



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

January 13, 2021

Re: Remediation Activities and Closure Report
Turquoise PWU 27 #1H
API No. 30-015-38333
GPS: Latitude 32.6362 Longitude -104.0703
UL "D", Sec. 27, T19S, R29E
Eddy County, NM
NMOCD Ref. ID. NAB1908046533, NRM2030058093

Dear Mr. Bratcher,

Pima Environmental Services, LLC (Pima) has been contracted by Devon Energy Production Company (Devon) to perform a spill assessment, site remediation and has prepared this Closure Report for two produced water releases that occurred at the Turquoise PWU 27 #1H (Turquoise). The first initial C-141 was submitted on March 14, 2019 (Appendix C). This incident was assigned 2RP-5316, Incident ID NAB1908046533, by the New Mexico Oil Conservation Division (NMOCD). The second C-141 was submitted on October 21, 2020 and was assigned Incident ID NRM2030058093, by the NMOCD.

Site Characterization

The Turquoise is located approximately eighteen (18) miles northeast of Carlsbad, NM. This spill site is in Unit D, Section 27, Township 19S, Range 29E, Latitude 32.6362, Longitude -104.0703, Eddy County, NM. Figure 4 references a location map.

Per the New Mexico Bureau of Geology and Mineral Resources, the geology is in the Quaternary Formation- Older alluvial deposits of upland plains and piedmont areas, and calcic soils and eolian cover sediments of High Plains region (middle to lower Pleistocene)- includes scattered lacustrine, playa, and alluvial deposits of the Tahoka, Double Tanks, Tule, Blackwater Draw, and Gatuna Formations, the latter of which be Pliocene at base; outcrops, however are basically Quaternary deposits (Qoa). The soil in this area is made up of Kimbrough-Stegall loams, 0 to 3 percent slopes according to the United States Department of Agriculture Natural Resources Conservation Service soil survey (Appendix B). The drainage courses in this area are well-drained. There is a high potential for karst geology to be present in the area of the Turquoise (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 65 feet BGS. The closest waterway and is a Playa located approximately 4.57 miles to the southeast of this location. See Appendix A for the referenced Surface Water Map.

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
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 TOPO Map.

Release Information

NAB1908046533: On March 4, 2019, the water tank overflowed due to the transfer pump going down on high discharge pressure, causing a release of 28.39 barrels (bbls) of produced water into the engineer steel and poly-lined containment. A vac truck was dispatched and recovered 25 bbls.

NRM2030058093: On October 7, 2020, a pin hole developed in the water fill line that runs from the separator vessels to the tanks. This hole resulted in the release of 19.84 bbls of produced water, all fluids were contained in the engineered steel and poly-lined containment. A vac truck was dispatched and recovered the 19.84 bbls of fluids.

Site Assessment and Soil Sampling Results

On July 28, 2020, Pima Environmental conducted a site assessment and obtained soil samples. The laboratory results of this sampling event can be found in the following data table.

7-28-20 Soil Sample Results

NMOCD Table 1 Closure Criteria 19.15.29 NMAC (Depth to Groundwater is <50')								
Sample Date 7-28-20		NM Approved Laboratory Results						
Sample ID	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Cl mg/kg
N. Composite	0	ND	ND	ND	1200	1600	2800	2900
S. Composite	0	ND	ND	ND	12	ND	12	1000
E. Composite	0	ND	ND	ND	21	51	72	9800
W. Composite	0	ND	ND	ND	1100	1000	2100	ND
BG-1	0	ND	ND	ND	ND	ND	ND	ND
BG-2	0	ND	ND	ND	ND	ND	ND	ND
BG-3	0	ND	ND	ND	ND	ND	ND	ND

ND- Analyte Not Detected

Remediation Activities

On September 17, 2020, Pima mobilized personnel and equipment to conduct remedial activities. The area outside the containment was excavated to a depth of 0.5-foot below grade surface (BGS) and 3-feet horizontally away from the containment wall. Sidewall and bottom confirmation samples were obtained, and the laboratory results can be found in the following data table.

9-21-20 Confirmation Soil Sample Results

NMOCD Table 1 Closure Criteria 19.15.29 NMAC (High Karst-Standards are <50')								
Sample Date	9-21-20	NM Approved Laboratory Results						
Sample ID	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Cl mg/kg
S-1 N. Bottom Composite	0.5	—	—	ND	ND	ND	ND	48
S-2 N. Sidewall Comp	0.5	—	—	ND	ND	ND	ND	112
S-3 W. Bottom Comp	0.5	—	—	ND	ND	ND	ND	—
S-4 W. Sidewall Comp	0.5	—	—	ND	ND	ND	ND	—
S-5 S. Bottom Comp	0.5	—	—	—	—	—	—	64
S-6 S. Sidewall Comp	0.5	—	—	—	—	—	—	48
S-7 E. Bottom Comp	0.5	—	—	—	—	—	—	80
S-8 E. Sidewall Comp	0.5	—	—	—	—	—	—	160

ND- Analyte Not Detected

-- Analyte Not Tested

Complete Laboratory results can be found attached in Appendix F.

The final sample results were below NMOCD Closure Criteria 19.15.29 NMAC. Based on these findings, no further remediation activities were needed at this location. The excavation was backfilled with clean, like material, the area was then contoured to match the surrounding area.

On December 20, 2020, Pima returned to this site and conducted a liner inspection. The inspection found no loss of integrity in the liner. A liner inspection for and photos of the liner are attached in Appendix E.

