SITE INFORMATION

Report Type: Sampling Plan nAB1817142364 / 2RP-4812

General Site Information:						
Site:	**Rohmer #001**					
Company:	**Permian Water Solutions LLC**					
Section, Township and Range	**Unit F**	**Sec. 23**	**T 22S**	**R 27E**		
Lease Number:						
County:	**Eddy County**					
GPS:	**32.37889**			**-104.162648**		
Surface Owner:						
Mineral Owner:						
Directions:	From intersection CR702 & CR216, travel north on 216 for 0.77 miles. Turn right onto Forni Rd. Follow Forni road for 0.41 miles, turn right onto lease road. Follow for 0.16 miles to location.					

Release Data:	
Date Released:	6/13/2018
Type Release:	Produced Water
Source of Contamination:	Check Valve at Loading Station
Fluid Released:	57 bbls water
Fluids Recovered:	25 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:	dmcinturff@dufrane.com		clair.gonzales@tetratech.com

Site Characterization	
Depth to Groundwater:	*45' 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*

TETRA TECH

May 25, 2022

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

RE: Sampling Plan
Permian Water Solutions
Rohmer #001
Eddy County, New Mexico
nAB1817142364
2RP-4812

Oil Conservation Division:

Tetra Tech, Inc. (Tetra Tech) was contacted by Permian Water Solutions (Permian Water) to assess a release that occurred at the Rohmer #001, Unit F, Section 23, Township 22 South, Range 27 East, Eddy County, New Mexico (Site). The spill site coordinates are 32.378890°, -104.162648°. 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 Rohmer #001 was caused by a check valve at a loading station, causing the release of 57 bbls of produced water, the release impacted an area of 200' X 30' of the pad. Additionally, approximately 25 bbls of water was recovered. On June 13, 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**.

TETRA TECH

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 two closest water wells within a ½ mile radius of the Site. The well reported on the NMOSE Water Rights Reporting System reports a total depth of 178 ft bgs and measured water level of 45 ft bgs and is approximately 0.08 miles of the Site. The well reported on the USGS National Water Information System reports a water level measured at 25.67 ft bgs and is approximately 0.44 miles southeast 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
0.08 Miles	9/7/1994	NMOSE	178’	45’
0.44 Miles	1/6/1998	USGS	N/A	25.67’

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 (nAB1817142364 / 2RP-4812) and the onsite inspection completed by Tetra Tech, Tetra Tech proposes additional sampling to collect current data and to attempt to vertically and horizontally dellineate the remaining impact. Tetra Tech proposes to install approximately eight (8) auger holes (AH-1 through AH-8) throughout the impacted area. Approximately eleven (11) horizontals (H-1 through H-11) will be installed directly outside of the impact to indicate horizontal delineation. Based on the data collected during the hand auger activities, Tetra Tech will determine a remedial plan to address the remaining impact. The proposed sample locations are shown on **Figure 3**.

