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

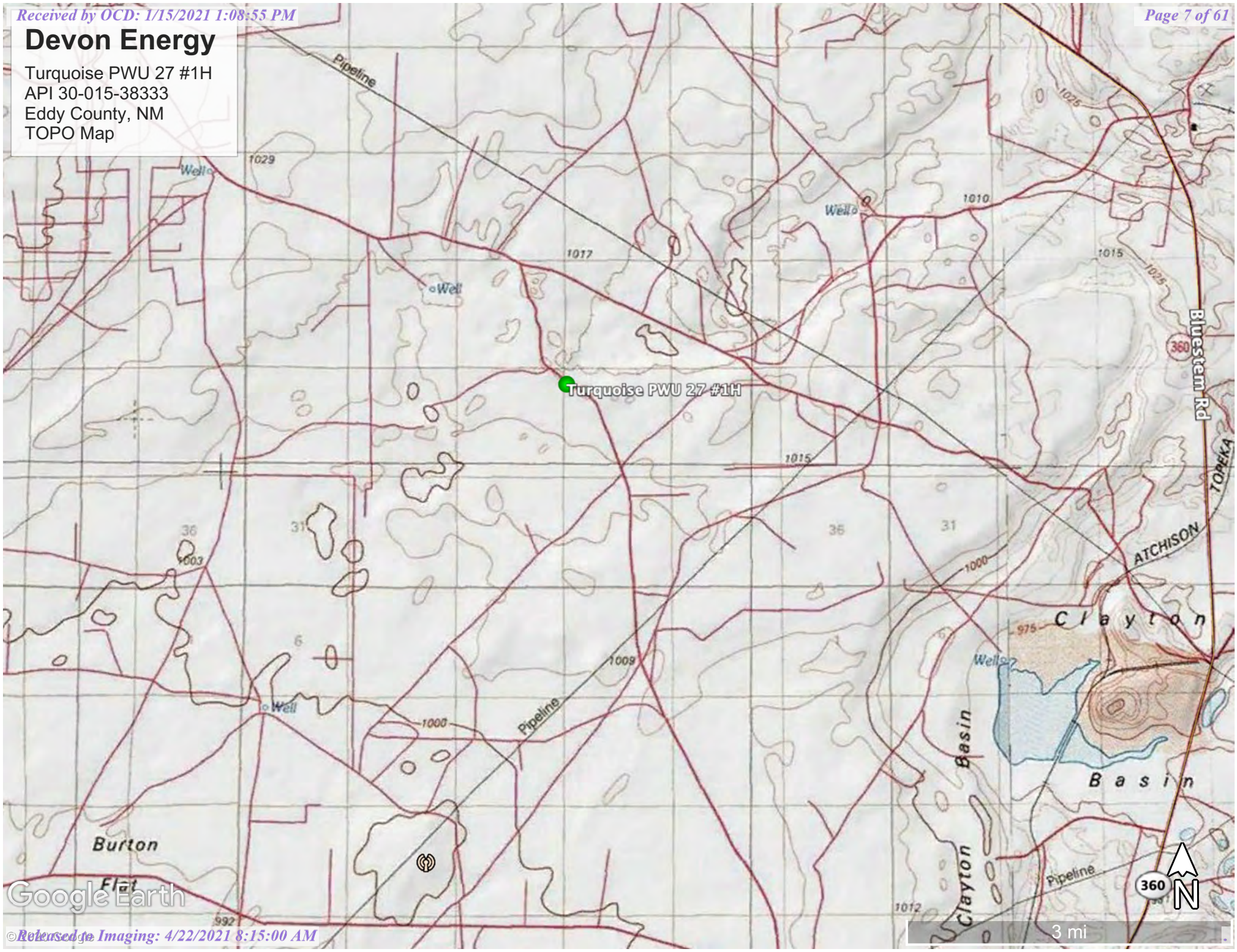
Figures:
1-Site Map
2- TOPO Map
3- Karst Map
4- Location Map

