

Incident ID	NJMW1325447866
District RP	
Facility ID	
Application ID	

## Site Assessment/Characterization

*This information must be provided to the appropriate district office no later than 90 days after the release discovery date.*

What is the shallowest depth to groundwater beneath the area affected by the release?	<50' (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas <b>not</b> 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.

<b>Characterization Report Checklist:</b> <i>Each of the following items must be included in the report.</i>
<input checked="" type="checkbox"/> Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
<input checked="" type="checkbox"/> Field data
<input checked="" type="checkbox"/> Data table of soil contaminant concentration data
<input checked="" type="checkbox"/> Depth to water determination
<input checked="" type="checkbox"/> Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
<input checked="" type="checkbox"/> Boring or excavation logs
<input checked="" type="checkbox"/> Photographs including date and GIS information
<input checked="" type="checkbox"/> Topographic/Aerial maps
<input checked="" type="checkbox"/> 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.

Incident ID	NJMW1325447866
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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: Dale Woodall Title: EHS Professional

Signature: *Dale Woodall* Date: 3/6/2023

email: dale.woodall@dn.com Telephone: 575-748-1838

**OCD Only**

Received by: Jocelyn Harimon Date: 03/06/2023

Incident ID	NJMW1325447866
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## 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: Dale Woodall Title: EHS Professional  
 Signature: *Dale Woodall* Date: 3-6-2023  
 email: dale.woodall@dvn.com Telephone: 575-748-1838

**OCD Only**

Received by: Jocelyn Harimon Date: 03/06/2023

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: *Ashley Maxwell* Date: 3/7/2023  
 Printed Name: Ashley Maxwell Title: Environmental Specialist



**Pima Environmental Services**  
**5614 N. Lovington Highway**  
**Hobbs, NM 88240**  
**575-964-7740**

March 3<sup>rd</sup>, 2023

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

Bureau of Land Management  
 620 East Green Street  
 Carlsbad, NM 88220

**Re: Site Assessment, Remediation, and Closure Report**  
**Aquila 22 Fed Com 4H**  
**API No. 30-015-41159**  
**GPS: Latitude 32.6442938 Longitude -103.8492756**  
**UL -- I, Sec. 22, T19S, R31E**  
**Eddy County, NM**  
**NMOCD Ref. No. NJMW1325447866**

Pima Environmental Services, LLC. (Pima) has been contracted by Devon Energy Production Company, LP (Devon) to perform a spill assessment, remediation activities, and submit this closure report for a 15% HCL Acid release that occurred at the Aquila 22 Fed Com 4H (Aquila). The initial C-141 was submitted on September 10<sup>th</sup>, 2013 (Appendix C). This incident was assigned Incident ID NJMW1325447866 by the New Mexico Oil Conservation Division (NMOCD).

**Site Characterization**

The Aquila is located approximately fourteen (14) miles southeast of Loco Hills, NM. This spill site is in Unit I, Section 22, Township 19S, Range 31E, Latitude 32.6442938 Longitude -103.8492756, Eddy County, NM. Figure 1 references a Location Map.

Per the New Mexico Bureau of Geology and Mineral Resources, the geology is in the Eolian and Piedmont deposits (Holocene to middle Pleistocene). The soil in this area is made up of Berino complex, 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 low potential for karst geology to be present in the area of the Aquila (Figure 3).

According to the New Mexico Office of the State Engineer, depth to the nearest groundwater in this area is 130 feet below grade surface (BGS). According to the United States Geological Survey (USGS), the nearest groundwater is greater than 166 feet BGS. The closest waterway is an unnamed salt playa, located approximately 6.29 miles to the northwest of this location. See Appendix A for referenced water surveys.

Table 1 NMAC and Closure Criteria 19.15.29					
Depth to Groundwater (Appendix A)	Constituent & Limits				
	Chlorides	Total TPH	GRO+DRO	BTEX	Benzene
<50' (Lack of GW)	600 mg/kg	100 mg/kg		50 mg/kg	10 mg/kg
51-100'	10,000 mg/kg	2,500 mg/kg	1,000 mg/kg	50 mg/kg	10 mg/kg
>100'	20,000 mg/kg	2,500 mg/kg	1,000 mg/kg	50 mg/kg	10 mg/kg

Reference Figure 2 for a Topographic Map.

**Release Information**

**NJMW1325447866:** On August 29<sup>th</sup>, 2013, the contract Operations Coordinator for Raging Bull arrived at 6:48 am and discovered the 15% HCL acid was leaking from the front manifold of the frac tank. He closed the butterfly valve isolating the manifold from the frac tank, which slowed down the leak. He notified the Devon consultant who called for vacuum trucks, backhoe, dump truck with sand and for new coated frac tanks to begin cleaning up. Approximately 167 barrels of 15% HCL Acid was released, and 82 barrels were recovered.

**Remediation Activities, Site Assessment, and Soil Sampling Results**

On February 17<sup>th</sup>, 2023, Pima Environmental mobilized personnel to the Aquila to assess the impacted area. Pima sampled the areas surrounding the area underlying the frac tank manifold release and collected a total of fifteen soil samples for laboratory analysis. Five bottom samples (S1-S5) were collected at depths of 1 and 4 feet to determine vertical delineation. Additionally, side wall samples (SW1-SW4) were collected at a depth of 6 inches to determine horizontal delineation. One background sample (BG-1) was collected to assess naturally occurring Chloride levels. An initial site map can be found in Figure 4.

2-17-23 Soil Sample Results

NMOCD Table 1 Closure Criteria 19.15.29 NMAC (Depth to Groundwater is <50')								
DEVON ENERGY - AQUILLA 22 FED COM 4H								
Sample Date: 2/17/23	NM Approved Laboratory Results							
Sample ID	Depth (BGS)							Total Corrosivity PH Units
S-1	1'							8.43
	4'							8.23
S-2	1'							8.63
	4'							8.23
S-3	1'							8.47
	4'							8.09
S-4	1'							8.39
	4'							7.66
S-5	1'							8.45
	4'							7.71
SW 1	6"							8.2
SW 2	6"							8.14
SW 3	6"							8.16
SW 4	6"							8.19
BG-1	6"							8.17

ND: Analyte Non-Detect

Based on the sample results, the bottoms and sidewalls are below NMOCD Closure Criteria 19.15.29 NMAC. We believe the impacted area has been adequately remediated. See Appendix D for Photographic Documentation.