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

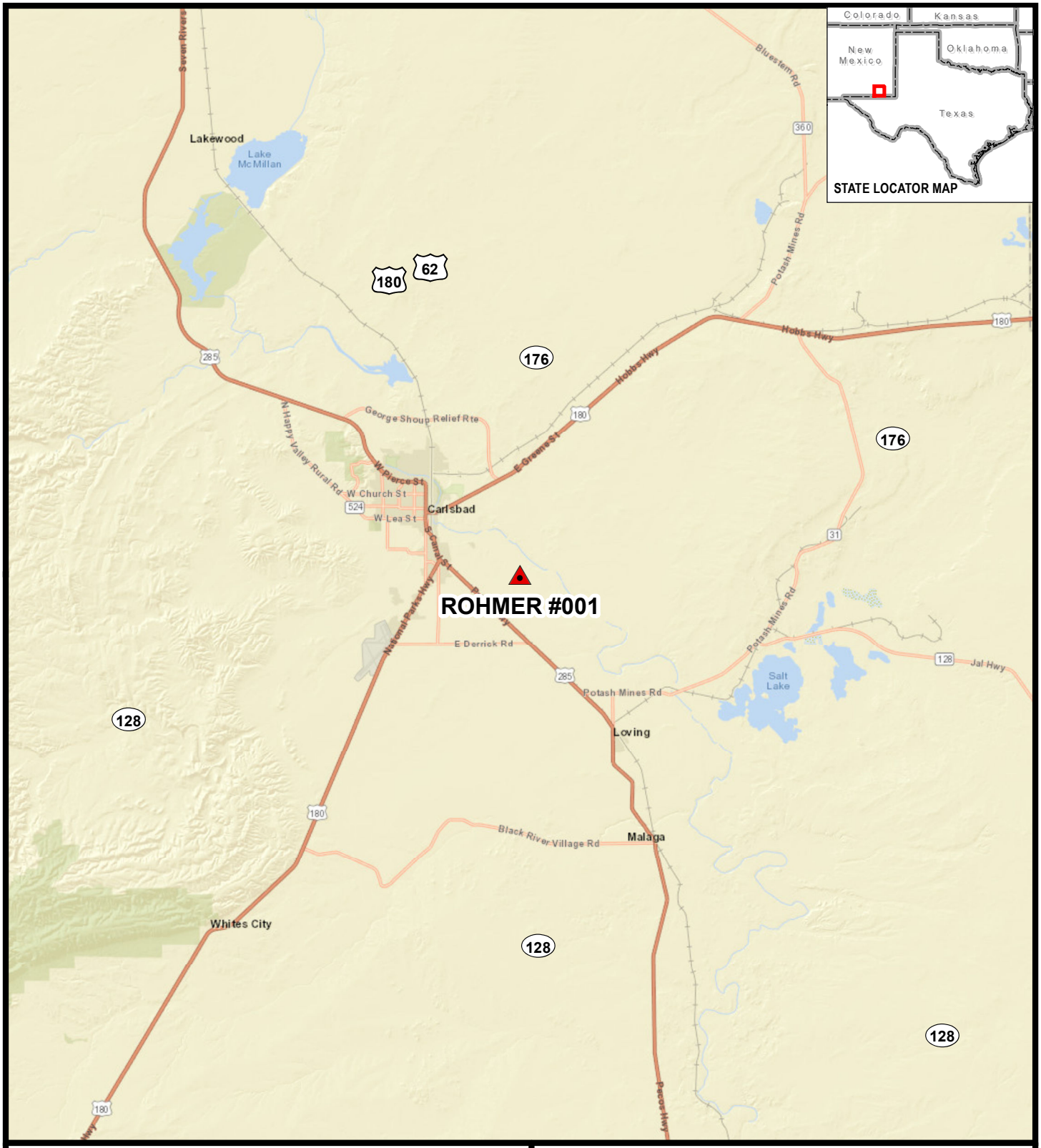
Respectfully submitted,
TETRA TECH

Brittany Long,
Project Manager

Clair Gonzales, P.G.
Senior Project Manager

TETRA TECH

Figures



SITE LOCATION

N
W
E
S

0 2.5 5 Miles

Approximate Scale in Miles

Source: ESRI Basemap - Streets, 2022.

