	05/24/21 19:04	1
Total BTEX	<0.00398	U	0.00398	mg/Kg		05/24/21 08:38	05/24/21 19:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	05/24/21 08:38	05/24/21 19:04	1
1,4-Difluorobenzene (Surr)	123		70 - 130	05/24/21 08:38	05/24/21 19:04	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 16:28	05/25/21 06:42	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Diamond PWU 22 114

Job ID: 890-714-1

Client Sample ID: CS8

Lab Sample ID: 890-714-8

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)	<50.0	U	50.0	mg/Kg		05/24/21 16:28	05/25/21 06:42	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/24/21 16:28	05/25/21 06:42	1
Total TPH	<50.0	U	50.0	mg/Kg		05/24/21 16:28	05/25/21 06:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130			05/24/21 16:28	05/25/21 06:42	1
o-Terphenyl	96		70 - 130			05/24/21 16:28	05/25/21 06:42	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.99	U	4.99	mg/Kg			05/26/21 14:45	1

Client Sample ID: CS9

Lab Sample ID: 890-714-9

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	<0.00202	U	0.00202	mg/Kg		05/24/21 08:38	05/24/21 19:25	1
Toluene	<0.00202	U	0.00202	mg/Kg		05/24/21 08:38	05/24/21 19:25	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		05/24/21 08:38	05/24/21 19:25	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		05/24/21 08:38	05/24/21 19:25	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		05/24/21 08:38	05/24/21 19:25	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		05/24/21 08:38	05/24/21 19:25	1
Total BTEX	<0.00404	U	0.00404	mg/Kg		05/24/21 08:38	05/24/21 19:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130			05/24/21 08:38	05/24/21 19:25	1
1,4-Difluorobenzene (Surr)	117		70 - 130			05/24/21 08:38	05/24/21 19:25	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 16:28	05/25/21 07:03	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/24/21 16:28	05/25/21 07:03	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/24/21 16:28	05/25/21 07:03	1
Total TPH	<49.9	U	49.9	mg/Kg		05/24/21 16:28	05/25/21 07:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130			05/24/21 16:28	05/25/21 07:03	1
o-Terphenyl	79		70 - 130			05/24/21 16:28	05/25/21 07:03	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.14		4.97	mg/Kg			05/26/21 14:50	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: EOR/Ridgeway Arizona Oil Corp
 Project/Site: Diamond PWU 22 114

Job ID: 890-714-1

Client Sample ID: CS10

Lab Sample ID: 890-714-10

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	<0.00198	U	0.00198	mg/Kg		05/24/21 08:38	05/24/21 19:45	1
Toluene	<0.00198	U	0.00198	mg/Kg		05/24/21 08:38	05/24/21 19:45	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		05/24/21 08:38	05/24/21 19:45	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		05/24/21 08:38	05/24/21 19:45	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		05/24/21 08:38	05/24/21 19:45	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		05/24/21 08:38	05/24/21 19:45	1
Total BTEX	<0.00396	U	0.00396	mg/Kg		05/24/21 08:38	05/24/21 19:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	05/24/21 08:38	05/24/21 19:45	1
1,4-Difluorobenzene (Surr)	114		70 - 130	05/24/21 08:38	05/24/21 19:45	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 16:28	05/25/21 07:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/24/21 16:28	05/25/21 07:24	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/24/21 16:28	05/25/21 07:24	1
Total TPH	<50.0	U	50.0	mg/Kg		05/24/21 16:28	05/25/21 07:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130	05/24/21 16:28	05/25/21 07:24	1
o-Terphenyl	87		70 - 130	05/24/21 16:28	05/25/21 07:24	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			05/26/21 14:55	1