**Closure Request**

Due to analytical levels falling below NMOCD closure criteria, no further action is required.

After careful review, Pima requests that this incident, NJMW1325447866 be closed. Devon has complied with the applicable closure requirements set forth in rule 19.15.19.12 NMAC.

Should you have any questions or need additional information, please feel free to contact Sebastian Orozco at 619-721-4813 or [Sebastian@pimaoil.com](mailto:Sebastian@pimaoil.com).

Respectfully,

*Sebastian Orozco*

Sebastian Orozco  
Environmental Professional  
Pima Environment Services, LLC

**Attachments**

Figures:

- 1- Location Map
- 2- Topographic Map
- 3- Karst Map
- 4- Initial Site Map

Appendices:

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



Pima Environmental Services

**Figures:**

1-Location Map

2-Topographic Map

3-Karst Map

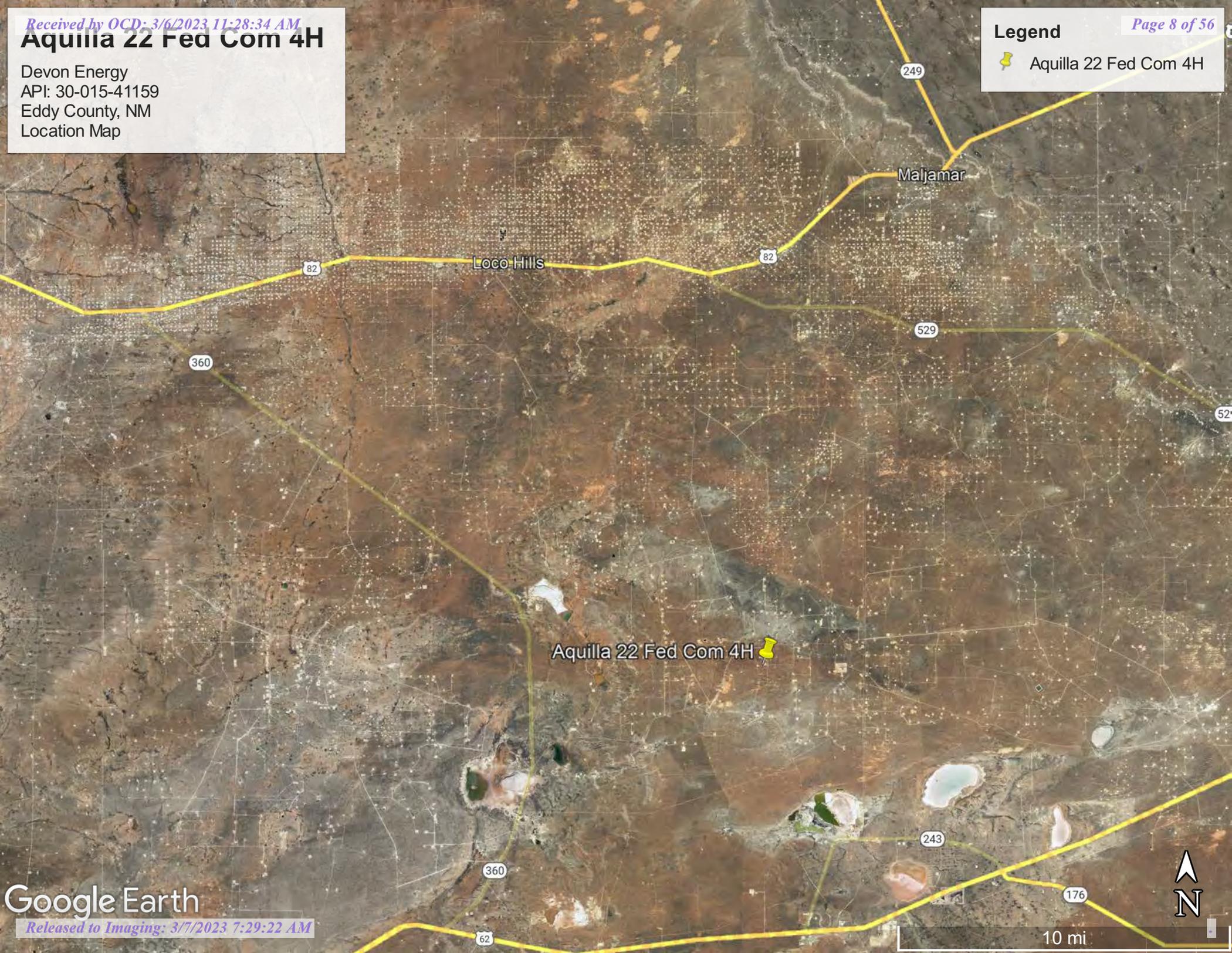
4-Site Map

# Aquilla 22 Fed Com 4H

Devon Energy  
API: 30-015-41159  
Eddy County, NM  
Location Map

## Legend

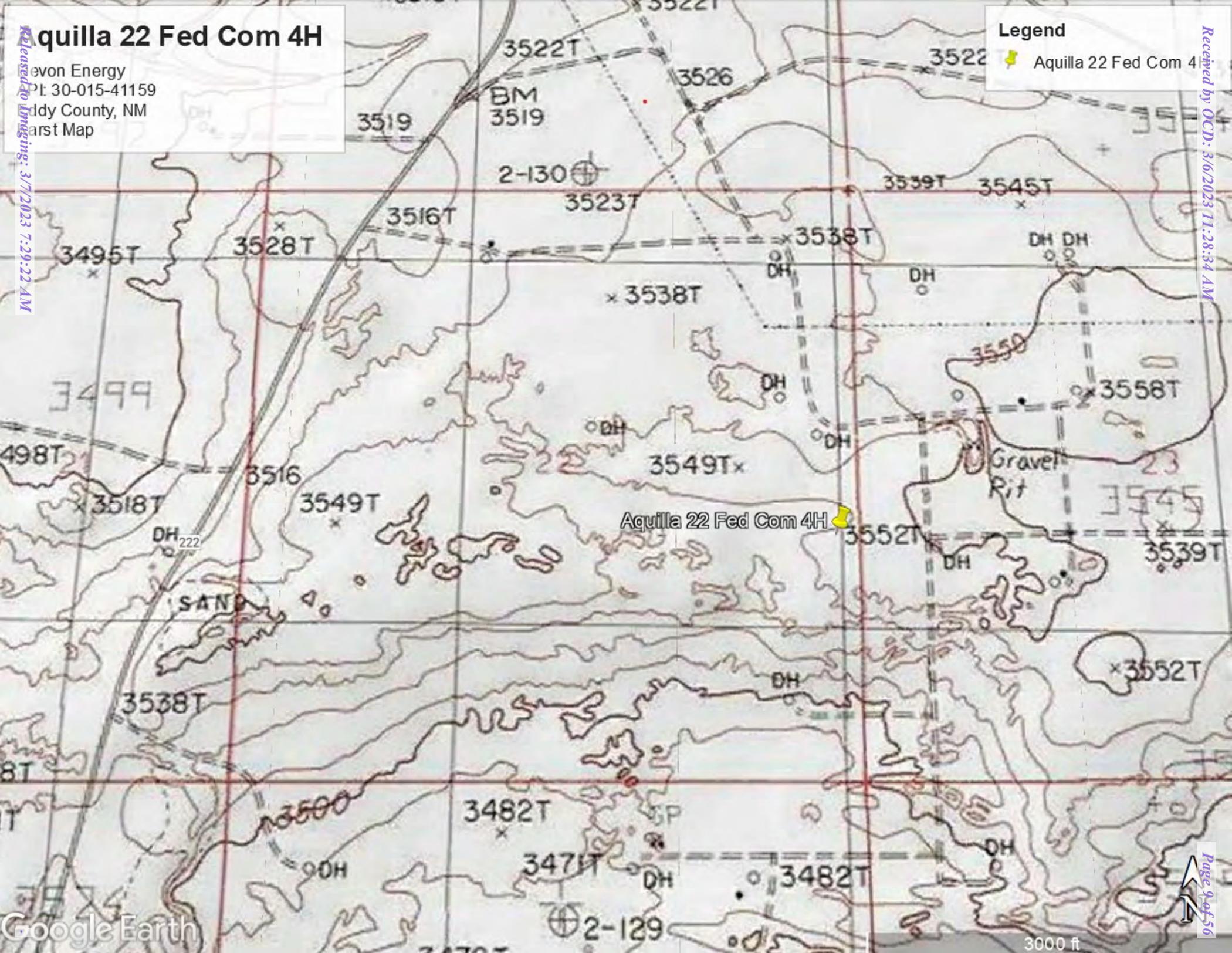
 Aquilla 22 Fed Com 4H



# Aguilla 22 Fed Com 4H

Devon Energy  
PI: 30-015-41159  
Sandoz County, NM  
Aerial Map

**Legend**  
Aguilla 22 Fed Com 4H



Released to Imaging: 3/7/2023 7:29:22 AM

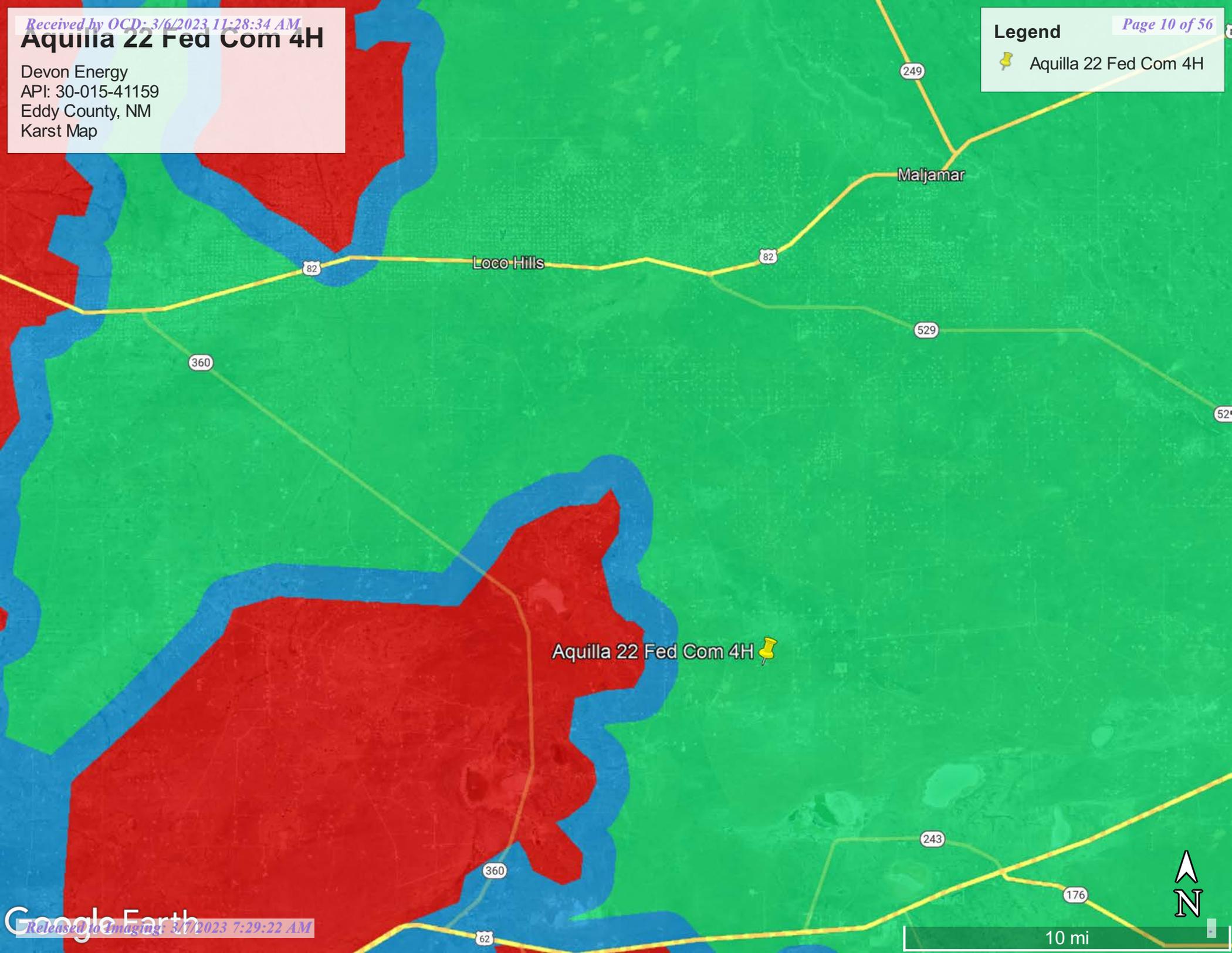
Received by OCD: 3/6/2023 11:28:34 AM

# Aquilla 22 Fed Com 4H

Devon Energy  
API: 30-015-41159  
Eddy County, NM  
Karst Map