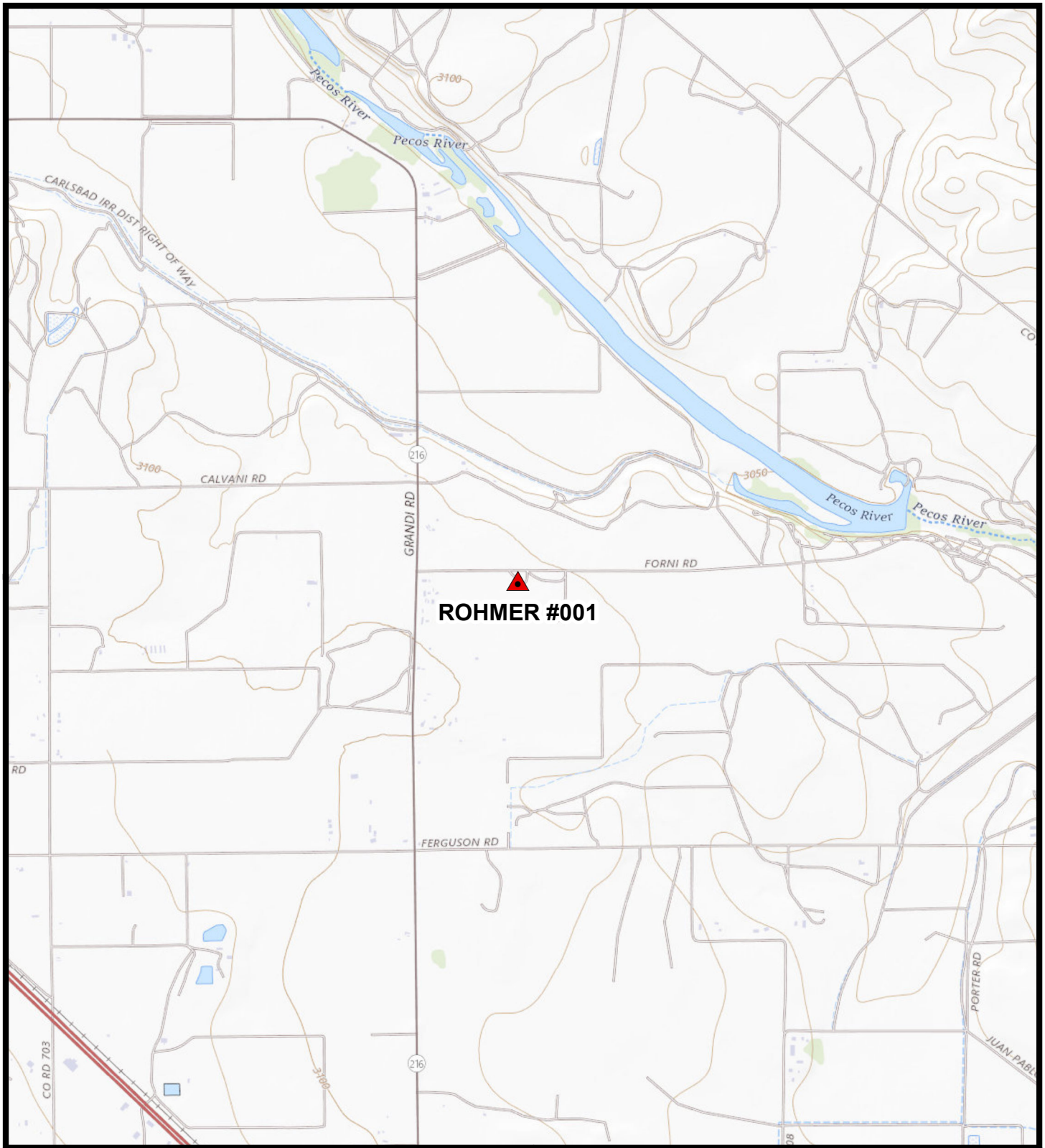
OVERVIEW MAP
ROHMER #001
Property Located at coordinates 32.378890°, -104.162648°
EDDY COUNTY, NEW MEXICO

PERMIAN WATER SOLUTIONS LLC

Project #: 212C-MD-02754

FIGURE 1

C:\Users\lisabel.marmolejo\Desktop\GIS\PERMIAN WATER SOLUTIONS\212C-MD-02754 PermianWaterSolutions_Rohmer #001\212C-MD-02754 PermianWaterSolutions_Rohmer #001_FIG1.mxd 5/25/2022 Isabel.Marmolejo



SITE LOCATION

N
W
E
S

0 1,000 2,000 Feet

Approximate Scale in Feet

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

TOPOGRAPHIC MAP
ROHMER #001
Property Located at coordinates 32.378890°, -104.162648°
EDDY COUNTY, NEW MEXICO

PERMIAN WATER SOLUTIONS LLC

Project #: 212C-MD-02754

FIGURE 2

C:\Users\isabel.marmolejo\Desktop\GIS\PERMIAN WATER SOLUTIONS\212C-MD-02754 PermianWaterSolutions_Rohmer #001\212C-MD-02754 PermianWaterSolutions_Rohmer #001_FIG2.mxd 5/25/2022 Isabel.Marmolejo

AUGER HOLE SAMPLE LOCATION
HORIZONTAL SAMPLE LOCATION
RELEASE POINT
SPILL FOOTPRINT

N
W
E
S

0 25 50 Feet
Approximate Scale in Feet

Source: ESRI Basemap - Imagery, 2022.

