

## SITE INFORMATION

### Report Type: Sampling Plan nMAP1825433366 / 2RP-4964

#### General Site Information:

Site:	Nix Ann SWD #001					
Company:	Permian Water Solutions LLC					
Section, Township and Range	Unit G	Sec. 18	T 19S	R 26E		
Lease Number:						
County:	Eddy County					
GPS:	32.66262			-104.41911		
Surface Owner:						
Mineral Owner:						
Directions:	From intersection of CR 21 & US 285, travel west on CR 21 for 650' and the location will be on the right.					

#### Release Data:

Date Released:	9/5/2018
Type Release:	Produced Water
Source of Contamination:	Automation Not Designed for High Volume
Fluid Released:	300 bbls water
Fluids Recovered:	295 bbls water

#### Official Communication:

Name:	Dusty McInturff		Clair Gonzales
Company:	Permian Water Solutions		Tetra Tech
Address:	PO BOX 2106		901 W. Wall St.
			Ste 100
City:	Midland, Texas, 79702		Midland, Texas, 79701
Phone number:	432-634-7865		(432) 682-4559
Fax:			
Email:	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>		<a href="mailto:clair.gonzales@tetrattech.com">clair.gonzales@tetrattech.com</a>

#### Site Characterization

Depth to Groundwater:	69' bgs
Karst Potential:	Medium

#### Recommended Remedial Action Levels (RRALs)

Benzene	Total BTEX	TPH (GRO+DRO)	TPH (GRO+DRO+MRO)	Chlorides
10 mg/kg	50 mg/kg	100 mg/kg	100 mg/kg	600 mg/kg



May 25, 2022

New Mexico Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

**RE: Sampling Plan  
Permian Water Solutions  
Nix Ann SWD #001  
Eddy County, New Mexico  
nMAP1825433366  
2RP-4964**

Oil Conservation Division:

Tetra Tech, Inc. (Tetra Tech) was contacted by Permian Water Solutions (Permian Water) to assess a release that occurred at the Nix Ann SWD #001, Unit G, Section 18, Township 19 South, Range 26 East, Eddy County, New Mexico (Site). The spill site coordinates are 32.66262°, -104.41911°. The site location is shown on **Figures 1 and 2**.

## **Background**

According to the State of New Mexico C-141 Initial Report, the release at the Nix Ann SWD #001 was caused by a automation not being designed for a high volume, causing the release of 300 bbls of produced water. Additionally, approximately 295 bbls of water was recovered. On September 5, 2018, the release was discovered and reported to the New Mexico Oil Conservation Division (NMOCD). The C-141 is shown in **Appendix A**.

## **Site Characterization**

### Significant Water Features

According to the NFHL (National Flood Hazard Layer) Flood Data Application and the USGS (United States Geological Survey) National Water Information System Mapper, there were no watercourses, lakebeds, sinkholes, springs, playas, wetlands, subsurfaces mines, private domestic water wells, or floodplains located within the specified distances. However, the site is located in a medium karst area. The NFHL Map and USGS Mapper are shown in **Appendix B**.



### Significant Boundaries

According to Google Earth US Government City Boundaries and US School Districts, the lateral extents of the release were not within an incorporated municipal boundaries, defined municipal fresh water well field, or a school district. Additionally, there were no occupied permanent residences, schools, hospitals, institution, or churches located within the specified distances of the lateral extents of the release.

### Groundwater Review

Groundwater research was completed for the site through the USGS (United States Geological Survey) National Water Information System and New Mexico Office of the State Engineer (NMOSE) Water Rights Reporting System. Groundwater research conducted through these two resources, show the three closest water wells within a mile radius of the Site. The well reported on the NMOSE Water Rights Reporting System reports a total depth of 440 ft bgs and measured water level of 69 ft bgs and is approximately 0.53 miles of the Site. The well reported on the NMOSE Water Rights Reporting System reports a total depth of 224 ft bgs and measured water level of 145 ft bgs and is approximately 0.70 miles of the Site. The well reported on the USGS National Water Information System reports a total depth of 224 ft bgs and a measured water level of 146 ft bgs and is approximately 0.69 miles south of the Site. The groundwater information is shown in **Appendix B**.

Distance from Site	Date of Data	Resource of Information	Depth of Well	Depth to Water
0.53 Miles	12/20/1942	NMOSE	440'	69'
0.70 Miles	6/26/1990	NMOSE	224'	145'
0.69 Miles	6/26/1990	USGS	224'	146'

### **Regulatory**

A risk-based evaluation was performed for the site following the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills, and Releases, updated August 14, 2018. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene, and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based upon the site characterization, for TPH is 100 mg/kg (GRO + DRO + ORO). Additionally, based on the site characterization, for chlorides is 600 mg/kg.