Devon Energy

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

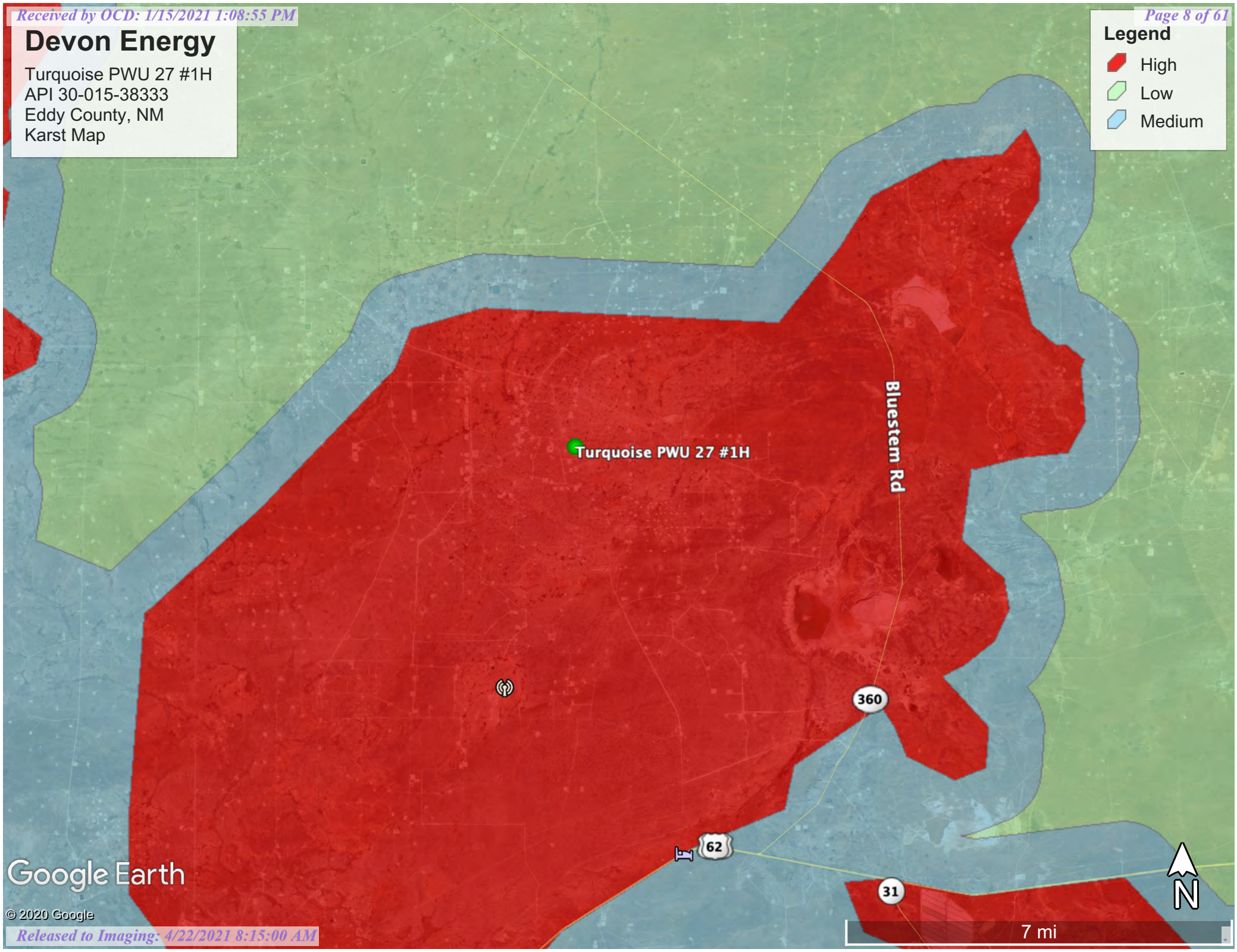
Devon Energy

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



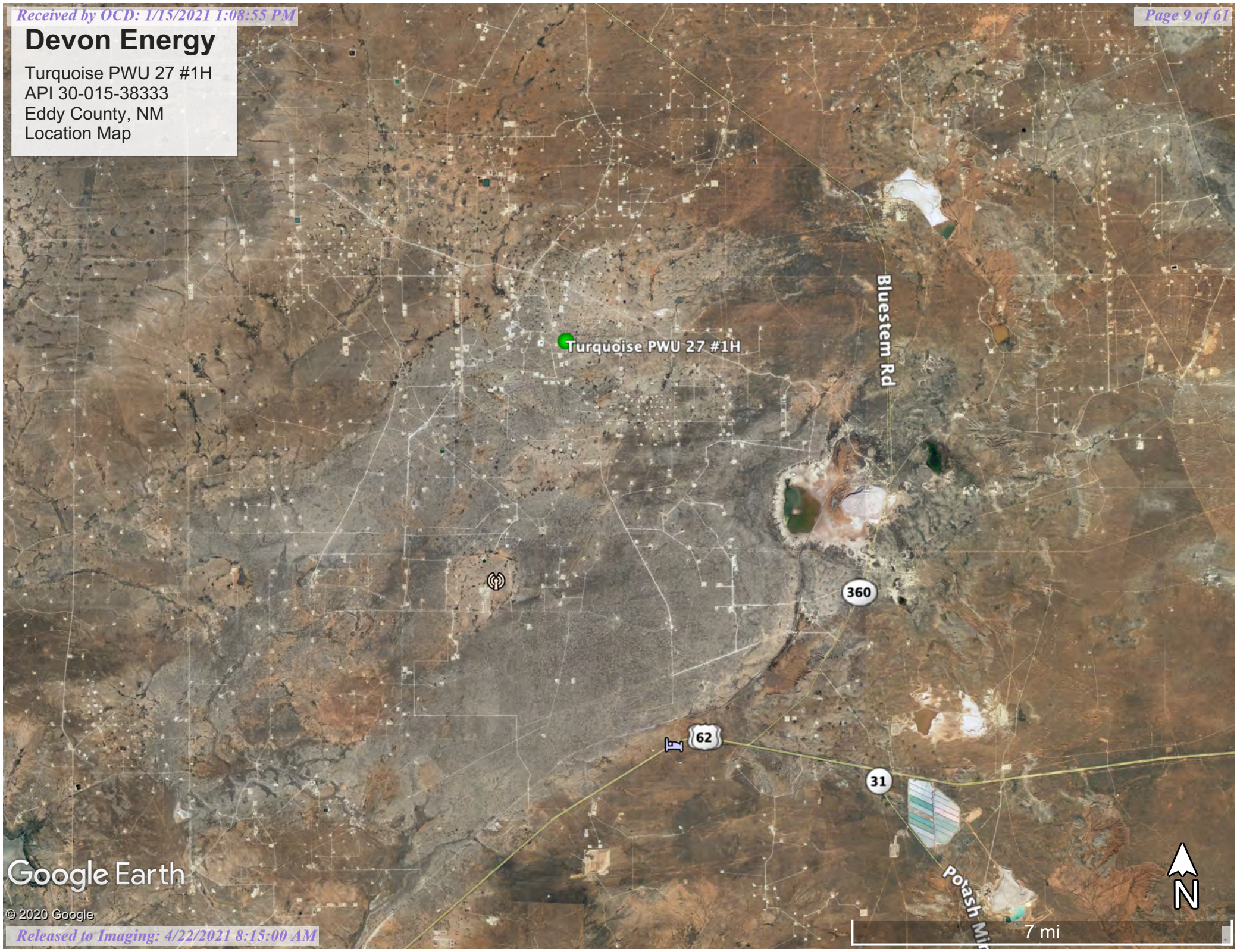
Devon Energy

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



Devon Energy

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



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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	Depth Well	Depth Water	Water Column
CP 00741		CP	ED	1	3	2	34	19S	29E	588030	3609533*	2007	230	60	170
CP 00681		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**