RELEASE ASSESSMENT AND BORING LOCATION MAP
ROHMER #001
Property Located at coordinates 32.378890°, -104.162648°
EDDY COUNTY, NEW MEXICO

PERMIAN WATER SOLUTIONS LLC

Project #:
212C-MD-02754

FIGURE
3

C:\Users\isabel.marmolejo\Desktop\GIS\PERMIAN WATER SOLUTIONS\212C-MD-02754 PermianWaterSolutions_Rohmer #001\212C-MD-02754 PermianWaterSolutions_Rohmer #001_FIG3.mxd 5/25/2022 Isabel Marmolejo

TETRA TECH

Appendix A

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

JUN 14 2018
DISTRICT II-ARTESIA OCD

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 April 3, 2017

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

nAB1817142364

OPERATOR

X Initial Report ☐ Final Report

Name of Company Cambrian Management, Ltd 1984688	Contact Andy Rickard
Address PO Box 272, Midland, TX 79702	Telephone No. 432-620-9181
Facility Name Rhomer #1 SWD Loading Station	Facility Type Disposal

Surface Owner FEE	Mineral Owner FEE	API No. 30-015-25722

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
F	23	22S	27E	1980	North	1980	West	Eddy

Latitude 32.37888901602 **Longitude** 104.162648544465 NAD83

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 57 bbls	Volume Recovered 25 bbls
Source of Release Check valve at loading station	Date and Hour of Occurrence 06/13/2018	Date and Hour of Discovery 06/13/2018 10:00 AM
Was Immediate Notice Given? ☐ Yes X No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes X No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
A check valve at the loading station leaked. The valve was replaced.

Describe Area Affected and Cleanup Action Taken.*

An area of caliche 200x30' was affected. We picked up as much water as we could and will remediate per the NMOCD requirements

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: Denise Jones

Printed Name: Denise Jones

Title: Regulatory Analyst

E-mail Address: djones@cambrianmgmt.com

Date: 06/13/2018 Phone: 432-620-9181

OIL CONSERVATION DIVISION

Approved by Environmental Specialist: Signed By

Approval Date: 6/15/18 Expiration Date: N/A

Conditions of Approval: See attached

Attached ☐ - 4812

* Attach Additional Sheets If Necessary

Rec'd via USPS

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 6/14/2018 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 2RP-4812 has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

> *The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC.* [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District 2 office in ARTESIA on or before 7/14/2018. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.

- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.

- Nominal detection limits for field and laboratory analyses must be provided.

- Composite sampling is not generally allowed.

- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

•Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

• If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

• Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold
OCD Environmental Bureau Chief
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3465
jim.griswold@state.nm.us

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

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

Location of Release Source

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

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

Unit Letter	Section	Township	Range	County

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☐ Private (*Name:* _____)

Nature and Volume of Release

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

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

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Initial Response

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

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

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

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

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

Printed Name: _____ Title: _____

Signature: Jenni Usher Date: _____

email: _____ Telephone: _____

OCD Only

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

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

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

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

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

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: _____

State of New Mexico
Oil Conservation Division

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: _____

TETRA TECH

Appendix B

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)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	C 00231 A	1	4	1	23	22S	27E	578666	3582951*

Driller License: 1044 **Driller Company:** EADES WELL DRILLING & PUMP SERVICE

Driller Name: ALAN EADES

Drill Start Date:	09/07/1994	**Drill Finish Date:**	09/07/1994	**Plug Date:**	
Log File Date:	09/15/1994	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:	SUBMER	**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:		**Depth Well:**	178 feet	**Depth Water:**	45 feet

Meter Number:	600	**Meter Make:**	SENSUS
Meter Serial Number:	1624814	**Meter Multiplier:**	100.0000
Number of Dials:	6	**Meter Type:**	Diversion
Unit of Measure:	Gallons	**Return Flow Percent:**	
Usage Multiplier:		**Reading Frequency:**	