### **Tetra Tech Sampling Plan**

Based on the information provided in the C-141 (nMAP1825433366 / 2RP-4964), Tetra Tech proposes additional sampling to collect current data and to attempt to vertically and horizontally delineate the remaining impact. The final spill footprint and sampling locations will be determined in the field by site inspection. Based on the data collected during the assessment



activities, Tetra Tech will determine a remedial plan to address the remaining impact. The site is shown on **Figure 3**.

If you require any additional information or have any questions or comments, please contact us at (432) 682-4559.

Respectfully submitted,  
TETRA TECH

A handwritten signature in blue ink, appearing to read 'Brittany Long'.

Brittany Long,  
Project Manager

A handwritten signature in blue ink, appearing to read 'Clair Gonzales'.

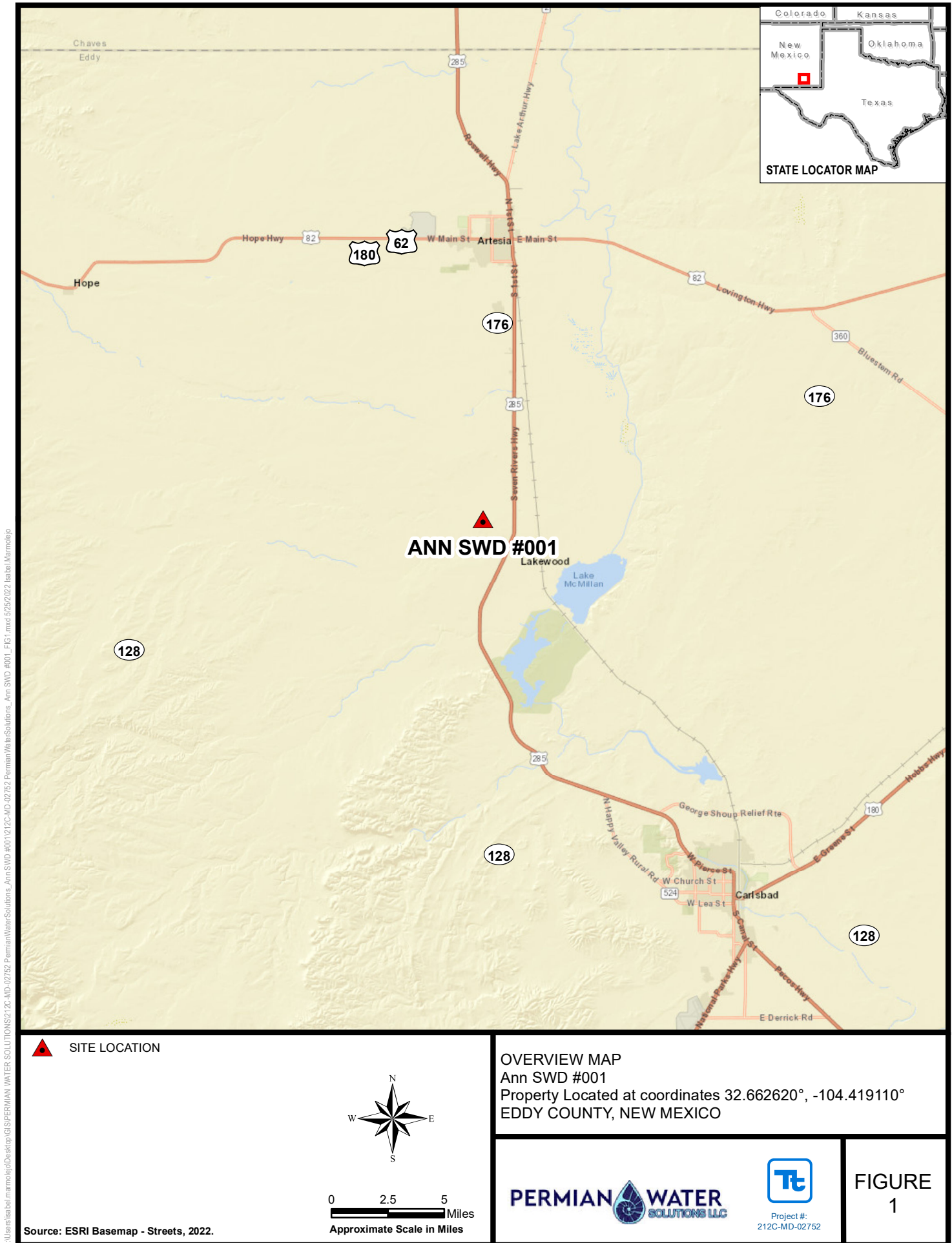
Clair Gonzales, P.G.  
Senior Project Manager