8/6/20 9:48 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER

New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	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**

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

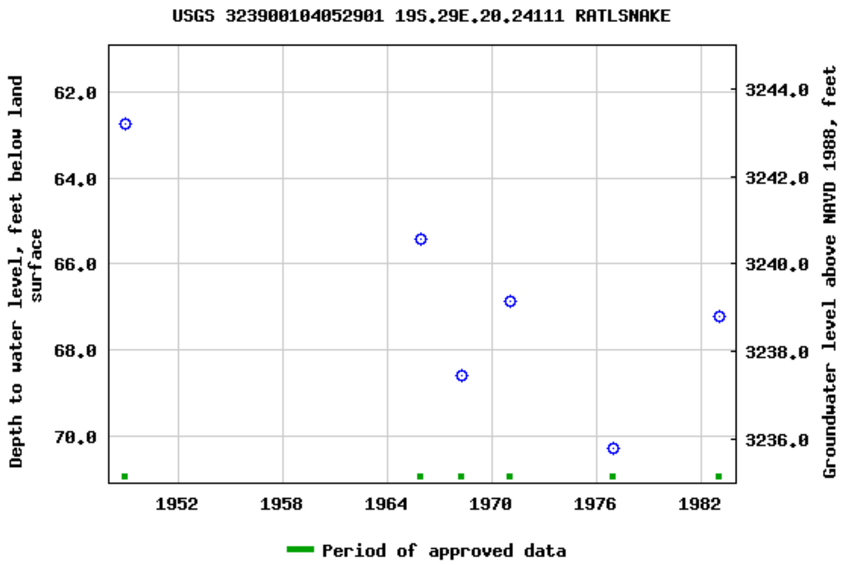
USGS 323900104052901 19S.29E.20.24111 RATLSNAKE

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

National Water Information System: Mapper

Help Info

Sites Map

Search

Surface-Water Sites

Groundwater Sites

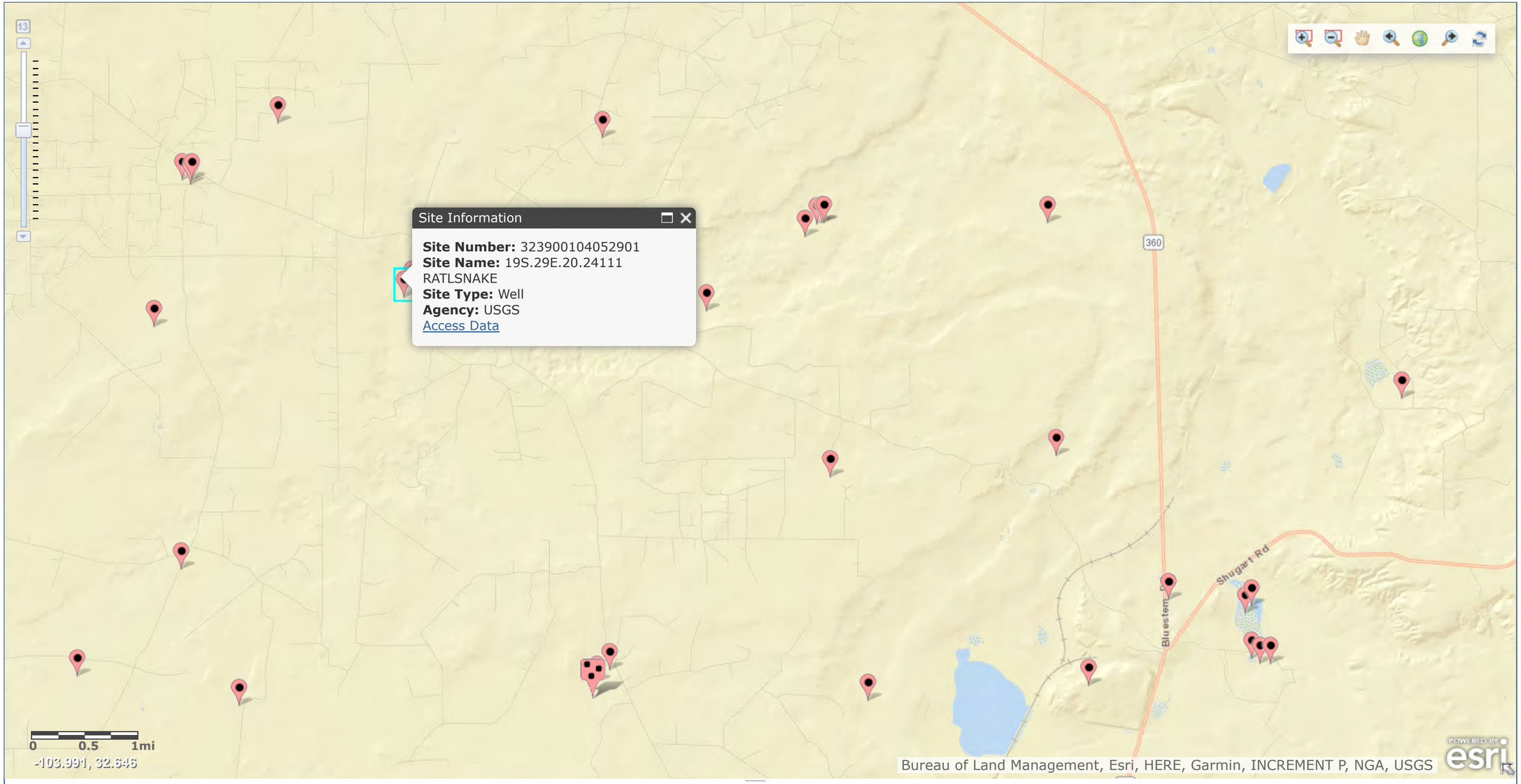
Active Sites
- Any data
- Instantaneous data
- Daily data
- Water-quality data
- Measurements
- Annual Report