Closure Request

After careful review, Pima requests that incidents, NAB1908046533 and NRM2030058093, be closed. Devon has complied with the applicable closure requirements outlined in rule 19.15.19.12 NMAC.

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

Respectfully,



Chris Jones
Environmental Professional
Pima Environmental Services, LLC

Attachments

Figures:

- 1- Site Map
- 2- TOPO Map
- 3- Karst Map
- 4- Location 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- Liner Inspection Form and Photos
- Appendix F- Laboratory Reports



Pima Environmental Services

Figures:
1-Site Map
2- TOPO Map
3- Karst Map
4- Location Map

Devon Energy

Turquoise PWU 27 #1H
API 30-015-38333
Eddy County, NM
Site Map

Legend

○ Samples

Turquoise PWU 27 #1H

S-1 N. Comp

BG-1

S-4 W. Comp

S-2 E. Comp

S-3 S. Comp

BG-2

BG-3

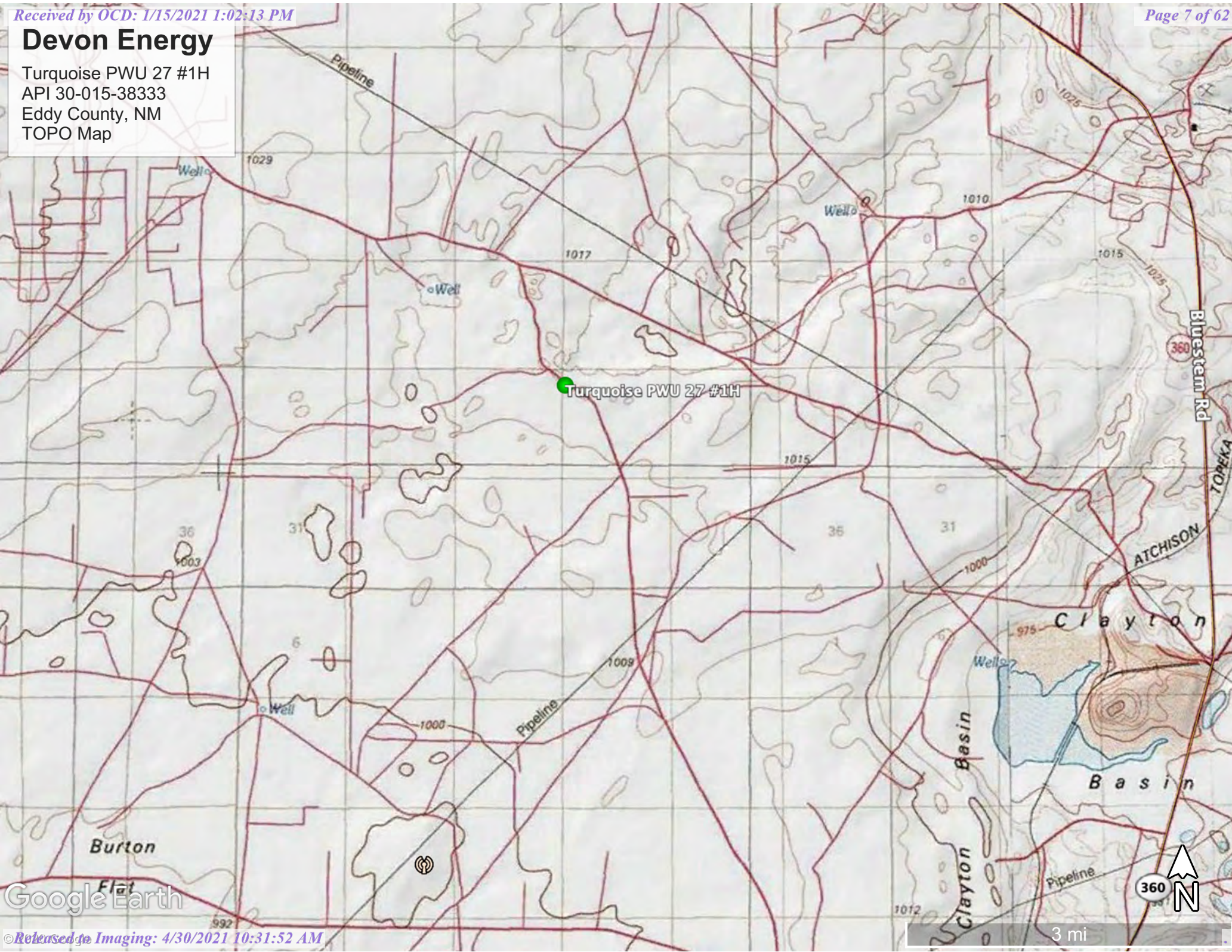
Google Earth



100 ft

Devon Energy

Turquoise PWU 27 #1H
API 30-015-38333
Eddy County, NM
TOPO Map



Devon Energy

Turquoise PWU 27 #1H
API 30-015-38333
Eddy County, NM
Karst Map

Legend

- High
- Low
- Medium

Turquoise PWU 27 #1H

Bluestem Rd

360

62

31



7 mi

Google Earth

© 2020 Google

Devon Energy

Turquoise PWU 27 #1H
API 30-015-38333
Eddy County, NM
Location Map

Turquoise PWU 27 #1H

Bluestem Rd

360

62

31

Porash Mi

7 mi



Google Earth

© 2020 Google



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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	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
CP00741		CP	ED	1	3	2	34	19S	29E	588030	3609533*		2007	230	60 170
CP00681		CP	ED	1	1	3	34	19S	29E	587230	3609127*		2243		

Average Depth to Water: 60 feet

Minimum Depth: 60 feet

Maximum Depth: 60 feet

Record Count: 2

UTMNAD83 Radius Search (in meters):

Easting (X): 587219.65

Northing (Y): 3611370


Radius: 3000

*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.