Figures

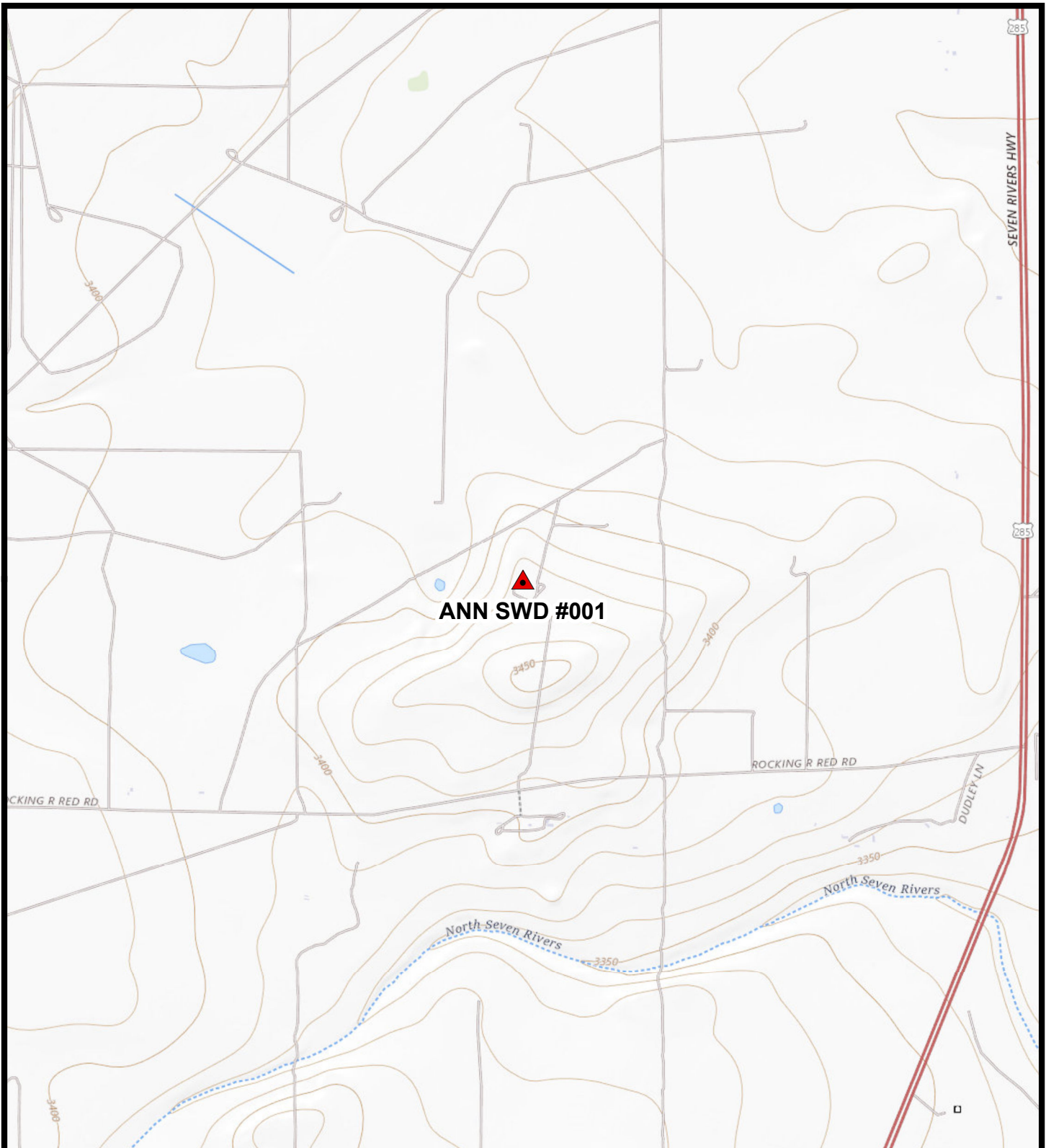
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C:\Users\lshah\Documents\GIS\PERMIAN WATER SOLUTIONS\212C-MD-02752\PermanWaterSolutions\_Ann SWD #001\FG2.mxd 5/25/2022 Isabel Marmolejo



 SITE LOCATION



0 1,000 2,000  
Feet  
Approximate Scale in Feet

Source: USGS, The National Map,  
Topo Base, 2022.