Inactive Sites
- Any data
- Instantaneous data
- Daily data
- Water-quality data
- Measurements
- Annual Report

Springs

Atmospheric Sites

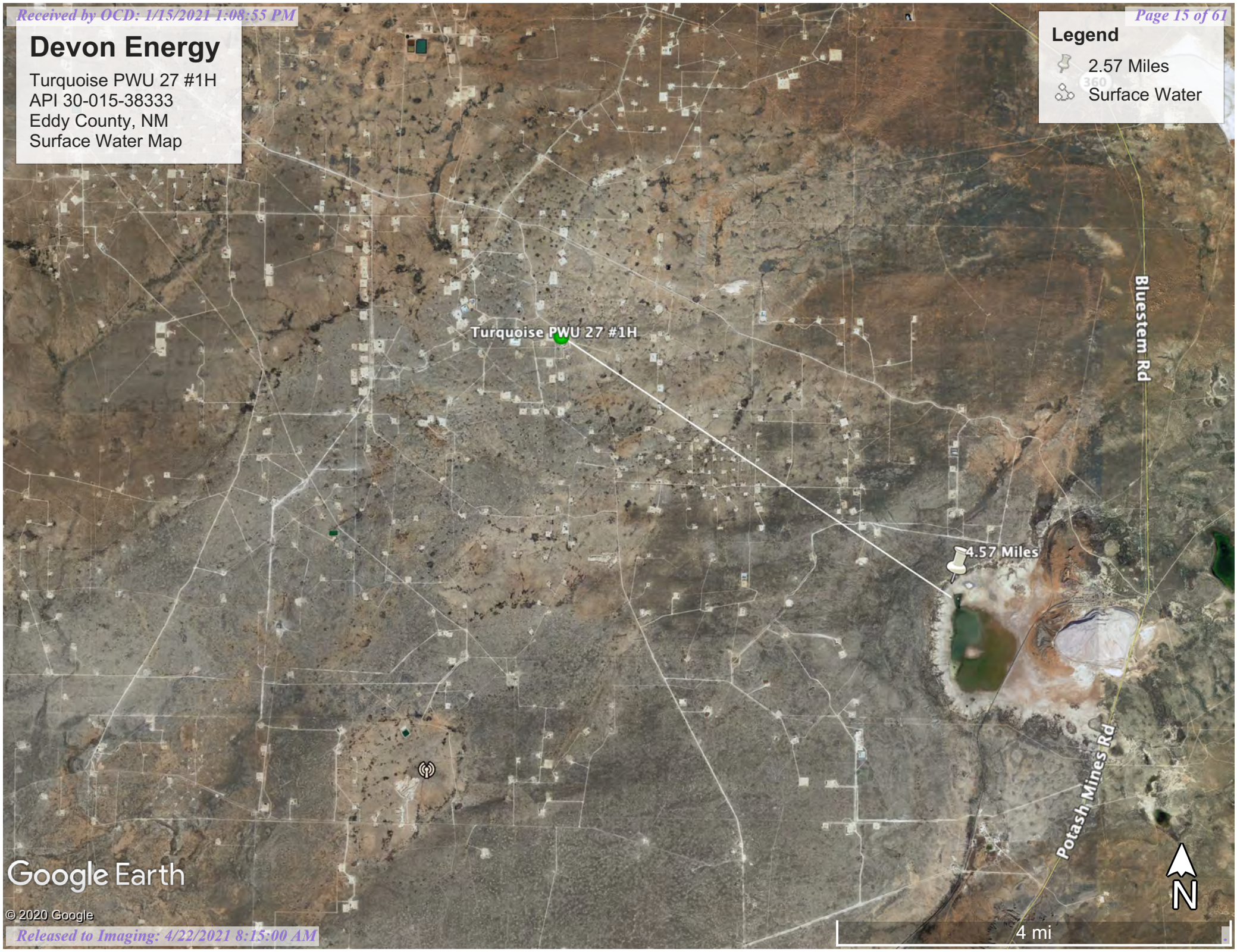
Other Sites



Site Information

Devon Energy

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



Pima Environmental Services

Appendix B
Soil Survey & Geological Data:
FEMA Flood Map

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, talf
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

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

FEMA

104°4'32"W 32°38'25"N

104°3'54"W 32°37'55"N

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

1:6,000

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 / 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
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

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)

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)
Cause of Release		

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Initial Response

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

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

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

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

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

Printed Name: _____ Title: _____

Signature: Kendra DeHoyos Date: _____

email: _____ Telephone: _____

OCD Only

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

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

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

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

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

Form C-141
Page 2

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@dvn.com