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount	Online
12/29/1998	1999	95658	A	ms		0	
04/01/1999	1999	95658	A	ms		0	
06/30/1999	1999	101800	A	ms		1.885	
09/29/1999	1999	114619	A	ms		3.934	
01/06/2000	1999	143367	A	ms		8.822	
04/07/2000	2000	172172	A	mb		8.840	
07/11/2000	2000	201446	A	mb		8.984	
10/20/2000	2000	219583	A	mb		5.566	
01/11/2001	2000	254666	A	ms		10.767	
05/15/2001	2001	313808	A	ms		18.150	
07/27/2001	2001	337688	A	ms		7.329	
09/25/2001	2001	467233	A	AM		39.756	
11/06/2001	2001	477287	A	AM		3.085	
04/09/2002	2002	34749	A	MB		0	
06/18/2002	2002	55657	A	ms		6.416	
01/22/2003	2002	142716	A	ms		26.717	
03/31/2003	2003	163476	A	ms		6.371	
08/21/2003	2003	163476	A	ab		0	
10/28/2003	2003	163476	A	TW		0	
01/05/2004	2003	163508	A	rm	only 4 ac-ft of water remain	0.010	
02/18/2004	2003	171360	A	ms		2.410	
03/01/2004	2003	176510	A	ms		1.580	
03/12/2004	2004	184394	A	ms		2.420	
04/22/2004	2004	198534	A	ms		4.339	
06/03/2004	2004	221578	A	ms		0	

06/10/2004	2004	223638	A	ms	0.632
07/19/2004	2004	240224	A	ms	5.090
08/16/2004	2004	254167	A	ms	4.279
11/15/2004	2004	287318	A	ms	10.174
01/01/2005	2004	303299	A	ms	4.904
01/11/2005	2005	307664	A	ms	1.340
04/04/2005	2005	336099	A	ms	8.726
07/01/2005	2005	367792	A	ms	9.726
07/07/2005	2005	370314	A	ms	0.774
10/20/2005	2005	393503	A	ms	7.116
11/09/2005	2005	398641	A	TW	1.577
12/29/2005	2005	409598	A	tw	3.363
12/31/2005	2006	410064	A	RPT	0.143
04/13/2006	2006	415949	A	tw	1.806
07/13/2006	2006	415949	A	tw	0
11/15/2006	2006	415949	A	tw	0
12/31/2006	2006	415949	A	RPT	0
01/01/2007	2007	415949	A	RPT	0
07/01/2007	2007	415949	A	RPT	0
10/01/2007	2007	415949	A	RPT	0
12/31/2007	2007	415949	A	RPT	0
04/01/2008	2008	415949	A	RPT	0
07/22/2008	2008	415949	A	RPT	0
10/09/2008	2008	415949	A	RPT	0
12/31/2008	2008	415949	A	RPT	0
04/01/2009	2009	415949	A	RPT	0
06/02/2009	2009	415949	A	RPT	0
08/31/2009	2009	415949	A	RPT	0
12/31/2009	2009	415949	A	RPT	0
04/01/2010	2010	415949	A	RPT	0
07/01/2010	2010	415949	A	RPT	0
10/01/2010	2010	415949	A	RPT	0
12/31/2010	2010	415949	A	RPT	0
06/30/2011	2011	419128	A	RPT	0.976
12/31/2011	2011	419128	A	RPT	0
09/30/2012	2012	419128	A	RPT	0

**YTD Meter Amounts:	Year	Amount
	1999	14.641
	2000	34.157
	2001	68.320
	2002	33.133
	2003	10.371
	2004	31.838
	2005	32.622
	2006	1.949
	2007	0
	2008	0
	2009	0
	2010	0

2011	0.976
2012	0

***UTM location was derived from PLSS - see Help**

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Groundwater levels for New Mexico

Click to hide state-specific text

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Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 322230104100301

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 322230104100301 22S.27E.23.331113