#### TOPOGRAPHIC MAP

Ann SWD #001

Property Located at coordinates 32.662620°, -104.419110°  
EDDY COUNTY, NEW MEXICO

**PERMIAN WATER**  
SOLUTIONS LLC



Project #:  
212C-MD-02752

**FIGURE**  
**2**







# Appendix A

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C-141 Document

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	NMAP1825433366
District RP	2RP-4964
Facility ID	N/A
Application ID	pMAP1825365838

## Release Notification

### Responsible Party

Responsible Party Cambrian Management, Ltd	OGRID 198688
Contact Name Mike Anthony	Contact Telephone 432-631-4398
Contact email <a href="mailto:arickard@cambrianmgmt.com">arickard@cambrianmgmt.com</a>	Incident # (assigned by OCD)
Contact mailing address PO Box 272, Midland, TX 79702	

### Location of Release Source

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

Site Name Ann SWD	Site Type SWD
Date Release Discovered 09/05/2018	API# (if applicable) 30-015-23580

Unit Letter	Section	Township	Range	County
G	18	19S	26E	Eddy

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (Name: \_\_\_\_\_)

### Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 300	Volume Recovered (bbls) 295
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

## Oil Conservation Division

Incident ID	NMAP1825483360
District RP	2RP-4964
Facility ID	N/A
Application ID	pMAP1825365838

## Cause of Release

Automation not designed for high volume

Was this a major release as defined by 19.15.29.7(A) NMAC?

X Yes ☐ No

If YES, for what reason(s) does the responsible party consider this a major release?  
This was an unauthorized release of a volume 25 bbls or more

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?  
OCD was notified within 2 hours of the release being discovered. Mr. Mike Bratcher was notified via e-mail by Denise Jones @ 9:19 Am on 09/05/2018.

## Initial Response

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

- X The source of the release has been stopped.
- X The impacted area has been secured to protect human health and the environment.
- X Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
- X 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: Denise Jones

Title: Regulatory Analyst

Signature: Denise Jones

Date: 09/06/2018

email: djones@cambrianmgmt.com

Telephone: 432-620-9181

Incident ID	NMAP1825453500
District RP	2RP-4964
Facility ID	N/A
Application ID	pMAP1825365838

**OCD Only**

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



Date: 09/10/18



OCD Permitting

Home > Searches > Incidents > Incident Details

NMAP1825433366 ANN SWD @ 30-015-23580

General Incident Information

Site Name:Ann SWD

Well:[30-015-23580] ANN SWD #001

Facility:

Operator:[198688] CAMBRIAN MANAGEMENT LTD

Status:Closure Not Approved

Type:Produced Water Release

District:Artesia

Incident Location:G-18-19S-26E    0 FNL    0 FEL

Lat/Long:32.66262,-104.41911 NAD83

Directions:

Severity:Major

Surface Owner:Private

County:Eddy (15)

Notes

Source of Referral:Industry Rep

Action / Escalation:Referred to Environmental Inspector

Resulted In Fire:☐

Will or Has Reached Watercourse:☐

Endangered Public Health:☐

Property Or Environmental Damage:☐

Fresh Water Contamination:☐

Contact Details

Contact Name:Mike Anthony

Contact Title:

Event Dates

Date of Discovery:09/05/2018

OCD Notified of Release:

Extension Date:

Cancelled Date:

Initial C-141 Received:

Characterization Report Approved:

Characterization Report Received:09/10/2018

Remediation Plan Approved:

Remediation Plan Received:

Remediation Due:

Closure Report Received:

Closure Report Approved:

Compositional Analysis of Vented and/or Flared Natural Gas

No Compositional Analysis Found

Incidents Materials

Cause	Source	Material	Volume				Units
			Unk.	Released	Recovered	Lost	
Human Error	Tank ( Any )	Produced Water	<input type="checkbox"/>	300	295	5	BBL

Incident Events

Date	Detail
09/11/2018	Cause listed as, "Automation not designed for high volume"

- Quick Links
- General Incident Information
  - Materials
  - Events
  - Orders
- Associated Images
- Incident Files (2)
  - Well Files (56)
- New Searches
- New Facility Search
  - New Incident Search
  - New Operator Search
  - New Pit Search
  - New Spill Search
  - New Tank Search
  - New Well Search



District I  
1625 N. French Dr., Hobbs, NM 88240  
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State of New Mexico  
Energy Minerals and Natural  
Resources Department  
  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

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

Incident ID	
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

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

### Location of Release Source

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

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

Unit Letter	Section	Township	Range	County

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☐ Private (Name: \_\_\_\_\_)

### Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

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

Cause of Release

Incident ID	
District RP	
Facility ID	
Application ID	

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

### Initial Response

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

<input type="checkbox"/> The source of the release has been stopped.	
<input type="checkbox"/> The impacted area has been secured to protect human health and the environment.	
<input type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.	
<input type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: _____	Title: _____
Signature: <u>Jenni Usher</u>	Date: _____
email: _____	Telephone: _____
<b><u>OCD Only</u></b>	
Received by: _____	Date: _____

Incident ID	
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?	_____ (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input 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 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 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 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 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 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 type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input 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	
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: \_\_\_\_\_ Title: \_\_\_\_\_

Signature: Jenni Usher Date: \_\_\_\_\_

email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**

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

Incident ID	
District RP	
Facility ID	
Application ID	

## Remediation Plan

**Remediation Plan Checklist:** *Each of the following items must be included in the plan.*

- ☐ Detailed description of proposed remediation technique
- ☐ Scaled sitemap with GPS coordinates showing delineation points
- ☐ Estimated volume of material to be remediated
- ☐ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☐ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

**Deferral Requests Only:** *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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: Jenni Usher Date: \_\_\_\_\_

email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**

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

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



Incident ID	
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: \_\_\_\_\_ Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

email: \_\_\_\_\_ 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: \_\_\_\_\_



## Appendix B

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Site Characterization Documents



# 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)

<b>Well Tag</b>	<b>POD Number</b>	<b>Q64 Q16 Q4</b>	<b>Sec</b>	<b>Tws</b>	<b>Rng</b>	<b>X</b>	<b>Y</b>
RA 01343		2 1 1	18	19S	26E	553777	3614525*

**Driller License:****Driller Company:****Driller Name:** R. T. SCHENCK**Drill Start Date:****Drill Finish Date:**

12/20/1942

**Plug Date:****Log File Date:****PCW Rev Date:**

05/17/1943

**Source:**

Shallow

**Pump Type:** TURBIN**Pipe Discharge Size:****Estimated Yield:****Casing Size:****Depth Well:**

440 feet

**Depth Water:**

69 feet

**Meter Number:**

4239

**Meter Make:**

MCCROMETER

**Meter Serial Number:**

916161

**Meter Multiplier:**

1.0000

**Number of Dials:**

3

**Meter Type:**

Diversion

**Unit of Measure:**

Acre-Feet

**Return Flow Percent:****Usage Multiplier:****Reading Frequency:****Meter Readings (in Acre-Feet)**

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount Online
10/28/1996	1997	470	A	PF		0
10/29/1997	1997	569	A	PF		99.321
10/29/1998	1998	685	A	PF		116.357
10/27/1999	1999	785	A	PF		99.690
10/24/2000	2000	908	A	PF		123.225
04/04/2001	2001	920	A	PF		11.954
05/23/2001	2001	943	A	PF		22.560
07/11/2001	2001	966	A	PF		23.349
08/28/2001	2001	991	A	pf		24.543
10/26/2001	2001	1	R	pf	Meter Rollover	10.340
03/29/2002	2002	14	A	pf		12.900
09/24/2002	2002	103	A	BT		88.721
04/05/2004	2004	125	A	sj		22.055
07/26/2004	2004	126	A	sj		0.818

**\*\*YTD Meter Amounts:**


Year	Amount
1997	99.321
1998	116.357
1999	99.690
2000	123.225
2001	92.746
2002	101.621
2004	22.873

\*UTM location was derived from PLSS - see Help



# 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	Tw	Rng	X	Y				
	RA 07817	2	1	2	19	19S	26E	554592	3612915*				
<hr/>													
Driller License:	353	Driller Company:				OSBOURN DRILLING & PUMP CO.							
Driller Name:	OSBOURN DRILLING COMPANY												
Drill Start Date:	06/29/1990	Drill Finish Date:				06/26/1990			Plug Date:				
Log File Date:	06/28/1990	PCW Rcv Date:							Source:		Shallow		
Pump Type:		Pipe Discharge Size:							Estimated Yield:				
Casing Size:		Depth Well:				224 feet			Depth Water:		145 feet		

\*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.

5/25/22 2:16 PM

POINT OF DIVERSION SUMMARY

[USGS Home](#)  
[Contact USGS](#)  
[Search USGS](#)**National Water Information System: Web Interface**[USGS Water Resources](#)

Data Category:

Groundwater

Geographic Area:

New Mexico

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 New Mexico

Click to hide  
state-specific text

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

**Search Results -- 1 sites found**

Agency code = usgs

site\_no list =

- 323919104250101

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload**USGS 323919104250101 19S.26E.19.21212**

Eddy County, New Mexico

Latitude 32°39'10", Longitude 104°25'03" NAD27

Land-surface elevation 3,401 feet above NGVD29

The depth of the well is 224 feet below land surface.