New Mexico Office of the State Engineer
Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)						(NAD83 UTM in meters)	
		Q64	Q16	Q4	Sec	TwS	Rng	X	Y
	CP 00741	1	3	2	34	19S	29E	588030	3609533* 
Driller License:	1107	Driller Company:				DUBOSE DRILLING, INC.			
Driller Name:	DUBOSE, BILL M. JR.								
Drill Start Date:	04/17/1989	Drill Finish Date:				04/20/1989		Plug Date:	
Log File Date:	04/24/1989	PCW Rcv Date:						Source:	Shallow
Pump Type:		Pipe Discharge Size:						Estimated Yield:	20 GPM
Casing Size:	6.63	Depth Well:				230 feet		Depth Water:	60 feet
Water Bearing Stratifications:		Top		Bottom		Description			
		60		230		Other/Unknown			
Casing Perforations:		Top		Bottom					
		170		230					

***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.

8/6/20 9:48 AM

POINT OF DIVERSION SUMMARY

National Water Information System: Web Interface

USGS Water Resources

Data Category:

Groundwater

Geographic Area:

United States

GO

- Click to hide News Bulletins

Introducing The Next Generation of USGS Water Data for the Nation

Full News

Groundwater levels for the Nation

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

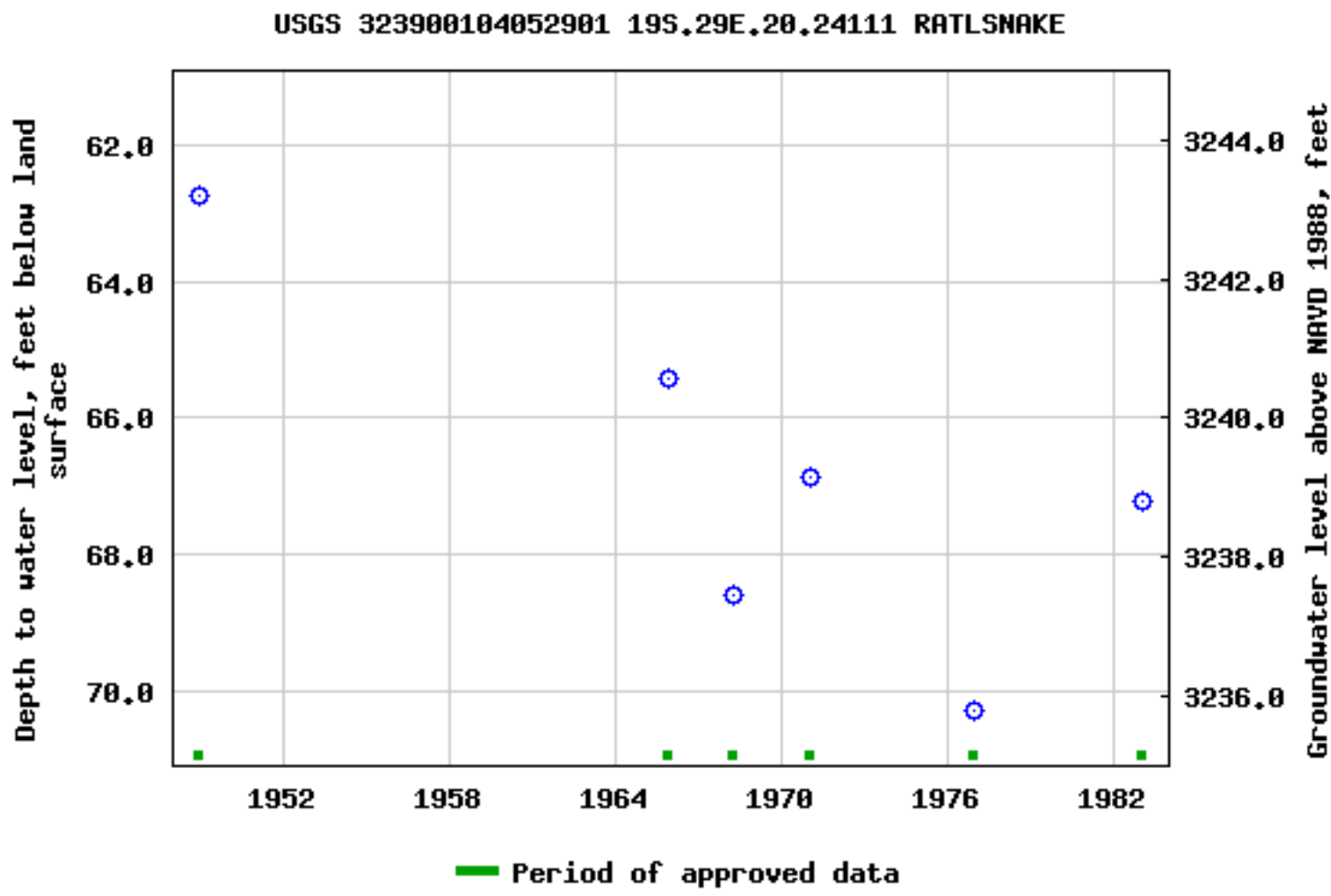
Groundwater: Field measurements

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 Rustler Formation (312RSLR) local aquifer.