Telephone:

OCD Only

Received by: _____

Date: _____

State of New Mexico
Oil Conservation Division

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: Envrionmental 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)

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)
Cause of Release		

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Initial Response

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

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

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

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

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

Printed Name: _____ Title: _____

Signature: Kendra DeHoyos Date: _____

email: _____ Telephone: _____

OCD Only

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

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

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

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

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

Form C-141
Page 2

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: _____

State of New Mexico
Oil Conservation Division

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: Chad Hensley
Date: 04/22/2021

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: Chad Hensley
Date: 04/22/2021

Printed Name: Chad Hensley
Title: Environmental Specialist Advanced

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

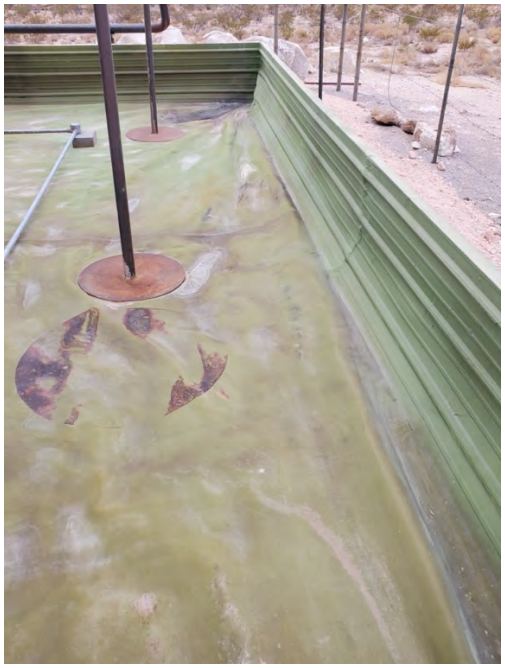
Other: _____

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

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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2007E42**
Date Reported: **8/6/2020**