## Legend

 Aquilla 22 Fed Com 4H



# Aquila 22 Fed Com 4H

Devon Energy  
API:30-015-41159  
Eddy County, NM  
NJMW 1325447866  
Site Map

**Legend**

-  7866 Release Area
-  Side Wall Sample
-  Soil Sample





Pima Environmental Services

**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	Q 22	Sec	Tws	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
<a href="#">CP 01554 POD2</a>		CP	LE	2	2	1	22	19S	31E		607165	3613322	1167	400		
<a href="#">CP 01554 POD1</a>		CP	LE	2	2	1	22	19S	31E		607166	3613354	1192	400		
<a href="#">CP 00829 POD1</a>		CP	LE		2	4	16	19S	31E		606165	3614009*	2361	120		
<a href="#">CP 01864 POD1</a>		CP	ED	4	2	1	34	19S	31E		607068	3609824	2752	110		
<a href="#">CP 00642 POD1</a>		CP	ED		2	2	25	19S	31E		611025	3611657*	3193	250		
<a href="#">CP 00722 POD1</a>		CP	LE	4	3	3	28	19S	31E		605106	3610273*	3557	200		
<a href="#">CP 00722 POD1</a>	R	CP	LE	4	3	3	28	19S	31E		605106	3610273*	3557	200		
<a href="#">CP 00725 POD1</a>		CP	ED	1	3	3	28	19S	31E		604906	3610473*	3605	231		
<a href="#">CP 00641 POD1</a>		CP	ED		4	1	36	19S	31E		610247	3609634*	3638	300	130	170
<a href="#">CP 00722 POD3</a>		CP	LE	2	4	1	33	19S	31E		605519	3609673*	3668	220	140	80
<a href="#">CP 00723 POD1</a>		CP	ED	2	1	1	33	19S	31E		605111	3610071*	3680	139		
<a href="#">CP 00563 POD1</a>		CP	LE	1	1	2	19	19S	32E		612118	3613376*	4292	300		
<a href="#">CP 00640 POD1</a>		CP	LE		2	2	19	19S	32E		612621	3613280*	4766	260	102	158