Output formats

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



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

[Questions about sites/data?](#)
[Feedback on this web site](#)
[Automated retrievals](#)
[Help](#)

[Data Tips](#)
[Explanation of terms](#)
[Subscribe for system changes](#)
[News](#)



National Water Information System: Mapper

Help Info

Sites

Map

Search

Surface-Water Sites

Groundwater Sites

Active Sites

Any data

Instantaneous data

Daily data

Water-quality data

Measurements

Annual Report

Inactive Sites

Any data

Instantaneous data

Daily data

Water-quality data

Measurements

Annual Report

Springs

Atmospheric Sites

Other Sites

Released to Imaging: 4/30/2021 10:31:52 AM

The map displays a topographic view of a region with numerous water sites marked by red pins. A pop-up window titled 'Site Information' is open, showing details for a specific site. The map includes a scale bar (0 to 1 mile) and a coordinate display (-103.991, 32.646). Roads are labeled 'Bluestem' and 'Shugart Rd'. A scale of 1:250,000 is indicated in the top right corner of the map area.

Site Number	Site Name	Site Type	Agency
323900104052901	19S.29E.20.24111 RATLSNAKE	Well	USGS

[Access Data](#)

Site Information



Bureau of Land Management, Esri, HERE, Garmin, INCREMENT P, NGA, USGS

POWERED BY
esri

Devon Energy

Turquoise PWU 27 #1H
API 30-015-38333
Eddy County, NM
Surface Water Map

Legend

-  2.57 Miles
-  Surface Water

Turquoise PWU 27 #1H

4.57 Miles

Bluestem Rd

Potash Mines Rd

Google Earth

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Released to Imaging: 4/30/2021 10:31:52 AM

4 mi





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Appendix B
Soil Survey & Geological Data:
FEMA Flood Map

Map Unit Description: Kimbrough-Stegall loams, 0 to 3 percent slopes---Eddy Area, New Mexico

Eddy Area, New Mexico

KT—Kimbrough-Stegall loams, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 1w4t

Elevation: 2,750 to 5,000 feet

Mean annual precipitation: 8 to 16 inches

Mean annual air temperature: 57 to 70 degrees F

Frost-free period: 180 to 230 days

Farmland classification: Not prime farmland

Map Unit Composition

Kimbrough and similar soils: 70 percent

Stegall and similar soils: 25 percent

Minor components: 5 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kimbrough

Setting

Landform: Alluvial fans, plains

Landform position (three-dimensional): Rise, tal

Down-slope shape: Linear, convex

Across-slope shape: Linear

Parent material: Mixed alluvium and/or eolian sands

Typical profile

H1 - 0 to 3 inches: loam

H2 - 3 to 9 inches: loam

H3 - 9 to 60 inches: indurated

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: 8 to 20 inches to petrocalcic

Drainage class: Well drained

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 1.0

Available water capacity: Very low (about 1.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Map Unit Description: Kimbrough-Stegall loams, 0 to 3 percent slopes---Eddy Area, New Mexico

Hydrologic Soil Group: D
Ecological site: R042XC025NM - Shallow
Hydric soil rating: No

Description of Stegall

Setting

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

Typical profile

H1 - 0 to 5 inches: loam
H2 - 5 to 28 inches: clay loam
H3 - 28 to 32 inches: indurated
H4 - 32 to 60 inches: variable

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 20 to 40 inches to petrocalcic
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high (0.01 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 90 percent
Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water capacity: Low (about 4.8 inches)

Interpretive groups

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

Minor Components

Simona

Percent of map unit: 5 percent
Ecological site: R042XC002NM - Shallow Sandy
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°4'32"W 32°38'25"N



USGS The National Map: Orthoimagery. Data refreshed April 2020

0 250 500 1,000 1,500 2,000 Feet 1:6,000

Released to Imaging: 4/30/2021 10:31:52 AM

Legend

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

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		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 Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
MAP PANELS		Profile Baseline
		Hydrographic Feature
		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 **8/6/2020 at 12:24 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	
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

Incident ID	
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: <u>Ana Maria B. Ramirez</u>	Date: _____

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?	_____ 60 (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

Incident ID	NAB1908046533
District RP	2RP-5316
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: Wesley Mathews

Title: Environmental Professional

Signature: *Wesley Mathews*

Date: 1/13/2021

email: Wesley.Mathews@dmv.com

Telephone:

OCD Only

Received by: _____

Date: _____

Incident ID	NAB1908046533
District RP	2RP-5316
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: Wesley Mathews

Title: Environmental Professional

Signature: *Wesley Mathews*

Date: 1/13/2021

email: Wesley.Mathews@dvn.com

Telephone:

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: _____

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	
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

Incident ID	
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: _____

Spills In Lined Containment	
Measurements Of Standing Fluid	
Length(Ft)	45
Width(Ft)	20
Depth(in.)	4
Total Capacity without tank displacements (bbls)	53.43
No. of 500 bbl Tanks In Standing Fluid	3
No. of Other Tanks In Standing Fluid	
OD Of Other Tanks In Standing Fluid(feet)	
Total Volume of standing fluid accounting for tank displacement.	19.84

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?	_____ 60 (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

Incident ID	NRM2030058093
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: Wesley Mathews

Title: Environmental Professional

Signature: *Wesley Mathews*

Date: 1/13/2021

email: Wesley.Mathews@dvn.com

Telephone:

OCD Only

Received by: _____

Date: _____

Incident ID	NRM2030058093
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: Wesley Mathews

Title: Environmental Professional

Signature: *Wesley Mathews*

Date: 1/13/2021

email: Wesley.Mathews@dvn.com

Telephone:

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

Photographic Documentation Excavation





Completed





Pima Environmental Services

Appendix E:
Liner Inspection and Photos



Pima Environmental Services, LLC

Liner Inspection Form

Company Name: Devon Energy

Site: Turquoise PWU 27 #1H

Lat/Long: 32.6362, -104.0709

NMOCD Incident ID

& Incident Date: 10-7-20 Incident ID NRM2030058093

Inspection Date: 12-29-20

Liner Type: Earthen w/liner

Earthen no liner

Polystar

Steel w/poly liner

Steel w/spray epoxy


No Liner

Other: _____

Visualization	Yes	No	Comments
Is there a tear in the liner?		x	
Are there holes in the liner?		x	
Is the liner retaining any fluids?		x	
Does the liner have integrity to contain a leak?		x	

Comments: _____

Inspector Name: Chris Jones

Inspector Signature: 

Liner Photos







Pima Environmental Services

Appendix F:
Laboratory Reports



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

August 06, 2020

Chris Jones

Pima Environmental Services LLC

1601 N. Turner Ste 500

Hobbs, NM 88240

TEL: (575) 631-6977

FAX:

RE: Turquoise PWU 27 1H

OrderNo.: 2007E42

Dear Chris Jones:

Hall Environmental Analysis Laboratory received 7 sample(s) on 7/29/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2007E42

Date Reported: 8/6/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: N-Composite

Project: Turquoise PWU 27 1H

Collection Date: 7/28/2020 1:50:00 PM

Lab ID: 2007E42-001

Matrix: SOIL

Received Date: 7/29/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	2900	150		mg/Kg	50	8/5/2020 10:18:03 AM	54155
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	1200	94		mg/Kg	10	8/4/2020 2:48:10 PM	54061
Motor Oil Range Organics (MRO)	1600	470		mg/Kg	10	8/4/2020 2:48:10 PM	54061
Surr: DNOP	0	30.4-154	S	%Rec	10	8/4/2020 2:48:10 PM	54061
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/2/2020 8:05:31 AM	54058
Surr: BFB	96.5	75.3-105		%Rec	1	8/2/2020 8:05:31 AM	54058
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	8/2/2020 8:05:31 AM	54058
Toluene	ND	0.050		mg/Kg	1	8/2/2020 8:05:31 AM	54058
Ethylbenzene	ND	0.050		mg/Kg	1	8/2/2020 8:05:31 AM	54058
Xylenes, Total	ND	0.099		mg/Kg	1	8/2/2020 8:05:31 AM	54058
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	8/2/2020 8:05:31 AM	54058

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		

Page 1 of 11

Analytical Report

Lab Order 2007E42

Date Reported: 8/6/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S-Comp

Project: Turquoise PWU 27 1H

Collection Date: 7/28/2020 1:55:00 PM

Lab ID: 2007E42-002

Matrix: SOIL

Received Date: 7/29/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	1000	60		mg/Kg	20	8/4/2020 6:40:55 PM	54155
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	12	9.2		mg/Kg	1	7/31/2020 11:20:26 PM	54061
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	7/31/2020 11:20:26 PM	54061
Surr: DNOP	52.9	30.4-154		%Rec	1	7/31/2020 11:20:26 PM	54061
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	8/2/2020 8:29:07 AM	54058
Surr: BFB	98.1	75.3-105		%Rec	1	8/2/2020 8:29:07 AM	54058
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	8/2/2020 8:29:07 AM	54058
Toluene	ND	0.046		mg/Kg	1	8/2/2020 8:29:07 AM	54058
Ethylbenzene	ND	0.046		mg/Kg	1	8/2/2020 8:29:07 AM	54058
Xylenes, Total	ND	0.092		mg/Kg	1	8/2/2020 8:29:07 AM	54058
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	8/2/2020 8:29:07 AM	54058

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		

Page 2 of 11

Analytical Report

Lab Order 2007E42

Date Reported: 8/6/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: E-Comp

Project: Turquoise PWU 27 1H

Collection Date: 7/28/2020 2:00:00 PM

Lab ID: 2007E42-003

Matrix: SOIL

Received Date: 7/29/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	9800	300		mg/Kg	100	8/5/2020 10:30:23 AM	54155
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	21	9.9		mg/Kg	1	8/1/2020 12:08:55 AM	54061
Motor Oil Range Organics (MRO)	51	49		mg/Kg	1	8/1/2020 12:08:55 AM	54061
Surr: DNOP	63.1	30.4-154		%Rec	1	8/1/2020 12:08:55 AM	54061
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	8/2/2020 8:52:39 AM	54058
Surr: BFB	98.1	75.3-105		%Rec	1	8/2/2020 8:52:39 AM	54058
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	8/2/2020 8:52:39 AM	54058
Toluene	ND	0.046		mg/Kg	1	8/2/2020 8:52:39 AM	54058
Ethylbenzene	ND	0.046		mg/Kg	1	8/2/2020 8:52:39 AM	54058
Xylenes, Total	ND	0.092		mg/Kg	1	8/2/2020 8:52:39 AM	54058
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	8/2/2020 8:52:39 AM	54058

