

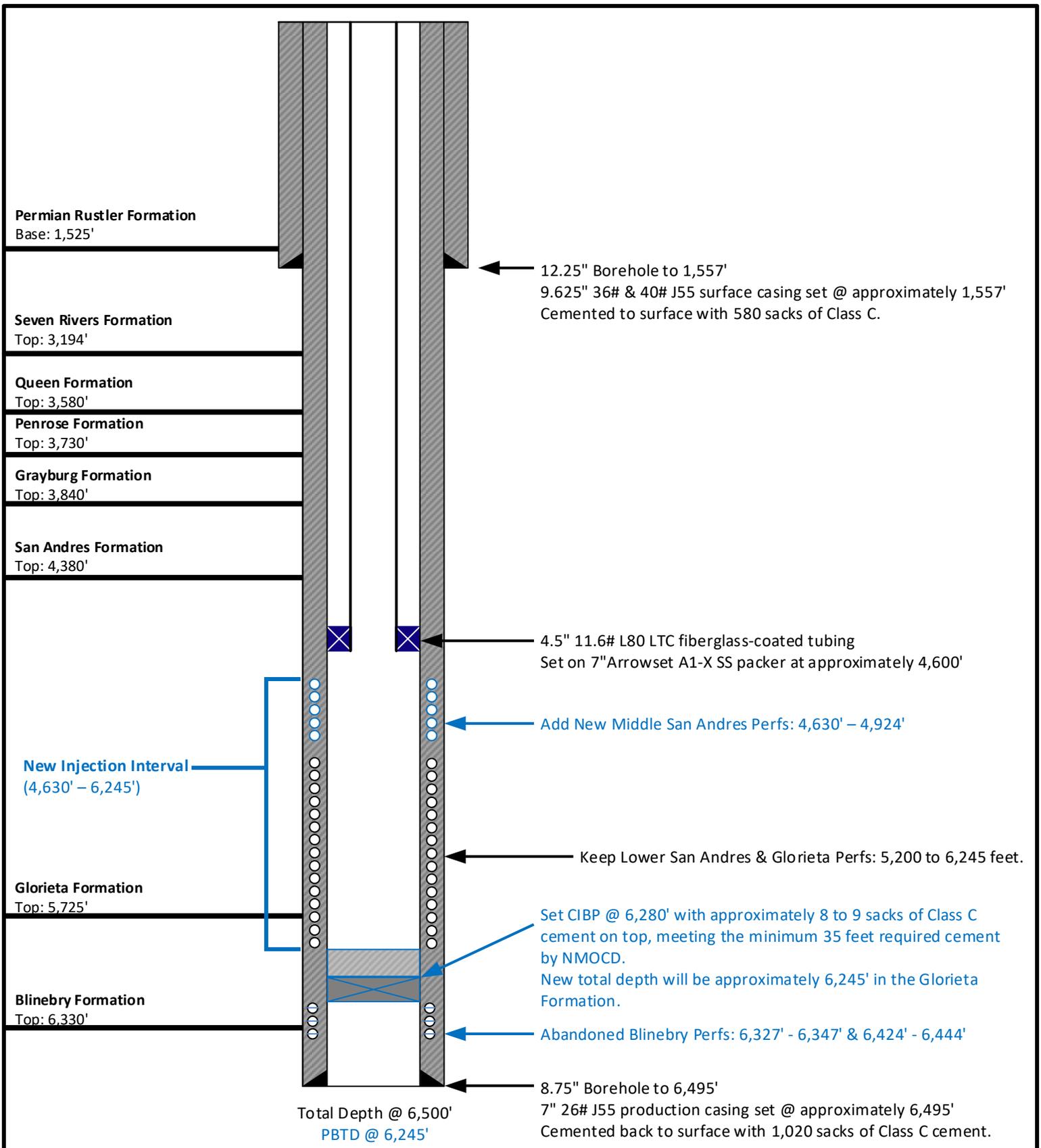
# Additional Information

## **GOONIGHT MIDSTREAM – TED 28 SWD #1 (API NO. 30-025-44386)**

### **PROPOSED PLUG BACK WORKOVER PROCEDURE**

Goodnight Midstream Permian LLC (Goodnight) operates the Ted 28 SWD disposal well (API No. 25-44386) in Lea County, New Mexico. Unfortunately, some of the original perforations were into the Blinebry Formation and the Oil Conservation Division (OCD) is requiring Goodnight to plug back the Ted 28 SWD so that the Blinebry Formation is no longer part of the current injection interval, since it was not permitted as part of the injection zone. ALL Consulting (ALL) has developed the follow proposed plug back plan for the Ted 28 SWD.