Average Depth to Water: **124 feet**  
 Minimum Depth: **102 feet**  
 Maximum Depth: **140 feet**

**Record Count:** 13

**UTMNAD83 Radius Search (in meters):**

**Easting (X):** 607929

**Northing (Y):** 3612438.54

**Radius:** 5000

\*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.

1/24/23 9:37 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER



USGS Home  
Contact USGS  
Search USGS

## National Water Information System: Web Interface

USGS Water Resources

Data Category:

Groundwater

Geographic Area:

United States

GO

Click to hide News Bulletins

- Explore the *NEW* [USGS National Water Dashboard](#) interactive map to access real-time water data from over 13,500 stations nationwide.
- [Full News](#)

Groundwater levels for the Nation

Important: [Next Generation Monitoring Location Page](#)

### Search Results -- 1 sites found

site\_no list =

- 323810103511401

Minimum number of levels = 1

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

### USGS 323810103511401 19S.31E.27.214121

Available data for this site

Groundwater: Field measurements

GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

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

Land-surface elevation 3,480 feet above NGVD29

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

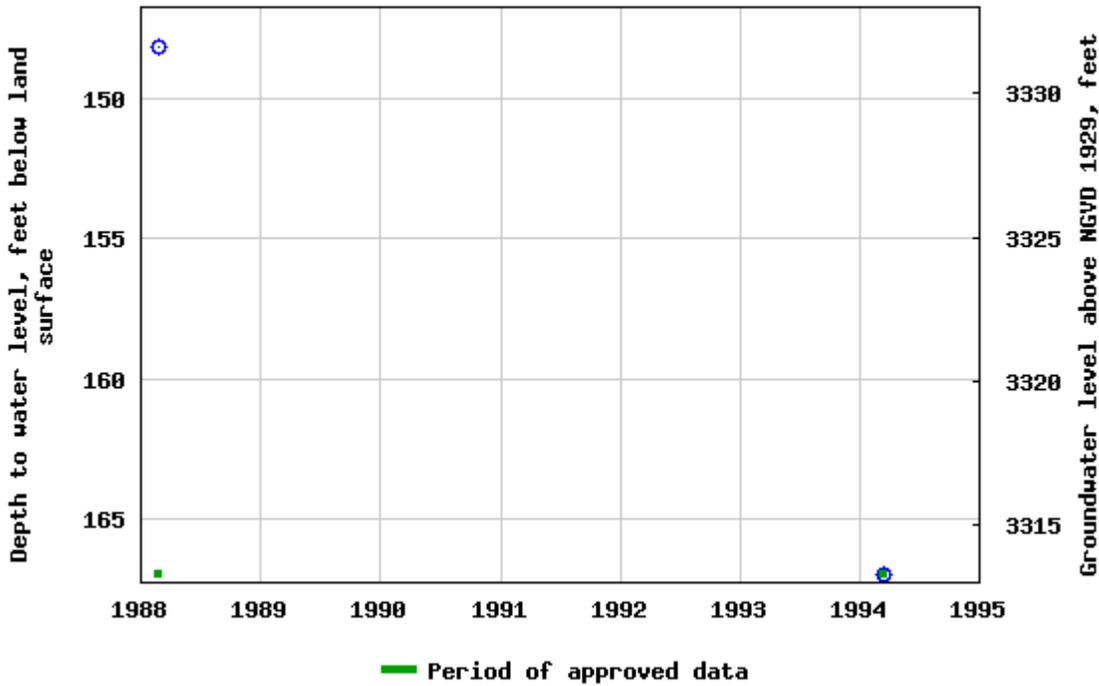
This well is completed in the Other aquifers (N9999OTHER) national aquifer.