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Diamond PWU 22 114

Job ID: 890-714-1

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)
880-2355-A-11-F MS	Matrix Spike	89	113
880-2355-A-11-G MSD	Matrix Spike Duplicate	94	112
890-714-1	CS1	100	114
890-714-2	CS2	100	109
890-714-3	CS3	103	125
890-714-4	CS4	103	135 S1+
890-714-5	CS5	101	95
890-714-6	CS6	107	117
890-714-7	CS7	118	103
890-714-8	CS8	100	123
890-714-9	CS9	100	117
890-714-10	CS10	105	114
LCS 880-3385/1-A	Lab Control Sample	95	120
LCS 880-3385/2-A	Lab Control Sample Dup	89	113
MB 880-3385/5-A	Method Blank	94	99

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)
890-714-1	CS1	107	103
890-714-2	CS2	110	103
890-714-3	CS3	131 S1+	124
890-714-4	CS4	108	103
890-714-5	CS5	98	90
890-714-6	CS6	96	90
890-714-7	CS7	131 S1+	125
890-714-8	CS8	99	96
890-714-9	CS9	87	79
890-714-10	CS10	91	87
890-717-A-1-C MS	Matrix Spike	96	85
890-717-A-1-D MSD	Matrix Spike Duplicate	97	84
MB 880-3430/1-A	Method Blank	107	103

Surrogate Legend
1CO = 1-Chlorooctane
OTPH = o-Terphenyl

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	OTPH1
LCS 880-3430/3-A	Lab Control Sample Dup		

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Diamond PWU 22 114

Job ID: 890-714-1

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: Diamond PWU 22 114

Job ID: 890-714-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-3385/5-A
 Matrix: Solid
 Analysis Batch: 3387

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 3385

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Benzene	<0.00200	U	0.00200	mg/Kg		05/24/21 08:38	05/24/21 11:49	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/24/21 08:38	05/24/21 11:49	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/24/21 08:38	05/24/21 11:49	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		05/24/21 08:38	05/24/21 11:49	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/24/21 08:38	05/24/21 11:49	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/24/21 08:38	05/24/21 11:49	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		05/24/21 08:38	05/24/21 11:49	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	94		70 - 130	05/24/21 08:38	05/24/21 11:49	1
1,4-Difluorobenzene (Surr)	99		70 - 130	05/24/21 08:38	05/24/21 11:49	1

Lab Sample ID: LCS 880-3385/1-A
 Matrix: Solid
 Analysis Batch: 3387

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 3385

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Benzene	0.100	0.1006		mg/Kg		101	70 - 130
Toluene	0.100	0.1039		mg/Kg		104	70 - 130
Ethylbenzene	0.100	0.1029		mg/Kg		103	70 - 130
m-Xylene & p-Xylene	0.200	0.2025		mg/Kg		101	70 - 130
o-Xylene	0.100	0.09981		mg/Kg		100	70 - 130

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	120		70 - 130

Lab Sample ID: LCSD 880-3385/2-A
 Matrix: Solid
 Analysis Batch: 3387

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 3385

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec. Limits	RPD	
		Result	Qualifier					RPD	Limit
Benzene	0.100	0.09114		mg/Kg		91	70 - 130	10	35
Toluene	0.100	0.09703		mg/Kg		97	70 - 130	7	35
Ethylbenzene	0.100	0.09520		mg/Kg		95	70 - 130	8	35
m-Xylene & p-Xylene	0.200	0.1934		mg/Kg		97	70 - 130	5	35
o-Xylene	0.100	0.09293		mg/Kg		93	70 - 130	7	35

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	89		70 - 130
1,4-Difluorobenzene (Surr)	113		70 - 130

Lab Sample ID: 880-2355-A-11-F MS
 Matrix: Solid
 Analysis Batch: 3387

Client Sample ID: Matrix Spike
 Prep Type: Total/NA
 Prep Batch: 3385

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier		Result	Qualifier				
Benzene	<0.00200	U	0.101	0.08198		mg/Kg		81	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: EOR/Ridgeway Arizona Oil Corp
 Project/Site: Diamond PWU 22 114