The depth of the hole is 224 feet below land surface.

This well is completed in the Roswell Basin aquifer system (S400RSWLBS) national aquifer.

This well is completed in the Artesia Group (313ARTS) local aquifer.

**Output formats**[Table of data](#)[Tab-separated data](#)[Graph of data](#)[Reselect period](#)

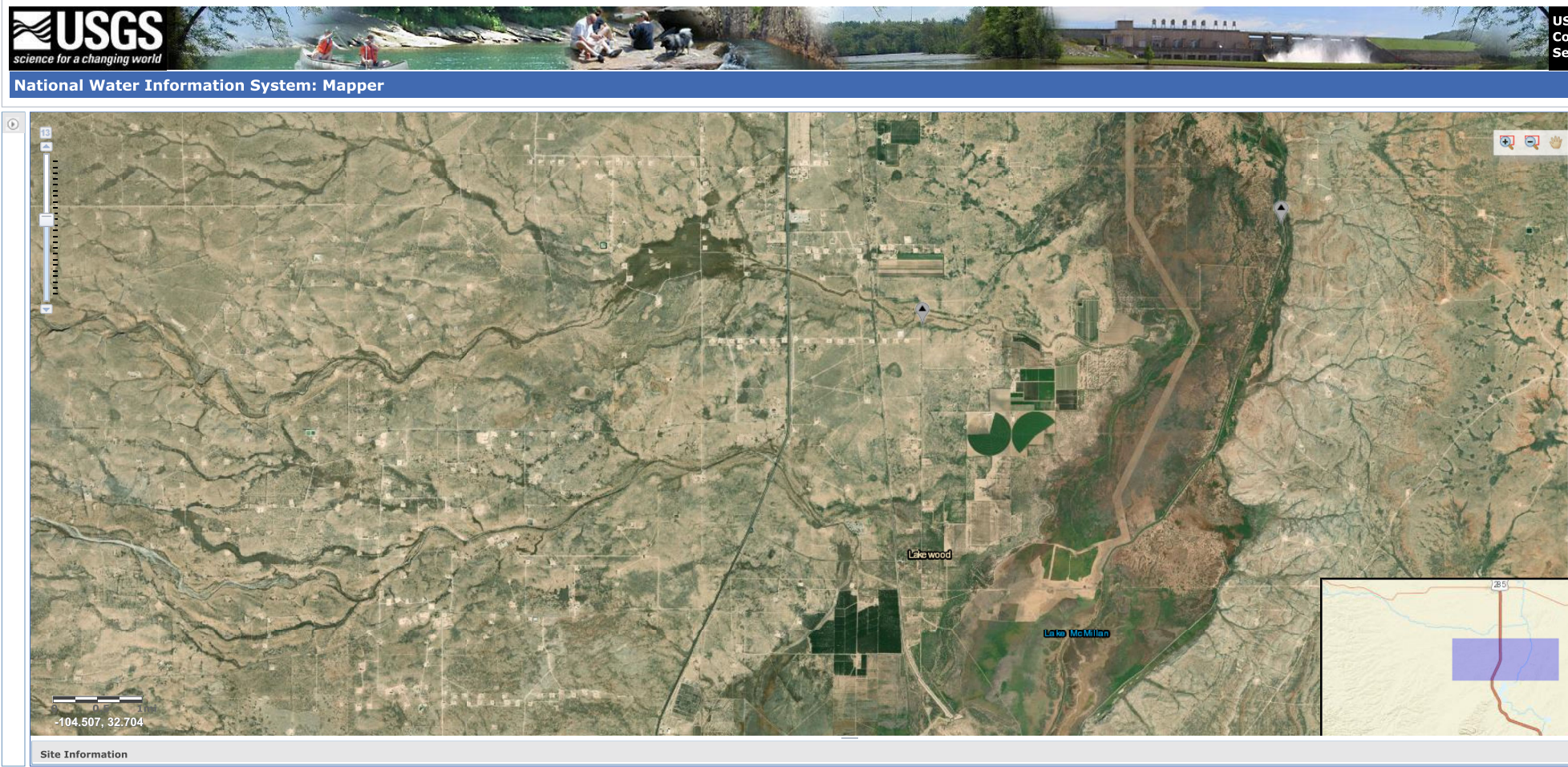
Date	Time	Water-level date-time accuracy	Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Status	Method of measurement	Measuring agency	Source of measurement	Water-level approval status
1990-06-26		D	62610		3255.00	NGVD29	1	O			A
1990-06-26		D	62611		3256.57	NAVD88	1	O			A
1990-06-26		D	72019	146.00			1	O			A