Eddy County, New Mexico
Latitude 32°22'30", Longitude 104°10'03" NAD27
Land-surface elevation 3,097 feet above NAVD88
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) 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 measu
1983-01-06		D	62610		3048.12	NGVD29	1	Z		
1983-01-06		D	62611		3049.70	NAVD88	1	Z		
1983-01-06		D	72019	47.30			1	Z		
1988-02-18		D	62610		3068.36	NGVD29	1	Z		
1988-02-18		D	62611		3069.94	NAVD88	1	Z		
1988-02-18		D	72019	27.06			1	Z		
1993-01-07		D	62610		3068.00	NGVD29	1	S		
1993-01-07		D	62611		3069.58	NAVD88	1	S		
1993-01-07		D	72019	27.42			1	S		
1995-07-12		D	62610		3068.37	NGVD29	1	S		
1995-07-12		D	62611		3069.95	NAVD88	1	S		
1995-07-12		D	72019	27.05			1	S		
1996-01-23		D	62610		3069.42	NGVD29	1	S		
1996-01-23		D	62611		3071.00	NAVD88	1	S		
1996-01-23		D	72019	26.00			1	S		

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 measu
1998-01-06		D	62610		3069.75	NGVD29	1	S		
1998-01-06		D	62611		3071.33	NAVD88	1	S		
1998-01-06		D	72019	25.67			1	S		