Job ID: 890-714-1

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

Lab Sample ID: 880-2355-A-11-F MS

Client Sample ID: Matrix Spike

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 3387

Prep Batch: 3385

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier		Result	Qualifier				
Toluene	<0.00200	U	0.101	0.07849		mg/Kg		78	70 - 130
Ethylbenzene	<0.00200	U	0.101	0.07268		mg/Kg		72	70 - 130
m-Xylene & p-Xylene	<0.00399	U	0.202	0.1423		mg/Kg		71	70 - 130
o-Xylene	<0.00200	U	0.101	0.07243		mg/Kg		72	70 - 130
MS MS									
Surrogate	%Recovery	Qualifier	Limits						
4-Bromofluorobenzene (Surr)	89		70 - 130						
1,4-Difluorobenzene (Surr)	113		70 - 130						

Lab Sample ID: 880-2355-A-11-G MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 3387

Prep Batch: 3385

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD
	Result	Qualifier		Result	Qualifier					
Benzene	<0.00200	U	0.0996	0.07914		mg/Kg		79	70 - 130	4 35
Toluene	<0.00200	U	0.0996	0.07600		mg/Kg		76	70 - 130	3 35
Ethylbenzene	<0.00200	U	0.0996	0.07077		mg/Kg		71	70 - 130	3 35
m-Xylene & p-Xylene	<0.00399	U	0.199	0.1420		mg/Kg		71	70 - 130	0 35
o-Xylene	<0.00200	U	0.0996	0.07096		mg/Kg		71	70 - 130	2 35
MSD MSD										
Surrogate	%Recovery	Qualifier	Limits							
4-Bromofluorobenzene (Surr)	94		70 - 130							
1,4-Difluorobenzene (Surr)	112		70 - 130							

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

Lab Sample ID: MB 880-3430/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 3406

Prep Batch: 3430

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		05/24/21 16:28	05/25/21 11:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/24/21 16:28	05/25/21 11:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/24/21 16:28	05/25/21 11:37	1
Total TPH	<50.0	U	50.0	mg/Kg		05/24/21 16:28	05/25/21 11:37	1
MB MB								
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
1-Chlorooctane	107		70 - 130	05/24/21 16:28	05/25/21 11:37	1		
o-Terphenyl	103		70 - 130	05/24/21 16:28	05/25/21 11:37	1		

Lab Sample ID: LCSD 880-3430/3-A

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 3406

Prep Batch: 3430

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD
		Result	Qualifier					
Gasoline Range Organics (GRO)-C6-C10	1000	848.6		mg/Kg				

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QC Sample Results

Client: EOR/Ridgeway Arizona Oil Corp
 Project/Site: Diamond PWU 22 114

Job ID: 890-714-1

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

Lab Sample ID: LCSD 880-3430/3-A
Matrix: Solid
Analysis Batch: 3406

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 3430

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (Over C10-C28)	1000	995.0		mg/Kg					
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane									
o-Terphenyl									

Lab Sample ID: 890-717-A-1-C MS
Matrix: Solid
Analysis Batch: 3406

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 3430

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	833.6		mg/Kg		81	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	996	999.3		mg/Kg		100	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1-Chlorooctane	96		70 - 130								
o-Terphenyl	85		70 - 130								

Lab Sample ID: 890-717-A-1-D MSD
Matrix: Solid
Analysis Batch: 3406

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 3430

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	818.4		mg/Kg		80	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.9	U	996	1012		mg/Kg		102	70 - 130	1	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	97		70 - 130								
o-Terphenyl	84		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-3410/1-A
Matrix: Solid
Analysis Batch: 3426

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			05/24/21 14:56	1

Lab Sample ID: LCS 880-3410/2-A
Matrix: Solid
Analysis Batch: 3426

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	235.3		mg/Kg		94	90 - 110		

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QC Sample Results

Client: EOR/Ridgeway Arizona Oil Corp
 Project/Site: Diamond PWU 22 114

Job ID: 890-714-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCSD 880-3410/3-A
 Matrix: Solid
 Analysis Batch: 3426