**Explanation**

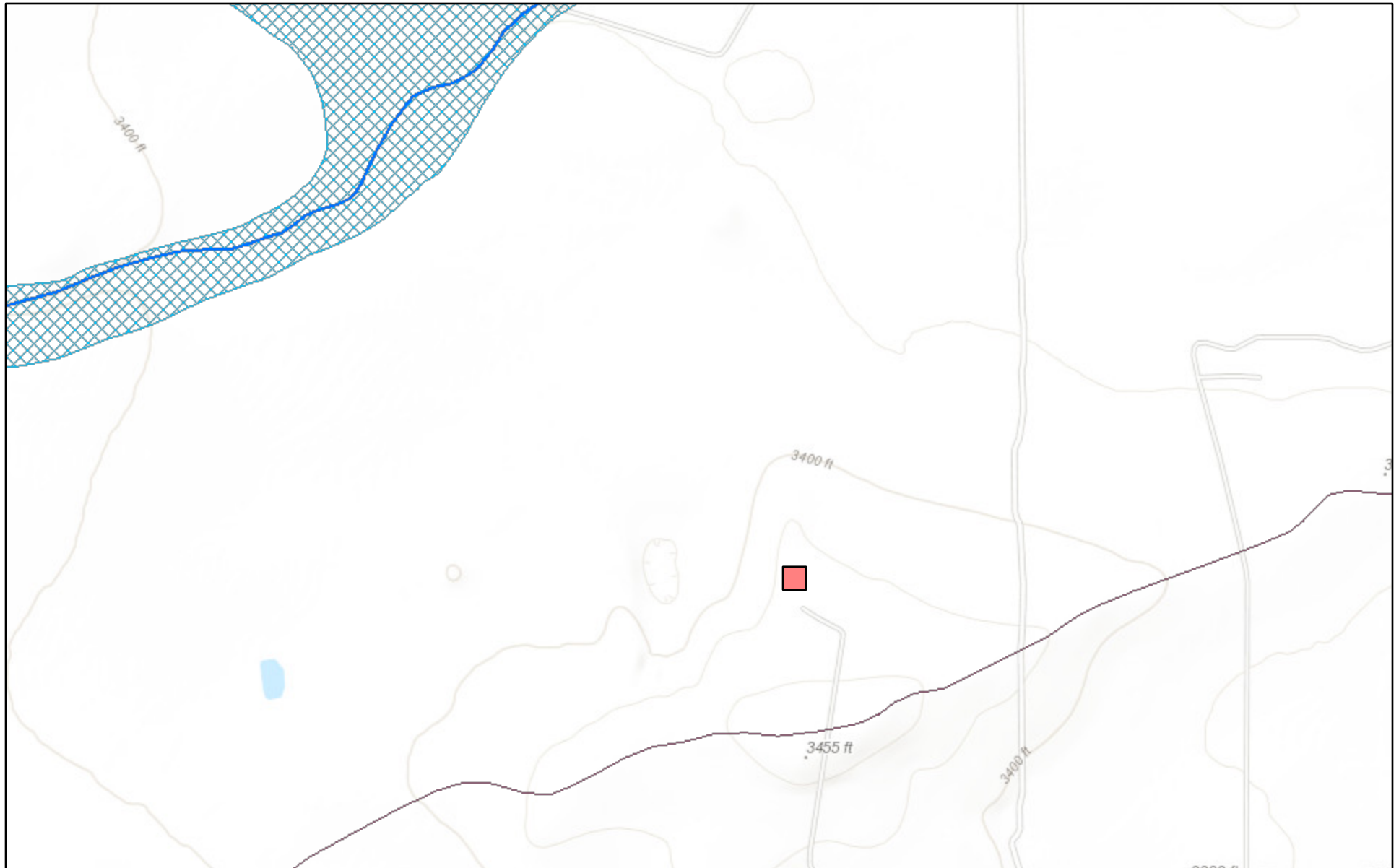
Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	O	Observed.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

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

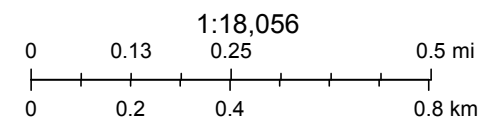




# New Mexico NFHL Data



May 25, 2022




FEMA, Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey,


[nmflood.org](http://nmflood.org) is made possible through a collaboration with NMDHSEM,


This is a non-regulatory product for informational use only. Please consult your local floodplain administrator for further information.