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

#### Output formats

<a href="#">Table of data</a>
<a href="#">Tab-separated data</a>
<a href="#">Graph of data</a>
<a href="#">Reselect period</a>

USGS 323810103511401 19S,31E,27,214121



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](#)
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[Accessibility](#)   [FOIA](#)   [Privacy](#)   [Policies and Notices](#)

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

**Title: Groundwater for USA: Water Levels**

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



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

Page Last Modified: 2023-01-24 11:33:55 EST

0.59 0.51 nadww01

# Aquilla 22 Fed Com 4H

Devon Energy  
API: 30-015-41159  
Eddy County, NM  
Surface Water Map

## Legend

-  6.29 Miles
-  Aquilla 22 Fed Com 4H



360

Salt Playa

Aquilla 22 Fed Com 4H



5 mi



Pima Environmental Services

**Appendix B**

Soil Survey & Geological Data

FEMA Flood Map

Wetlands Map

Map Unit Description: Berino complex, 0 to 3 percent slopes, eroded---Eddy Area, New Mexico

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## Eddy Area, New Mexico

### BB—Berino complex, 0 to 3 percent slopes, eroded

#### Map Unit Setting

*National map unit symbol:* 1w43

*Elevation:* 2,000 to 5,700 feet

*Mean annual precipitation:* 5 to 15 inches

*Mean annual air temperature:* 57 to 70 degrees F

*Frost-free period:* 180 to 260 days

*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Berino and similar soils:* 60 percent

*Pajarito and similar soils:* 25 percent

*Minor components:* 15 percent

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

#### Description of Berino

##### Setting

*Landform:* Fan piedmonts, plains

*Landform position (three-dimensional):* Riser

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Parent material:* Mixed alluvium and/or eolian sands

##### Typical profile

*H1 - 0 to 17 inches:* fine sand

*H2 - 17 to 58 inches:* sandy clay loam

*H3 - 58 to 60 inches:* loamy sand

##### Properties and qualities

*Slope:* 0 to 3 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Well drained

*Runoff class:* Low

*Capacity of the most limiting layer to transmit water (Ksat):*

Moderately high to high (0.60 to 2.00 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 40 percent

*Salinity, maximum in profile:* Very slightly saline to slightly saline  
(2.0 to 4.0 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 1.0

*Available water storage in profile:* Moderate (about 8.0 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7e

Map Unit Description: Berino complex, 0 to 3 percent slopes, eroded---Eddy Area, New Mexico

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*Hydrologic Soil Group:* B  
*Ecological site:* Loamy Sand (R042XC003NM)  
*Hydric soil rating:* No

### Description of Pajarito

#### Setting

*Landform:* Interdunes, plains, dunes  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Linear, convex  
*Across-slope shape:* Linear, convex  
*Parent material:* Mixed alluvium and/or eolian sands

#### Typical profile

*H1 - 0 to 9 inches:* loamy fine sand  
*H2 - 9 to 72 inches:* fine sandy loam

#### Properties and qualities

*Slope:* 0 to 3 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Well drained  
*Runoff class:* Very low  
*Capacity of the most limiting layer to transmit water (Ksat):* High  
 (2.00 to 6.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 40 percent  
*Salinity, maximum in profile:* Nonsaline (0.0 to 1.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 1.0  
*Available water storage in profile:* Moderate (about 8.0 inches)

#### Interpretive groups

*Land capability classification (irrigated):* 2e  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* A  
*Ecological site:* Loamy Sand (R042XC003NM)  
*Hydric soil rating:* No

### Minor Components

#### Cacique

*Percent of map unit:* 4 percent  
*Ecological site:* Sandy (R042XC004NM)  
*Hydric soil rating:* No

#### Pajarito

*Percent of map unit:* 4 percent  
*Ecological site:* Loamy Sand (R042XC003NM)  
*Hydric soil rating:* No

#### Wink

*Percent of map unit:* 4 percent  
*Ecological site:* Loamy Sand (R042XC003NM)  
*Hydric soil rating:* No

Map Unit Description: Berino complex, 0 to 3 percent slopes, eroded---Eddy Area, New Mexico

---

**Kermit**

*Percent of map unit:* 3 percent

*Ecological site:* Deep Sand (R042XC005NM)

*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 FIRMMette



103°51'16"W 32°38'56"N



## Legend

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

- SPECIAL FLOOD HAZARD AREAS**
    - Without Base Flood Elevation (BFE) Zone A, 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**
    - 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
- The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

0 250 500 1,000 1,500 2,000 Feet 1:6,000 103°50'39"W 32°38'25"N

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/3/2023 at 12:13 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.



# Wetlands Map



U.S. Fish and Wildlife Service, National Standards and Support Team, wetlands\_team@fws.gov

January 24, 2023

### Wetlands

-  Estuarine and Marine Deepwater
-  Freshwater Emergent Wetland
-  Lake
-  Estuarine and Marine Wetland
-  Freshwater Forested/Shrub Wetland
-  Other
-  Freshwater Pond
-  Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



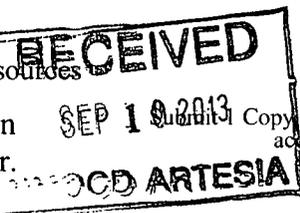
Pima Environmental Services

**Appendix C**

C-141 Form

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



Form C-141  
Revised August 8, 2011

**Release Notification and Corrective Action**

*JMW1325447860*

**OPERATOR**  Initial Report  Final Report

Name of Company	<b>Devon Energy (#6137) Production</b>	Contact:	<b>Denise Menoud</b>
Address	<b>PO Box 250 Artesia, NM 88211</b>	Telephone No.	<b>575-746-5544</b>
Facility Name	<b>Aquila 22 Fed Com #4H</b>	Facility Type	<b>Well</b>

Surface Owner:	<b>BLM</b>	Mineral Owner		API No.	<b>30-015-41159</b>
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**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
<b>I</b>	<b>22</b>	<b>19S</b>	<b>31E</b>	<b>2030</b>	<b>South</b>	<b>225</b>	<b>East</b>	<b>Eddy</b>

Latitude: \_\_\_ Longitude: \_\_\_

**NATURE OF RELEASE**

Type of Release	<b>15% HCL Acid</b>	Volume of Release:	<b>167 bbls</b>	Volume Recovered	<b>82 bbls</b>
Source of Release	<b>Frac Tank</b>	Date and Hour of Occurrence	<b>8/29/2013 6:48 AM</b>	Date and Hour of Discovery	<b>8/29/2013 6:48 AM</b>
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? <b>1) Jim Amos, BLM-Carlsbad, NM and 2) Mike Bratcher, NMOCD-Artesia, NM</b>			
By Whom?	<b>Tony Bunch, Devon Completions Foreman</b>	Date and Hour	<b>1) 8/29/13 1:45 pm 2) 8/29/13 2:15 pm</b>		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.\*  
NA

Describe Cause of Problem and Remedial Action Taken.\*  
The contract Operations Coordinator for Raging Bull arrived at 6:48 AM and discovered the 15% HCL acid was leaking from the front manifold of the frac tank. He closed the butterfly valve isolating the manifold from the frac tank, which slowed down the leak. He notified the Devon consultant who called for vacuum trucks, backhoe, dump truck with sand and for new coated frac tanks to begin clean up. The leaks were coming from new welds on the manifold. Either the manifold was not recoated after welding or the coating was poorly applied.