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		

Page 3 of 11

Analytical Report

Lab Order 2007E42

Date Reported: 8/6/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: W-Comp

Project: Turquoise PWU 27 1H

Collection Date: 7/28/2020 2:05:00 PM

Lab ID: 2007E42-004

Matrix: SOIL

Received Date: 7/29/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	61		mg/Kg	20	8/4/2020 7:05:45 PM	54155
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	1100	180		mg/Kg	20	8/1/2020 12:33:04 AM	54061
Motor Oil Range Organics (MRO)	1000	900		mg/Kg	20	8/1/2020 12:33:04 AM	54061
Surr: DNOP	0	30.4-154	S	%Rec	20	8/1/2020 12:33:04 AM	54061
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/2/2020 9:16:17 AM	54058
Surr: BFB	96.7	75.3-105		%Rec	1	8/2/2020 9:16:17 AM	54058
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	8/2/2020 9:16:17 AM	54058
Toluene	ND	0.049		mg/Kg	1	8/2/2020 9:16:17 AM	54058
Ethylbenzene	ND	0.049		mg/Kg	1	8/2/2020 9:16:17 AM	54058
Xylenes, Total	ND	0.098		mg/Kg	1	8/2/2020 9:16:17 AM	54058
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	8/2/2020 9:16:17 AM	54058

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		

Page 4 of 11

Analytical Report

Lab Order 2007E42

Date Reported: 8/6/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: BG-1

Project: Turquoise PWU 27 1H

Collection Date: 7/28/2020 2:10:00 PM

Lab ID: 2007E42-005

Matrix: SOIL

Received Date: 7/29/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/4/2020 7:18:09 PM	54155
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	8/1/2020 12:57:17 AM	54061
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	8/1/2020 12:57:17 AM	54061
Surr: DNOP	45.4	30.4-154		%Rec	1	8/1/2020 12:57:17 AM	54061
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/2/2020 9:39:57 AM	54058
Surr: BFB	97.1	75.3-105		%Rec	1	8/2/2020 9:39:57 AM	54058
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	8/2/2020 9:39:57 AM	54058
Toluene	ND	0.049		mg/Kg	1	8/2/2020 9:39:57 AM	54058
Ethylbenzene	ND	0.049		mg/Kg	1	8/2/2020 9:39:57 AM	54058
Xylenes, Total	ND	0.097		mg/Kg	1	8/2/2020 9:39:57 AM	54058
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	8/2/2020 9:39:57 AM	54058

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 2007E42

Date Reported: 8/6/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: BG-2

Project: Turquoise PWU 27 1H

Collection Date: 7/28/2020 2:15:00 PM

Lab ID: 2007E42-006

Matrix: SOIL

Received Date: 7/29/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/4/2020 7:30:34 PM	54155
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	8/1/2020 1:21:33 AM	54061
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/1/2020 1:21:33 AM	54061
Surr: DNOP	35.6	30.4-154		%Rec	1	8/1/2020 1:21:33 AM	54061
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/2/2020 10:03:34 AM	54058
Surr: BFB	99.5	75.3-105		%Rec	1	8/2/2020 10:03:34 AM	54058
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	8/2/2020 10:03:34 AM	54058
Toluene	ND	0.049		mg/Kg	1	8/2/2020 10:03:34 AM	54058
Ethylbenzene	ND	0.049		mg/Kg	1	8/2/2020 10:03:34 AM	54058
Xylenes, Total	ND	0.099		mg/Kg	1	8/2/2020 10:03:34 AM	54058
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	8/2/2020 10:03:34 AM	54058

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 2007E42

Date Reported: 8/6/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: BG-3

Project: Turquoise PWU 27 1H

Collection Date: 7/28/2020 2:20:00 PM

Lab ID: 2007E42-007

Matrix: SOIL

Received Date: 7/29/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/4/2020 7:42:58 PM	54155
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	8/1/2020 1:45:51 AM	54061
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/1/2020 1:45:51 AM	54061
Surr: DNOP	38.2	30.4-154		%Rec	1	8/1/2020 1:45:51 AM	54061
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/2/2020 10:27:00 AM	54058
Surr: BFB	99.8	75.3-105		%Rec	1	8/2/2020 10:27:00 AM	54058
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	8/2/2020 10:27:00 AM	54058
Toluene	ND	0.048		mg/Kg	1	8/2/2020 10:27:00 AM	54058
Ethylbenzene	ND	0.048		mg/Kg	1	8/2/2020 10:27:00 AM	54058
Xylenes, Total	ND	0.096		mg/Kg	1	8/2/2020 10:27:00 AM	54058
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	8/2/2020 10:27:00 AM	54058

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		

Page 7 of 11

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

WO#: 2007E42

06-Aug-20

Client: Pima Environmental Services LLC**Project:** Turquoise PWU 27 1H

Sample ID: MB-54155	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 54155	RunNo: 70830								
Prep Date: 8/4/2020	Analysis Date: 8/4/2020	SeqNo: 2466155	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-54155	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 54155	RunNo: 70830								
Prep Date: 8/4/2020	Analysis Date: 8/4/2020	SeqNo: 2466156	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.2	90	110			

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

WO#: 2007E42

06-Aug-20

Client: Pima Environmental Services LLC**Project:** Turquoise PWU 27 1H

Sample ID: LCS-54061	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 54061		RunNo: 70721							
Prep Date: 7/30/2020	Analysis Date: 7/31/2020		SeqNo: 2465153		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	102	70	130			
Surr: DNOP	5.2		5.000		104	30.4	154			