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	S	Steel-tape measurement.
Method of measurement	Z	Other.
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?
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Title: Groundwater for New Mexico: Water Levels
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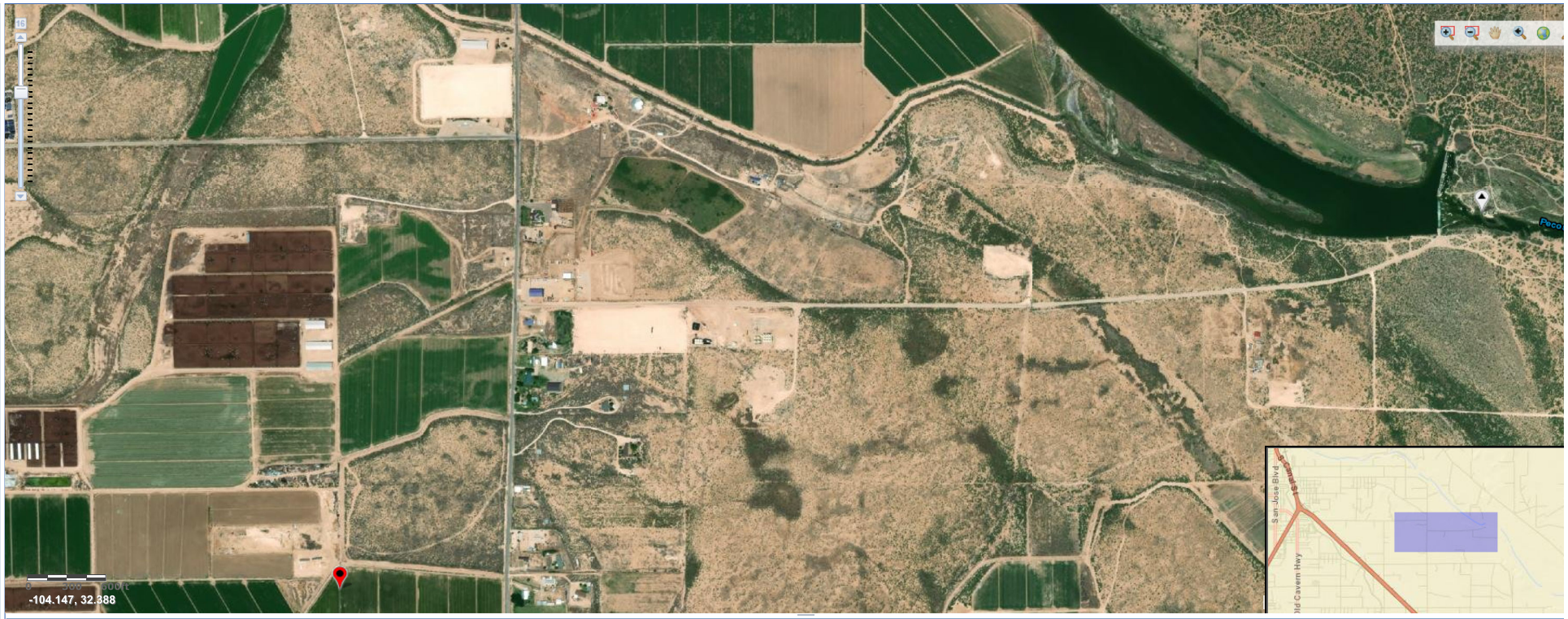
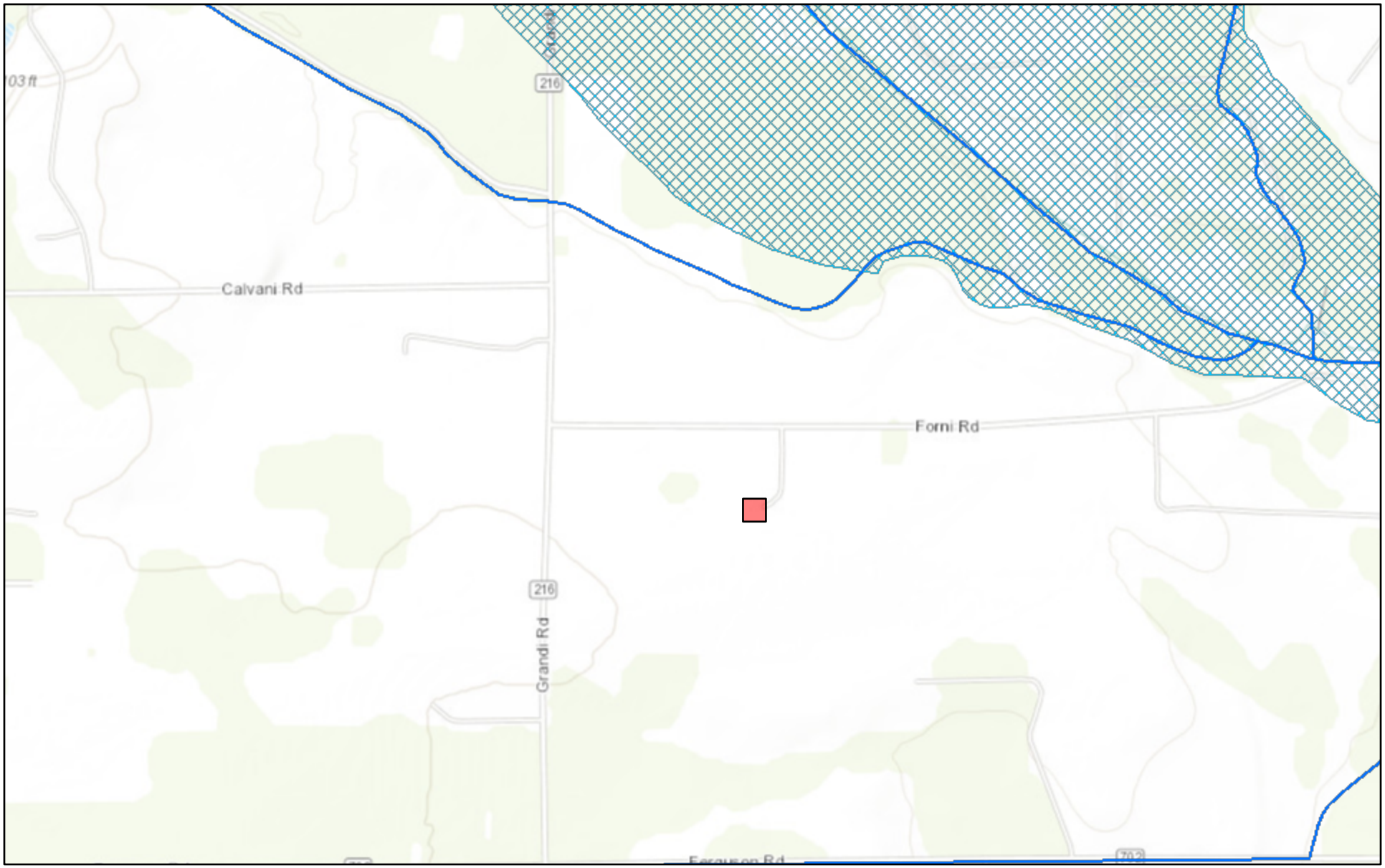