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	231.8		mg/Kg		93	90 - 110	1	20

Lab Sample ID: 890-701-A-1-F MS
 Matrix: Solid
 Analysis Batch: 3426

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	36.0		250	278.1		mg/Kg		97	90 - 110

Lab Sample ID: 890-701-A-1-G MSD
 Matrix: Solid
 Analysis Batch: 3426

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	36.0		250	278.4		mg/Kg		97	90 - 110	0	20

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

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: 890-714-5 MS
 Matrix: Solid
 Analysis Batch: 3480

Client Sample ID: CS5
 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: 890-714-5 MSD
 Matrix: Solid
 Analysis Batch: 3480

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	19.0		250	265.3		mg/Kg		99	90 - 110	0	20

Eurofins Xenco, Carlsbad

QC Association Summary

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Diamond PWU 22 114

Job ID: 890-714-1

GC VOA

Prep Batch: 3385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-714-1	CS1	Total/NA	Solid	5035	
890-714-2	CS2	Total/NA	Solid	5035	
890-714-3	CS3	Total/NA	Solid	5035	
890-714-4	CS4	Total/NA	Solid	5035	
890-714-5	CS5	Total/NA	Solid	5035	
890-714-6	CS6	Total/NA	Solid	5035	
890-714-7	CS7	Total/NA	Solid	5035	
890-714-8	CS8	Total/NA	Solid	5035	
890-714-9	CS9	Total/NA	Solid	5035	
890-714-10	CS10	Total/NA	Solid	5035	
MB 880-3385/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-3385/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-3385/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-2355-A-11-F MS	Matrix Spike	Total/NA	Solid	5035	
880-2355-A-11-G MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 3387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-714-1	CS1	Total/NA	Solid	8021B	3385
890-714-2	CS2	Total/NA	Solid	8021B	3385
890-714-3	CS3	Total/NA	Solid	8021B	3385
890-714-4	CS4	Total/NA	Solid	8021B	3385
890-714-5	CS5	Total/NA	Solid	8021B	3385
890-714-6	CS6	Total/NA	Solid	8021B	3385
890-714-7	CS7	Total/NA	Solid	8021B	3385
890-714-8	CS8	Total/NA	Solid	8021B	3385
890-714-9	CS9	Total/NA	Solid	8021B	3385
890-714-10	CS10	Total/NA	Solid	8021B	3385
MB 880-3385/5-A	Method Blank	Total/NA	Solid	8021B	3385
LCS 880-3385/1-A	Lab Control Sample	Total/NA	Solid	8021B	3385
LCSD 880-3385/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	3385
880-2355-A-11-F MS	Matrix Spike	Total/NA	Solid	8021B	3385
880-2355-A-11-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	3385

GC Semi VOA

Analysis Batch: 3406

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-714-1	CS1	Total/NA	Solid	8015B NM	3430
890-714-2	CS2	Total/NA	Solid	8015B NM	3430
890-714-3	CS3	Total/NA	Solid	8015B NM	3430
890-714-4	CS4	Total/NA	Solid	8015B NM	3430
890-714-5	CS5	Total/NA	Solid	8015B NM	3430
890-714-6	CS6	Total/NA	Solid	8015B NM	3430
890-714-7	CS7	Total/NA	Solid	8015B NM	3430
890-714-8	CS8	Total/NA	Solid	8015B NM	3430
890-714-9	CS9	Total/NA	Solid	8015B NM	3430
890-714-10	CS10	Total/NA	Solid	8015B NM	3430
MB 880-3430/1-A	Method Blank	Total/NA	Solid	8015B NM	3430
LCSD 880-3430/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	3430
890-717-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	3430

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QC Association Summary

Client: EOR/Ridgeway Arizona Oil Corp
 Project/Site: Diamond PWU 22 114

Job ID: 890-714-1

GC Semi VOA (Continued)