Sample ID: MB-54061	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 54061		RunNo: 70721							
Prep Date: 7/30/2020	Analysis Date: 7/31/2020		SeqNo: 2465156		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		108	30.4	154			

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

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

WO#: 2007E42

06-Aug-20

Client: Pima Environmental Services LLC**Project:** Turquoise PWU 27 1H

Sample ID: mb-54058	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 54058	RunNo: 70777								
Prep Date: 7/30/2020	Analysis Date: 8/2/2020	SeqNo: 2463158			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		101	75.3	105			

Sample ID: lcs-54058	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 54058	RunNo: 70777								
Prep Date: 7/30/2020	Analysis Date: 8/1/2020	SeqNo: 2463159			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	94.3	72.5	106			
Surr: BFB	1100		1000		110	75.3	105			S

Sample ID: mb-54080	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 54080	RunNo: 70777								
Prep Date: 7/30/2020	Analysis Date: 8/2/2020	SeqNo: 2463182			Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	990		1000		98.8	75.3	105			

Sample ID: lcs-54080	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 54080	RunNo: 70777								
Prep Date: 7/30/2020	Analysis Date: 8/2/2020	SeqNo: 2463183			Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		111	75.3	105			S

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

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

WO#: 2007E42

06-Aug-20

Client: Pima Environmental Services LLC**Project:** Turquoise PWU 27 1H

Sample ID: mb-54058	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 54058	RunNo: 70777								
Prep Date: 7/30/2020	Analysis Date: 8/2/2020	SeqNo: 2463237	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Sample ID: LCS-54058	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 54058	RunNo: 70777								
Prep Date: 7/30/2020	Analysis Date: 8/1/2020	SeqNo: 2463238	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	93.4	80	120			
Toluene	0.95	0.050	1.000	0	94.5	80	120			
Ethylbenzene	0.96	0.050	1.000	0	95.6	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.5	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Sample ID: mb-54080	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 54080	RunNo: 70777								
Prep Date: 7/30/2020	Analysis Date: 8/2/2020	SeqNo: 2463261	Units: %Rec							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID: LCS-54080	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 54080	RunNo: 70777								
Prep Date: 7/30/2020	Analysis Date: 8/2/2020	SeqNo: 2463262	Units: %Rec							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		108	80	120			

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



*Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com*

Sample Log-In Check List

Client Name: Pima Environmental
Services LLC

Work Order Number: 2007E42

RcptNo: 1

Received By: **Cheyenne Cason**

7/29/2020 9:30:00 AM

Completed By: **Juan Rojas**

7/29/2020 10:07:51 AM

Reviewed By:

Em 1/29/20

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

- | | | | |
|--|---|--|--|
| 3. Was an attempt made to cool the samples? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> |
| 4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> |
| 5. Sample(s) in proper container(s)? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 6. Sufficient sample volume for indicated test(s)? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 7. Are samples (except VOA and ONG) properly preserved? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 8. Was preservative added to bottles? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | NA <input type="checkbox"/> |
| 9. Received at least 1 vial with headspace $<1/4"$ for AQ VOA? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/> |
| 10. Were any sample containers received broken? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | |
| 11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 12. Are matrices correctly identified on Chain of Custody? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 13. Is it clear what analyses were requested? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 14. Were all holding times able to be met?
(If no, notify customer for authorization.) | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
- # of preserved bottles checked for pH: (<2)

Adjusted? Adjusted?

Checked by ()

of preserved bottles checked for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.9	Good				
2	2.3	Good				
3	4.9	Good				



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

September 30, 2020

CHRIS JONES

PIMA ENVIROMENTAL

1601 N TURNER STE. 500

HOBBS, NM 88240

RE: TURQUOISE PWV 27 #1H

Enclosed are the results of analyses for samples received by the laboratory on 09/25/20 8:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	09/25/2020	Sampling Date:	09/21/2020
Reported:	09/30/2020	Sampling Type:	Soil
Project Name:	TURQUOISE PWV 27 #1H	Sampling Condition:	Cool & Intact
Project Number:	33	Sample Received By:	Tamara Oldaker
Project Location:	DEVON - EDDY CO NM		

Sample ID: S - 1 N BOTTOM (H002541-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	09/25/2020	ND	416	104	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/25/2020	ND	195	97.5	200	9.47	
DRO >C10-C28*	<10.0	10.0	09/25/2020	ND	185	92.6	200	13.7	
EXT DRO >C28-C36	<10.0	10.0	09/25/2020	ND					
Surrogate: 1-Chlorooctane		106 %	44.3-144						
Surrogate: 1-Chlorooctadecane		108 %	42.2-156						

Sample ID: S - 2 N SIDE (H002541-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	09/25/2020	ND	416	104	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/25/2020	ND	195	97.5	200	9.47	
DRO >C10-C28*	<10.0	10.0	09/25/2020	ND	185	92.6	200	13.7	
EXT DRO >C28-C36	<10.0	10.0	09/25/2020	ND					
Surrogate: 1-Chlorooctane		111 %	44.3-144						
Surrogate: 1-Chlorooctadecane		111 %	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:	09/25/2020	Sampling Date:	09/21/2020
Reported:	09/30/2020	Sampling Type:	Soil
Project Name:	TURQUOISE PWV 27 #1H	Sampling Condition:	Cool & Intact
Project Number:	33	Sample Received By:	Tamara Oldaker
Project Location:	DEVON - EDDY CO NM		

Sample ID: S - 3 W BOTTOM (H002541-03)