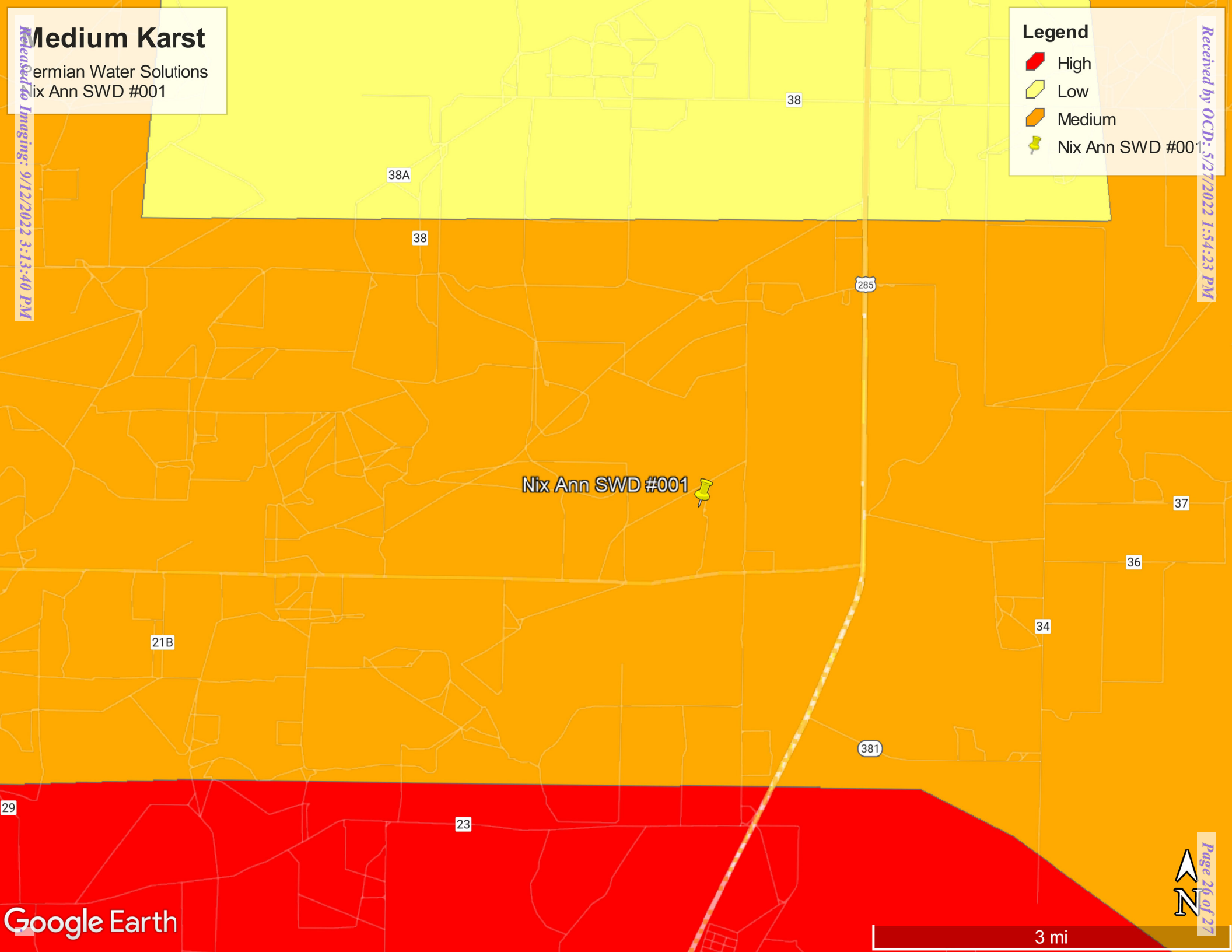
Legend

 High

 Low

 Medium

 Nix Ann SWD #001



**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 111639

**CONDITIONS**

Operator: Permian Water Solutions, LLC PO Box 2106 Midland, TX 79702	OGRID: 373626
	Action Number: 111639
	Action Type: [C-141] Release Corrective Action (C-141)

**CONDITIONS**

Created By	Condition	Condition Date
rhamlet	The Sampling Plan is conditionally approved. All off pad areas must contain a minimum of 4 feet non-waste containing uncontaminated, earthen material with chloride concentrations less than 600 mg/kg and less than 100 mg/kg for TPH. Floor confirmation samples should be delineated/excavated to meet closure criteria standards for site assessment/characterization/proven depth to water determination. Sidewall samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. Samples must be analyzed for all constituents listed in Table I of 19.15.29.12 NMAC. Confirmation samples should be collected every 200 ft2. A remediation plan and/or closure report will need to be completed and uploaded within 90 days.	9/12/2022