Analysis Batch: 3406 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-717-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	3430

Prep Batch: 3430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-714-1	CS1	Total/NA	Solid	8015NM Prep	
890-714-2	CS2	Total/NA	Solid	8015NM Prep	
890-714-3	CS3	Total/NA	Solid	8015NM Prep	
890-714-4	CS4	Total/NA	Solid	8015NM Prep	
890-714-5	CS5	Total/NA	Solid	8015NM Prep	
890-714-6	CS6	Total/NA	Solid	8015NM Prep	
890-714-7	CS7	Total/NA	Solid	8015NM Prep	
890-714-8	CS8	Total/NA	Solid	8015NM Prep	
890-714-9	CS9	Total/NA	Solid	8015NM Prep	
890-714-10	CS10	Total/NA	Solid	8015NM Prep	
MB 880-3430/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-3430/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-717-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-717-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 3410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-714-1	CS1	Soluble	Solid	DI Leach	
890-714-2	CS2	Soluble	Solid	DI Leach	
890-714-3	CS3	Soluble	Solid	DI Leach	
890-714-4	CS4	Soluble	Solid	DI Leach	
MB 880-3410/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-3410/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCS 880-3410/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-701-A-1-F MS	Matrix Spike	Soluble	Solid	DI Leach	
890-701-A-1-G MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 3419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-714-5	CS5	Soluble	Solid	DI Leach	
890-714-6	CS6	Soluble	Solid	DI Leach	
890-714-7	CS7	Soluble	Solid	DI Leach	
890-714-8	CS8	Soluble	Solid	DI Leach	
890-714-9	CS9	Soluble	Solid	DI Leach	
890-714-10	CS10	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	
LCS 880-3419/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-714-5 MS	CS5	Soluble	Solid	DI Leach	
890-714-5 MSD	CS5	Soluble	Solid	DI Leach	

Analysis Batch: 3426

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-714-1	CS1	Soluble	Solid	300.0	3410
890-714-2	CS2	Soluble	Solid	300.0	3410

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QC Association Summary

Client: EOR/Ridgeway Arizona Oil Corp
 Project/Site: Diamond PWU 22 114

Job ID: 890-714-1

HPLC/IC (Continued)

Analysis Batch: 3426 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-714-3	CS3	Soluble	Solid	300.0	3410
890-714-4	CS4	Soluble	Solid	300.0	3410
MB 880-3410/1-A	Method Blank	Soluble	Solid	300.0	3410
LCS 880-3410/2-A	Lab Control Sample	Soluble	Solid	300.0	3410
LCSD 880-3410/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	3410
890-701-A-1-F MS	Matrix Spike	Soluble	Solid	300.0	3410
890-701-A-1-G MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	3410

Analysis Batch: 3480

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-714-5	CS5	Soluble	Solid	300.0	3419
890-714-6	CS6	Soluble	Solid	300.0	3419
890-714-7	CS7	Soluble	Solid	300.0	3419
890-714-8	CS8	Soluble	Solid	300.0	3419
890-714-9	CS9	Soluble	Solid	300.0	3419
890-714-10	CS10	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
890-714-5 MS	CS5	Soluble	Solid	300.0	3419
890-714-5 MSD	CS5	Soluble	Solid	300.0	3419

Lab Chronicle

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Diamond PWU 22 114

Job ID: 890-714-1

Client Sample ID: CS1

Lab Sample ID: 890-714-1

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			5.04 g	5 mL	3385	05/24/21 08:38	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3387	05/24/21 16:39	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	3430	05/24/21 16:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3406	05/25/21 04:16	AM	XEN MID
Soluble	Leach	DI Leach			5.00 g	50 mL	3410	05/24/21 11:24	SC	XEN MID
Soluble	Analysis	300.0		1			3426	05/24/21 17:15	CH	XEN MID