Describe Area Affected and Cleanup Action Taken.\*  
A large area around the frac tanks and a 20' x 20' off location were affected. Approximately 1/2 of the acid was recovered by vacuum trucks and the rest was covered by sand. The BLM advised this was satisfactory until Devon's operations were complete and then final cleanup and restoration would be required.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature: <i>D. Menoud</i>	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: <b>Denise Menoud</b>	Approved by Environmental Specialist	Signed By: <i>Mike Bratcher</i>
Title: <b>Field Admin Support</b>	Approval Date: <b>SEP 11 2013</b>	Expiration Date:
E-mail Address: <b>Denise.Menoud@dvn.com</b>	Conditions of Approval: Remediation per OCD Rule & Guidelines, & like approval by BLM. <b>SUBMIT REMEDIATION</b>	Attached <input type="checkbox"/>
Date: <b>9/9/2013</b> Phone: <b>575-746-5544</b>	<b>PROPOSAL NO LATER THAN:</b>	

\* Attach Additional Sheets If Necessary

**October 11, 2013**

**2RP-1902**

Incident ID	NJMW1325447866
District RP	
Facility ID	
Application ID	

## Site Assessment/Characterization

*This information must be provided to the appropriate district office no later than 90 days after the release discovery date.*

What is the shallowest depth to groundwater beneath the area affected by the release?	<50' (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

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

State of New Mexico  
Oil Conservation Division

Page 4

Incident ID	NJMW1325447866
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: Dale Woodall Title: EHS Professional

Signature: *Dale Woodall* Date: 3/6/2023

email: dale.woodall@dn.com Telephone: 575-748-1838

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

Incident ID	NJMW1325447866
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: Dale Woodall Title: EHS Professional

Signature: Dale Woodall Date: 3-6-2023

email: dale.woodall@dvn.com Telephone: 575-748-1838

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

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

Closure Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_



Pima Environmental Services

**Appendix D**

Photographic Documentation



**SITE PHOTOGRAPHS  
DEVON ENERGY  
AQUILA 22 FED COM #4H**

Site Assessment







Pima Environmental Services

**Appendix E**

Laboratory Reports

Report to:  
Tom Bynum



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

### Pima Environmental Services-Carlsbad

Project Name: Aquila 22 Fed Com 4H

Work Order: E302093

Job Number: 01058-0007

Received: 2/22/2023

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
2/24/23

5796 U.S. Hwy 64  
Farmington, NM 87401

Phone: (505) 632-1881  
Envirotech-inc.com



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.  
Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.  
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.  
Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.  
Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.



Date Reported: 2/24/23

Tom Bynum  
PO Box 247  
Plains, TX 79355-0247

Project Name: Aquila 22 Fed Com 4H  
Workorder: E302093  
Date Received: 2/22/2023 7:00:00AM

Tom Bynum,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 2/22/2023 7:00:00AM, under the Project Name: Aquila 22 Fed Com 4H.

The analytical test results summarized in this report with the Project Name: Aquila 22 Fed Com 4H apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

**Walter Hinchman**  
Laboratory Director  
Office: 505-632-1881  
Cell: 775-287-1762  
[whinchman@envirotech-inc.com](mailto:whinchman@envirotech-inc.com)

**Raina Schwanz**  
Laboratory Administrator  
Office: 505-632-1881  
[rainaschwanz@envirotech-inc.com](mailto:rainaschwanz@envirotech-inc.com)

**Alexa Michaels**  
Sample Custody Officer  
Office: 505-632-1881  
[labadmin@envirotech-inc.com](mailto:labadmin@envirotech-inc.com)

Field Offices:

**Southern New Mexico Area**  
**Lynn Jarboe**  
Technical Representative/Client Services  
Office: 505-421-LABS(5227)  
Cell: 505-320-4759  
[ljjarboe@envirotech-inc.com](mailto:ljjarboe@envirotech-inc.com)

**West Texas Midland/Odessa Area**  
**Rayny Hagan**  
Technical Representative  
Office: 505-421-LABS(5227)

Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)

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### Sample Summary

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Aquila 22 Fed Com 4H Project Number: 01058-0007 Project Manager: Tom Bynum	<b>Reported:</b> 02/24/23 10:11
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
S1 - 1'	E302093-01A	Soil	02/17/23	02/22/23	Glass Jar, 2 oz.
S1 - 4'	E302093-02A	Soil	02/17/23	02/22/23	Glass Jar, 2 oz.
S2 - 1'	E302093-03A	Soil	02/17/23	02/22/23	Glass Jar, 2 oz.
S2 - 4'	E302093-04A	Soil	02/17/23	02/22/23	Glass Jar, 2 oz.
S3 - 1'	E302093-05A	Soil	02/17/23	02/22/23	Glass Jar, 2 oz.
S3 - 4'	E302093-06A	Soil	02/17/23	02/22/23	Glass Jar, 2 oz.
S4 - 1'	E302093-07A	Soil	02/17/23	02/22/23	Glass Jar, 2 oz.
S4 - 4'	E302093-08A	Soil	02/17/23	02/22/23	Glass Jar, 2 oz.
S5 - 1'	E302093-09A	Soil	02/17/23	02/22/23	Glass Jar, 2 oz.
S5 - 4'	E302093-10A	Soil	02/17/23	02/22/23	Glass Jar, 2 oz.
SW1	E302093-11A	Soil	02/17/23	02/22/23	Glass Jar, 2 oz.
SW2	E302093-12A	Soil	02/17/23	02/22/23	Glass Jar, 2 oz.
SW3	E302093-13A	Soil	02/17/23	02/22/23	Glass Jar, 2 oz.
SW4	E302093-14A	Soil	02/17/23	02/22/23	Glass Jar, 2 oz.
BG1	E302093-15A	Soil	02/17/23	02/22/23	Glass Jar, 2 oz.

### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Aquila 22 Fed Com 4H Project Number: 01058-0007 Project Manager: Tom Bynum	<b>Reported:</b> 2/24/2023 10:11:44AM
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S1 - 1'

E302093-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Corrosivity by 9045D/9040C</b>	pH Units	pH Units	Analyst: KF			Batch: 2308022
pH @25°C	<b>8.43</b>		1	02/22/23	02/22/23	



### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Aquila 22 Fed Com 4H Project Number: 01058-0007 Project Manager: Tom Bynum	<b>Reported:</b> 2/24/2023 10:11:44AM
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**S1 - 4'**

**E302093-02**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Corrosivity by 9045D/9040C</b> pH @25°C	<b>8.23</b>	pH Units	1	02/22/23	02/22/23	Analyst: KF Batch: 2308022



### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Aquila 22 Fed Com 4H Project Number: 01058-0007 Project Manager: Tom Bynum	<b>Reported:</b> 2/24/2023 10:11:44AM
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**S2 - 1'**

**E302093-03**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Corrosivity by 9045D/9040C</b> pH @25°C	<b>8.63</b>	pH Units	1	02/22/23	02/22/23	Analyst: KF Batch: 2308022



### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Aquila 22 Fed Com 4H Project Number: 01058-0007 Project Manager: Tom Bynum	<b>Reported:</b> 2/24/2023 10:11:44AM
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**S2 - 4'**

**E302093-04**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Corrosivity by 9045D/9040C</b> pH @25°C	<b>8.23</b>	pH Units	1	02/22/23	02/22/23	Analyst: KF Batch: 2308022



### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Aquila 22 Fed Com 4H Project Number: 01058-0007 Project Manager: Tom Bynum	<b>Reported:</b> 2/24/2023 10:11:44AM
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**S3 - 1'**

**E302093-05**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Corrosivity by 9045D/9040C</b> pH @25°C	<b>8.47</b>	pH Units	1	02/22/23	02/22/23	Analyst: KF Batch: 2308022



### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Aquila 22 Fed Com 4H Project Number: 01058-0007 Project Manager: Tom Bynum	<b>Reported:</b> 2/24/2023 10:11:44AM
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**S3 - 4'**

**E302093-06**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Corrosivity by 9045D/9040C</b> pH @25°C	<b>8.09</b>	pH Units	1	02/22/23	02/22/23	Analyst: KF Batch: 2308022



### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Aquila 22 Fed Com 4H Project Number: 01058-0007 Project Manager: Tom Bynum	<b>Reported:</b> 2/24/2023 10:11:44AM
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**S4 - 1'**

**E302093-07**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Corrosivity by 9045D/9040C</b> pH @25°C	<b>8.39</b>	pH Units	1	02/22/23	02/22/23	Analyst: KF Batch: 2308022



### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Aquila 22 Fed Com 4H Project Number: 01058-0007 Project Manager: Tom Bynum	<b>Reported:</b> 2/24/2023 10:11:44AM
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**S4 - 4'**

**E302093-08**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Corrosivity by 9045D/9040C</b> pH @25°C	<b>7.66</b>	pH Units	1	02/22/23	02/22/23	Analyst: KF Batch: 2308022



### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Aquila 22 Fed Com 4H Project Number: 01058-0007 Project Manager: Tom Bynum	<b>Reported:</b> 2/24/2023 10:11:44AM
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**S5 - 1'**

**E302093-09**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Corrosivity by 9045D/9040C</b> pH @25°C	<b>8.45</b>	pH Units	1	02/22/23	02/22/23	Analyst: KF Batch: 2308022



### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Aquila 22 Fed Com 4H Project Number: 01058-0007 Project Manager: Tom Bynum	<b>Reported:</b> 2/24/2023 10:11:44AM
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**S5 - 4'**

**E302093-10**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Corrosivity by 9045D/9040C</b> pH @25°C	7.71	pH Units	1	02/22/23	02/22/23	Analyst: KF Batch: 2308022



### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Aquila 22 Fed Com 4H Project Number: 01058-0007 Project Manager: Tom Bynum	<b>Reported:</b> 2/24/2023 10:11:44AM
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#### SW1

#### E302093-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Corrosivity by 9045D/9040C</b> pH @25°C	<b>8.20</b>	pH Units	1	02/22/23	02/22/23	Analyst: KF Batch: 2308022



### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Aquila 22 Fed Com 4H Project Number: 01058-0007 Project Manager: Tom Bynum	<b>Reported:</b> 2/24/2023 10:11:44AM
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#### SW2

#### E302093-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Corrosivity by 9045D/9040C</b> pH @25°C	<b>8.14</b>	pH Units	1	02/22/23	02/22/23	Analyst: KF Batch: 2308022



### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Aquila 22 Fed Com 4H Project Number: 01058-0007 Project Manager: Tom Bynum	<b>Reported:</b> 2/24/2023 10:11:44AM
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#### SW3

#### E302093-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Corrosivity by 9045D/9040C</b> pH @25°C	<b>8.16</b>	pH Units	1	02/22/23	02/22/23	Analyst: KF Batch: 2308022



### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Aquila 22 Fed Com 4H Project Number: 01058-0007 Project Manager: Tom Bynum	<b>Reported:</b> 2/24/2023 10:11:44AM
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#### SW4

#### E302093-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Corrosivity by 9045D/9040C</b> pH @25°C	<b>8.19</b>	pH Units	1	02/22/23	02/22/23	Analyst: KF Batch: 2308022



### Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Aquila 22 Fed Com 4H Project Number: 01058-0007 Project Manager: Tom Bynum	<b>Reported:</b> 2/24/2023 10:11:44AM
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**BG1**

**E302093-15**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Corrosivity by 9045D/9040C</b> pH @25°C	<b>8.17</b>	pH Units	1	02/22/23	02/22/23	Analyst: KF Batch: 2308022



### QC Summary Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Aquila 22 Fed Com 4H Project Number: 01058-0007 Project Manager: Tom Bynum	<b>Reported:</b> 2/24/2023 10:11:44AM
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#### Corrosivity by 9045D/9040C

Analyst: KF

Analyte	Result pH Units	Reporting Limit pH Units	Spike Level pH Units	Source Result pH Units	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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**LCS (2308022-BS1)**

Prepared: 02/22/23 Analyzed: 02/22/23

pH	8.00		8.00		100	98.75-101.25			
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**Duplicate (2308022-DUP1)**