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

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.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative 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

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

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 Quanitative 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: **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 Quanitative 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 Quanitative 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 Quanitative 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

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 7/29/20

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 ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☐	No ☐	NA ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by CMC 7/29/20

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				

Chain-of-Custody Record

Client: Pima Environmental

Mailing Address: 1601 N. Turner ste 500
Hobbs, NM 88240

Phone #: 575-631-6977

email or Fax#: Chris@pimaoil.com

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time: 5 Day
☒ Standard ☐ Rush

Project Name: Turquoise Fed 27 1H

Project #: 20867722

Project Manager: Chris Jones

Sampler:

On Ice: ☑ Yes ☐ No

# of Coolers: 3

Cooler Temp(including CF): see Remarks (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2007642	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Chloride
7/28/20	1350		N-Composite	Glass	Ice	-001											
	1355		S-Comp			-002											
	1400		E-Comp			-003											
	1405		W-Comp			-004											
	1420		BG-1			-005											
	1415		BG-2			-006											
	1420		BG-3			-007											
			per sample bottle JR 7/29/20														
			JR 7/29/20														

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
7/28/20	14:45		ACummings		7/28/20	1435
7/28/20	1900	ACummings	CM	Courier	7/29/20	0930

Remarks: Bill to Devon

3.9 ± 0 = 3.9c
2.3 ± 0 = 2.3c
4.9 ± 0 = 4.9c

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

CARDINAL Laboratories

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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 - 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

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

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

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:	Pima Environmental
Project Manager:	Chris Jones
Address:	1601 N Turner ste. 500
City:	Hobbs State: NM Zip: 88240
Phone #:	575-964-7740 Fax #:
Project #:	33 Project Owner: Devon
Project Name:	Turquoise PWU 27 #1H
Project Location:	Eddy, NM
Sampler Name:	Robert Carper

BILL TO

P.O. #:	20667722
Company:	Devon
Attn:	Tom Byrum
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

FOR LAB USE ONLY						MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST	
Lab I.D.	Sample I.D.			C (G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	TPH	Chlorides
H002541																		
1	S-1	N	bottom	C				✓					✓		9-21-20	1000	✓	✓
2	S-2	N	side													1005	✓	✓
3	S-3	W	bottom													1010	✓	
4	S-4	W	side													1015	✓	
5	S-5	S	bottom													1020		✓
6	S-6	S	side													1025		✓
7	S-7	E	bottom													1030		✓
8	S-8	E	side													1035		✓

Relinquished By:	Date: 9-25-20	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By:	Time: 6:00	Received By:	All Results are emailed. Please provide Email address:
	Date:		REMARKS:
	Time:		

Delivered By: (Circle One)	Observed Temp. °C -2.7	Sample Condition Cool Intact	CHECKED BY: (Initials)	Turnaround Time: Standard ☑ Rush ☐
Sampler - UPS - Bus - Other:	Corrected Temp. °C	☑ Yes ☑ Yes ☐ No ☐ No	T.O.	Thermometer ID #113 Correction Factor None

Bacteria (only) Sample Condition Cool Intact ☐ Yes ☐ Yes ☐ No ☐ No Observed Temp. °C Corrected Temp. °C

FORM-006 R 3.1 06/04/20

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

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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 14807

CONDITIONS OF APPROVAL

Operator:	OGRID:	Action Number:	Action Type:
PIMA ENVIRONMENTAL SERVICES, L 1601 N. Turner Suite 500 Hobbs, NM88240	329999	14807	C-141

OCD Reviewer	Condition
chensley	None