Client Sample ID: CS2

Lab Sample ID: 890-714-2

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	3385	05/24/21 08:38	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3387	05/24/21 17:00	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	3430	05/24/21 16:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3406	05/25/21 04:37	AM	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	3410	05/24/21 11:24	SC	XEN MID
Soluble	Analysis	300.0		1			3426	05/24/21 17:20	CH	XEN MID

Client Sample ID: CS3

Lab Sample ID: 890-714-3

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			5.03 g	5 mL	3385	05/24/21 08:38	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3387	05/24/21 17:20	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	3430	05/24/21 16:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3406	05/25/21 04:58	AM	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	3410	05/24/21 11:24	SC	XEN MID
Soluble	Analysis	300.0		1			3426	05/24/21 17:26	CH	XEN MID

Client Sample ID: CS4

Lab Sample ID: 890-714-4

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			5.05 g	5 mL	3385	05/24/21 08:38	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3387	05/24/21 17:41	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	3430	05/24/21 16:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3406	05/25/21 05:19	AM	XEN MID
Soluble	Leach	DI Leach			5.00 g	50 mL	3410	05/24/21 11:24	SC	XEN MID
Soluble	Analysis	300.0		1			3426	05/24/21 17:31	CH	XEN MID

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Lab Chronicle

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Diamond PWU 22 114

Job ID: 890-714-1

Client Sample ID: CS5

Lab Sample ID: 890-714-5

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	3385	05/24/21 08:38	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3387	05/24/21 18:02	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	3430	05/24/21 16:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3406	05/25/21 05:39	AM	XEN MID
Soluble	Leach	DI Leach			5.00 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 14:10	CH	XEN MID

Client Sample ID: CS6

Lab Sample ID: 890-714-6

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			5.01 g	5 mL	3385	05/24/21 08:38	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3387	05/24/21 18:23	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	3430	05/24/21 16:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3406	05/25/21 06:00	AM	XEN MID
Soluble	Leach	DI Leach			5.02 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 14:25	CH	XEN MID

Client Sample ID: CS7

Lab Sample ID: 890-714-7

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			5.01 g	5 mL	3385	05/24/21 08:38	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3387	05/24/21 18:43	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	3430	05/24/21 16:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3406	05/25/21 06:21	AM	XEN MID
Soluble	Leach	DI Leach			5.04 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 14:30	CH	XEN MID

Client Sample ID: CS8

Lab Sample ID: 890-714-8

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	5035			5.02 g	5 mL	3385	05/24/21 08:38	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3387	05/24/21 19:04	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	3430	05/24/21 16:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3406	05/25/21 06:42	AM	XEN MID
Soluble	Leach	DI Leach			5.01 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 14:45	CH	XEN MID

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Lab Chronicle

Client: EOR/Ridgeway Arizona Oil Corp
 Project/Site: Diamond PWU 22 114

Job ID: 890-714-1

Client Sample ID: CS9

Lab Sample ID: 890-714-9

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			4.95 g	5 mL	3385	05/24/21 08:38	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3387	05/24/21 19:25	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	3430	05/24/21 16:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3406	05/25/21 07:03	AM	XEN MID
Soluble	Leach	DI Leach			5.03 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 14:50	CH	XEN MID

Client Sample ID: CS10

Lab Sample ID: 890-714-10

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			5.05 g	5 mL	3385	05/24/21 08:38	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3387	05/24/21 19:45	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	3430	05/24/21 16:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3406	05/25/21 07:24	AM	XEN MID
Soluble	Leach	DI Leach			5.00 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 14:55	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: EOR/Ridgeway Arizona Oil Corp
Project/Site: Diamond PWU 22 114