Source: E302093-01

Prepared: 02/22/23 Analyzed: 02/22/23

pH	8.37			8.43			0.714	20	
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QC Summary Report Comment:

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



### Definitions and Notes

Pima Environmental Services-Carlsbad	Project Name:	Aquila 22 Fed Com 4H	
PO Box 247	Project Number:	01058-0007	<b>Reported:</b>
Plains TX, 79355-0247	Project Manager:	Tom Bynum	02/24/23 10:11

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

Note (1): Methods marked with \*\* are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Client: Pima Environmental Services	Attention: <b>Devon</b>	Lab Use Only		TAT			EPA Program		
Project: <b>Aguila 22 Fed Com 4H</b>	Address:	Lab WO# <b>E302093</b>	Job Number <b>01058-0007</b>	1D	2D	3D	Standard	CWA	SDWA
Project Manager: Tom Bynum	City, State, Zip	Analysis and Method							RCRA
Address: 5614 N. Lovington Hwy.	Phone:	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	State	
City, State, Zip Hobbs, NM, 88240	Email:	EPA Method 8205		NM	CO	UT	AZ	TX	
Phone: 580-748-1613	Pima Project # <b>1-20</b>	Remarks							
Email: tom@pimaoil.com									
Report due by:									

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	EPA Method 8205	BGDOC NM	BGDOC TX	Remarks
9:40	2/17/23	S	1	S1-1'	1							X			
9:45				S1-4'	2										
9:50				S2-1'	3										
9:55				S2-4'	4										
10:00				S3-1'	5										
10:05				S3-4'	6										
10:10				S4-1'	7										
10:15				S4-4'	8										
10:20				S5-1'	9										
10:25				S5-4'	10										

Additional Instructions: **Billing Number: NONE**

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

Sampled by: **Dominic G**

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature) <b>AB</b>	Date <b>2-21-23</b>	Time <b>2:00</b>	Received by: (Signature) <b>Maile Cuyak</b>	Date <b>2-21-23</b>	Time <b>1400</b>	Lab Use Only
Relinquished by: (Signature) <b>Maile Cuyak</b>	Date <b>2-21-23</b>	Time <b>1630</b>	Received by: (Signature) <b>Lorenzo Feri</b>	Date <b>2-21-23</b>	Time <b>1645</b>	Received on ice: <b>Y</b> / N
Relinquished by: (Signature) <b>Lorenzo Feri</b>	Date <b>2-21-23</b>	Time <b>2230</b>	Received by: (Signature) <b>Drew Zeffe</b>	Date <b>2/22/23</b>	Time <b>7:00</b>	T1 _____ T2 _____ T3 _____
Sample Matrix: <b>S</b> Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other						AVG Temp °C <b>4.0</b>

Container Type: **g** - glass, p - poly/plastic, ag - amber glass, v - VOA

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



Client: Pima Environmental Services		Bill To		Lab Use Only		TAT			EPA Program					
Project: <u>Aguila 22 Fed com 4H</u>		Attention:		Lab WO# <u>E302093</u>		Job Number <u>01058-0007</u>			1D	2D	3D	Standard	CWA	SDWA
Project Manager: Tom Bynum		Address:		Analysis and Method					RCRA					
Address: 5614 N. Lovington Hwy.		City, State, Zip							State					
City, State, Zip Hobbs, NM, 88240		Phone:							NM	CO	UT	AZ	TX	
Phone: 580-748-1613		Email:		Pima Project #										
Email: tom@pimaoil.com														
Report due by:														

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	EPA Method 8000 VFA	BGDOC NM	BGDOC TX	Remarks
10:30	2/17/23	S	1	SW1	11							+			
10:35	↓	↓	↓	SW2	12							↓			
10:40	↓	↓	↓	SW3	13							↓			
10:45	↓	↓	↓	SW4	14							↓			
10:50	↓	↓	↓	BG1	15							↓			

**Additional Instructions:** Billing Number: \_\_\_\_\_

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature) AB Date 2-21-23 Time 2:00 Received by: (Signature) Miaelle Cuyts Date 2-21-23 Time 1400

Relinquished by: (Signature) Miaelle Cuyts Date 2-21-23 Time 1630 Received by: (Signature) Lorenzo Fei Date 2-21-23 Time 1645

Relinquished by: (Signature) Lorenzo Fei Date 2-21-23 Time 2230 Received by: (Signature) Dominic G Date 2/22/23 Time 7:00

Sample Matrix: S - Sol, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other \_\_\_\_\_ Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

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



Envirotech Analytical Laboratory

Printed: 2/22/2023 8:48:54AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client: Pima Environmental Services-Carlsbad Date Received: 02/21/23 07:00 Work Order ID: E302093
Phone: (575) 631-6977 Date Logged In: 02/21/23 15:21 Logged In By: Caitlin Christian
Email: tom@pimaoil.com Due Date: 02/27/23 07:00 (4 day TAT)

Chain of Custody (COC)

- 1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Carrier: Courier

Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this discussion.

Sample Turn Around Time (TAT)

- 6. Did the COC indicate standard TAT, or Expedited TAT? Yes

Sample Cooler

- 7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6±2°C? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

- 13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

- 14. Are aqueous VOC samples present? No
15. Are VOC samples collected in VOA Vials? NA
16. Is the head space less than 6-8 mm (pea sized or less)? NA
17. Was a trip blank (TB) included for VOC analyses? NA
18. Are non-VOC samples collected in the correct containers? Yes
19. Is the appropriate volume/weight or number of sample containers collected? Yes

Field Label

- 20. Were field sample labels filled out with the minimum information:
Sample ID? Yes
Date/Time Collected? Yes
Collectors name? No

Sample Preservation

- 21. Does the COC or field labels indicate the samples were preserved? No
22. Are sample(s) correctly preserved? NA
24. Is lab filtration required and/or requested for dissolved metals? No

Multiphase Sample Matrix

- 26. Does the sample have more than one phase, i.e., multiphase? No
27. If yes, does the COC specify which phase(s) is to be analyzed? NA

Subcontract Laboratory

- 28. Are samples required to get sent to a subcontract laboratory? No
29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: NA

Client Instruction

Empty box for client instruction.

Comments/Resolution

Large empty box for comments/resolution.

Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

**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 193600

**CONDITIONS**

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 193600
	Action Type: [C-141] Release Corrective Action (C-141)

**CONDITIONS**

Created By	Condition	Condition Date
amaxwell	None	3/7/2023