Site Information

New Mexico NFHL Data



March 14, 2022

1:18,056

0 0.13 0.25 0.5 mi

0 0.2 0.4 0.8 km

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

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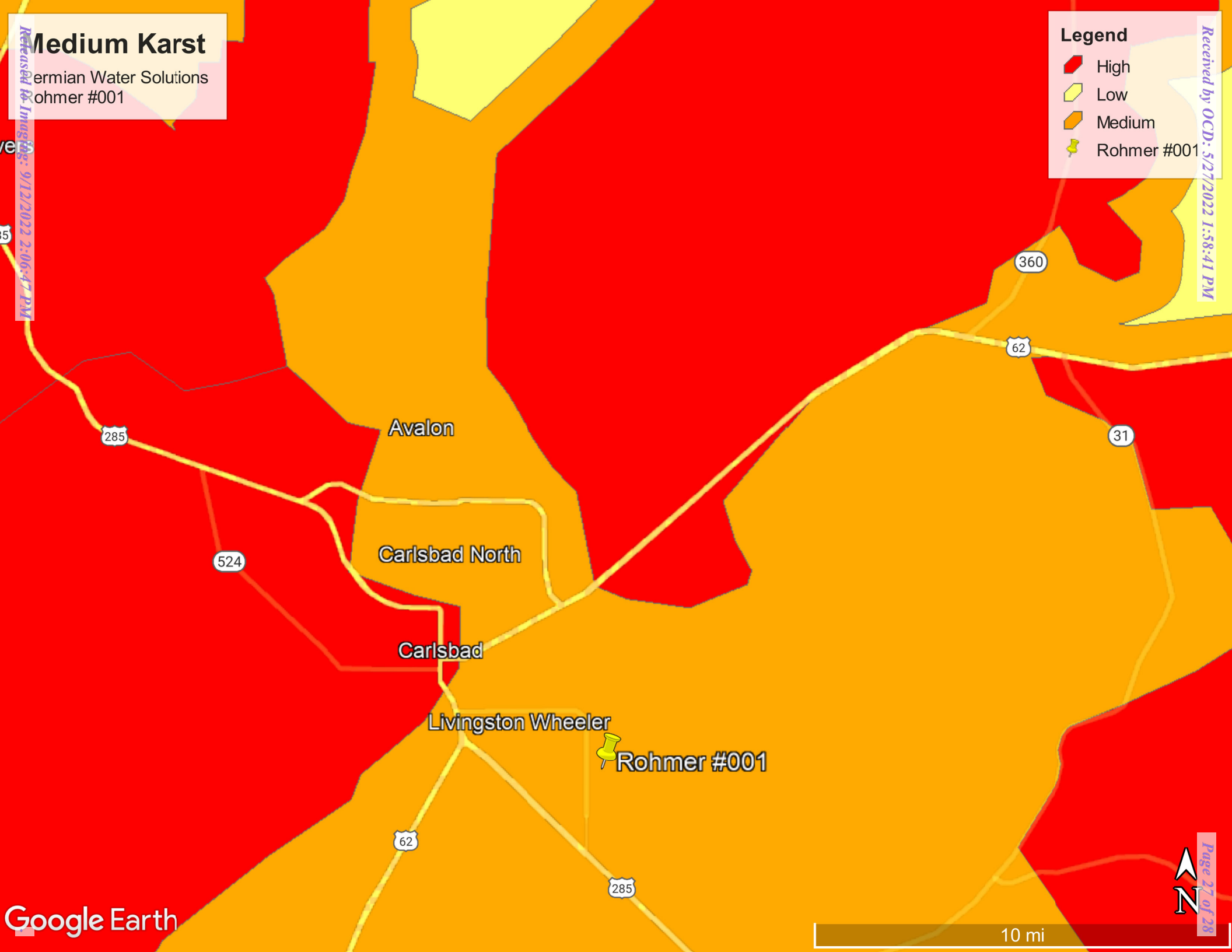
Medium Karst
ermian Water Solutions
ohmer #001
Legend
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Low
Medium
Rohmer #001
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Received by OCD: 5/27/2022 1:58:41 PM
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Carlsbad
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Rohmer #001
285
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31
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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 111637

CONDITIONS

Operator: Permian Water Solutions, LLC PO Box 2106 Midland, TX 79702	OGRID: 373626
	Action Number: 111637
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	The Sampling Plan is conditionally approved. The release will need to be remediated to the strictest closure criteria standards. 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