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	09/25/2020	ND	195	97.5	200	9.47	
DRO >C10-C28*	<10.0	10.0	09/25/2020	ND	185	92.6	200	13.7	
EXT DRO >C28-C36	<10.0	10.0	09/25/2020	ND					
Surrogate: 1-Chlorooctane	115 %	44.3-144							
Surrogate: 1-Chlorooctadecane	118 %	42.2-156							

Sample ID: S - 4 W SIDE (H002541-04)

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	09/25/2020	ND	195	97.5	200	9.47	
DRO >C10-C28*	<10.0	10.0	09/25/2020	ND	185	92.6	200	13.7	
EXT DRO >C28-C36	<10.0	10.0	09/25/2020	ND					
Surrogate: 1-Chlorooctane	116 %	44.3-144							
Surrogate: 1-Chlorooctadecane	116 %	42.2-156							

Sample ID: S - 5 S BOTTOM (H002541-05)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	09/25/2020	ND	416	104	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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: 09/25/2020
Reported: 09/30/2020
Project Name: TURQUOISE PWV 27 #1H
Project Number: 33
Project Location: DEVON - EDDY CO NM

Sampling Date: 09/21/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 6 S SIDE (H002541-06)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	09/25/2020	ND	416	104	400	0.00	

Sample ID: S - 7 E BOTTOM (H002541-07)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	09/25/2020	ND	416	104	400	0.00	

Sample ID: S - 8 E SIDE (H002541-08)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	09/25/2020	ND	416	104	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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

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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 client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <u>Pina & Xavier Methyl</u> Project Manager: <u>Chris Jones</u> Address: <u>1601 N Turner St. 500</u> City: <u>Hobbs</u> State: <u>NM</u> Zip: <u>88246</u> Phone #: <u>575-964-7740</u> Fax #: _____ Project #: <u>33</u> Project Owner: <u>Devon</u> Project Name: <u>Turquoise PWU 27 #1H</u> Project Location: <u>Eddy, NM</u> Sampler Name: <u>Robert Carper</u>		BILL TO P.O. #: <u>20867722</u> Company: <u>Devon</u> Attn: <u>Tom Bryum</u> Address: _____ City: _____ State: _____ Zip: _____ Phone #: _____ Fax #: _____																																																																																																																																																						
FOR LAB USE ONLY <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Lab I.D.</th> <th rowspan="2">Sample I.D.</th> <th rowspan="2">(G)RAB OR (C)OMP.</th> <th rowspan="2"># CONTAINERS</th> <th colspan="6">MATRIX</th> <th colspan="2">PRESERV.</th> <th rowspan="2">SAMPLING</th> <th rowspan="2">ANALYSIS REQUEST</th> </tr> <tr> <th>GROUNDWATER</th> <th>WASTEWATER</th> <th>SOIL</th> <th>OIL</th> <th>SLUDGE</th> <th>OTHER :</th> <th>ACID/BASE:</th> <th>ICE / COOL</th> <th>OTHER :</th> </tr> </thead> <tbody> <tr> <td><u>H003541</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>1</td> <td>S-1 N bottom</td> <td>✓</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>DATE</td> <td>TIME</td> </tr> <tr> <td>2</td> <td>S-2 N side</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td><u>9-21-20</u></td> <td><u>1000</u></td> </tr> <tr> <td>3</td> <td>S-3 W bottom</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td><u>1005</u></td> </tr> <tr> <td>4</td> <td>S-4 W side</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td><u>1015</u></td> </tr> <tr> <td>5</td> <td>S-5 S bottom</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td><u>1020</u></td> </tr> <tr> <td>6</td> <td>S-6 S side</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td><u>1025</u></td> </tr> <tr> <td>7</td> <td>S-7 E bottom</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td><u>1030</u></td> </tr> <tr> <td>8</td> <td>S-8 E side</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td><u>1035</u></td> </tr> </tbody> </table>		Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.		SAMPLING	ANALYSIS REQUEST	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	<u>H003541</u>														1	S-1 N bottom	✓										DATE	TIME	2	S-2 N side											<u>9-21-20</u>	<u>1000</u>	3	S-3 W bottom												<u>1005</u>	4	S-4 W side												<u>1015</u>	5	S-5 S bottom												<u>1020</u>	6	S-6 S side												<u>1025</u>	7	S-7 E bottom												<u>1030</u>	8	S-8 E side												<u>1035</u>	REMARKS: Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Add'l Phone #: All Results are emailed. Please provide Email address:	
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Incident ID	NAB1908046533
District RP	2RP-5316
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: Wesley Mathews

Title: Environmental Professional

Signature: *Wesley Mathews*

Date: 1/13/2021

email: Wesley.Mathews@dvn.com

Telephone:

OCD Only

Received by: Robert Hamlet

Date: 4/30/2021

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

Closure Approved by: Robert Hamlet Date: 4/30/2021

Printed Name: Robert Hamlet

Title: Environmental Specialist - Advanced

District I

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

District II

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

District III

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

District IV

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

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

CONDITIONS

Action 14806

CONDITIONS OF APPROVAL

Operator:		OGRID:	Action Number:	Action Type:
PIMA ENVIRONMENTAL SERVICES, L	1601 N. Turner	329999	14806	C-141
Suite 500	Hobbs, NM88240			

OCD Reviewer	Condition
rhamlet	We have received your closure report and final C-141 for Incident #NAB1908046533 TURQUOISE PWU 27 #001H, thank you. This closure is approved.