Job ID: 890-714-1

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: Diamond PWU 22 114

Job ID: 890-714-1

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: Diamond PWU 22 114

Job ID: 890-714-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
890-714-1	CS1	Solid	05/21/21 00:00	05/21/21 13:48	
890-714-2	CS2	Solid	05/21/21 00:00	05/21/21 13:48	
890-714-3	CS3	Solid	05/21/21 00:00	05/21/21 13:48	
890-714-4	CS4	Solid	05/21/21 00:00	05/21/21 13:48	
890-714-5	CS5	Solid	05/21/21 00:00	05/21/21 13:48	
890-714-6	CS6	Solid	05/21/21 00:00	05/21/21 13:48	
890-714-7	CS7	Solid	05/21/21 00:00	05/21/21 13:48	
890-714-8	CS8	Solid	05/21/21 00:00	05/21/21 13:48	
890-714-9	CS9	Solid	05/21/21 00:00	05/21/21 13:48	
890-714-10	CS10	Solid	05/21/21 00:00	05/21/21 13:48	

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Environment Testing
Xenco

Chain of Custody

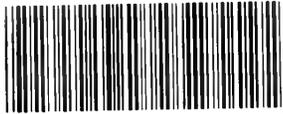
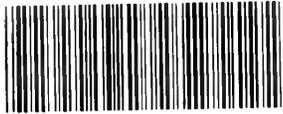
Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Tom Bynum	Bill to: (if different)	Devon Energy
Company Name:	PIMA	Company Name:	
Address:	1601 N. Turner St.	Address:	
City, State ZIP:	Hobbs, NM 88200	City, State ZIP:	
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:	Diamond PAVU 22 11K Turn Around		ANALYSIS REQUEST												Preservative Codes			
Project Number:	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Pres. Code															None: NO	DI Water: H ₂ O
Project Location:	Due Date:																Cool: Cool	MeOH: Me
Sampler's Name:	TAT starts the day received by the lab, if received by 4:30pm																HCL: HC	HNO ₃ : HN
PO #:																	H ₂ SO ₄ : H ₂	NaOH: Na
SAMPLE RECEIPT			Temp Blank:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Wet Ice:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<div style="text-align: center;">  890-714 Chain of Custody </div>										H ₃ PO ₄ : HP	
Samples Received Intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	N/A	Thermometer ID:	LNM-00		H ₃ PO ₄ : HP												
Cooler Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	N/A	Correction Factor:	10.2		NaHSO ₄ : NABIS												
Sample Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	N/A	Temperature Reading:	24.4		Na ₂ S ₂ O ₃ : NaSO ₃												
Total Containers:			Corrected Temperature:	24.2		Zn Acetate+NaOH: Zn												
							<div style="text-align: center;">  890-714 Chain of Custody </div>										NaOH+Ascorbic Acid: SAPC	
																	Sample Comments	
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters: BTEX, TPH, CL CS1 CS2 CS3 CS4 CS5 CS6 CS7 CS8 CS9 CS10											
CS1	Soil	5/21/21			C	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	Aq	SiO ₂	Na	Sr	Tl	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	Tl	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			
3			4		
5			6		

Eurofins Xenco, Carlsbad

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

Chain of Custody Record



Environment Testing America

Client Information (Sub Contract Lab), Analysis Requested, Sample Identification - Client ID (Lab ID), Possible Hazard Identification, Sample Disposal, Relinquished by, Custody Seals Intact, Cooler Temperature(s) °C and Other Remarks

Login Sample Receipt Checklist

Client: EOR/Ridgeway Arizona Oil Corp

Job Number: 890-714-1

Login Number: 714
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: 890-714-1

Login Number: 714

List Source: Eurofins Xenco, Midland

List Number: 2

List Creation: 05/24/21 10:11 AM

Creator: Copeland, Tatiana

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	NAPP2105355033
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: 6/1/2021
 email: wesley.mathews@dvn.com Telephone: 575-613-8608

OCD Only

Received by: Robert Hamlet Date: 7/28/2021

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: 7/28/2021

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 30517

CONDITIONS

Operator: Pima Environmental Services, LLC 1601 N. Turner Hobbs, NM 88240	OGRID: 329999
	Action Number: 30517
	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 #NAPP2105355033 DIAMOND PWU 22 11H, thank you. This closure is approved.	7/28/2021