- The original total depth of the well was 6,500 feet. Original perforated intervals were from 5,200 to 6,444 feet. The top of the Blinebry Formation was 6,330 feet.
- The existing 4-1/2” injection and Arrowset packer will be pulled from the well and racked on location.
- A cast iron bridge plug (CIBP) will be run into the well on a wireline and set at a depth of 6,280 feet and this will isolate the Blinebry Formation and the original lowermost perforations in that formation from 6,424 to 6,444 and 6,327 to 6,347 feet.
- After setting the CIBP, a dump bailer on a wireline will be run to just above the top of the CIBP and approximately 8 to 9 sacks of Class C cement will be placed upon the CIBP (which meets the minimum 35 feet required cement by OCD). The new total depth will be approximately 6,245 feet in the Glorieta Formation.
- Withdrawal wireline and run back into the well with wireline perforating guns to add new perforations within the San Andres Formation from depths of 4,630 to 4,924 feet.
- The new proposed injection interval will be the San Andres – Glorieta formations from 4,630 to 6,245 feet.
- Run back into well with 4-1/2” injection tubing and packer and set packer within 100 feet of the top of the injection interval.
- An acid stimulation will be performed to open up the new perforations in the San Andres Formation.
- Perform mechanical integrity testing (MIT) as required by OCD and submit all required forms after plug back and MIT are completed.



NOT TO SCALE

Prepared by:  
  
 Prepared for:  


Drawn by: Joshua Ticknor

Project Manager:  
Dan Arthur

Date: 1/30/2020

**Goodnight Midstream**

Ted 28 SWD #1

API# 30-025-44386

2402' FNL & 1911' FWL, Unit F of Sec 28-T21S-R36E  
Lea County, New Mexico

January 31, 2020

Oil Conservation Division  
1220 S. St. Francis Dr.  
Santa Fe, New Mexico 87505

Subject: Goodnight Midstream Permian, LLC – Ted 28 SWD #1 (pMAM1911936697)  
Application for Authorization to Inject

To Whom It May Concern,

The purpose of this letter is to demonstrate that the geologic isolation between the proposed perforations of Goodnight Midstream's (Goodnight) Ted 28 SWD #1 (API #30-025-44386) and the overlying producing wells within the ½-mile AOR is sufficient to be protective of correlative rights.

Goodnight's Ted 28 SWD #1 (API #30-025-44386) was originally permitted to dispose of produced water into the San Andres and Glorieta formations at a depth of 5,200' – 6,500' in June 2018 via Injection Order #SWD-1739. Goodnight is requesting authorization to add shallower perforations into the middle San Andres at depths of 4,630' – 4,924'.

These additional perforations would be 626' below the deepest well identified within the ½-mile Area of Review (AOR) (API 30-025-28255), with numerous tight formations isolating the injection zone from the overlying hydrocarbon producing zone (Penrose-Grayburg formations, Eumont Oil Pool). These formations are composed of alternating layers of anhydrite (barrier to flow) and sucrosic dolomite (saline aquifer). The sequence provides geologic isolation between the proposed injection interval and overlying producing zones, thus sufficiently protecting correlative rights.

A map and table identifying the wells within the ½-mile AOR are attached. Also attached is an exhibit demonstrating the vertical distance and number of geologic barriers between the proposed injection interval and the deepest well within the ½-mile AOR.

Should you have any questions, please contact Steve Drake at (469) 754-3833 or [steve.drake@goodnightmidstream.com](mailto:steve.drake@goodnightmidstream.com).

Sincerely,

Goodnight Midstream



Steve Drake

V.P. Geology and Reservoir Engineering

Continental Oil AM Lockhart B-28 #3  
 30-025-04811 L 28 215 36E  
 KB: 3621 4/13/1958 TD: 3900

Goodnight Midstream Ted 28-1  
 30-025-44386 F 28 215 36E  
 KB: 3628 7/31/2018 TD: 7910

Cities Service Felton A #3  
 30-025-26255 F 28 215 36E  
 KB: 3616 8/27/1983 TD: 4000

Day USA Felton A #4  
 30-025-32699 G 28 215 36E  
 KB: 3600 11/08/1994 TD: 4000

Goodnight Midstream Yaz 28-1  
 30-025-46382 A 28 215 36E  
 KB: 3582 10/24/2019 TD: 5425

**SWD**

**SWD**

Active Gas

Plugged & Abandoned

Shut In

Tansil

Yates

Seven Rivers

Queen

Penrose  
 Grayburg  
 stratigraphic  
 Grayburg

Barrier

Barrier

San Andres

Barrier

Barrier

Add New

Barrier

Add New

Barrier

Barrier

Barrier

Glorieta

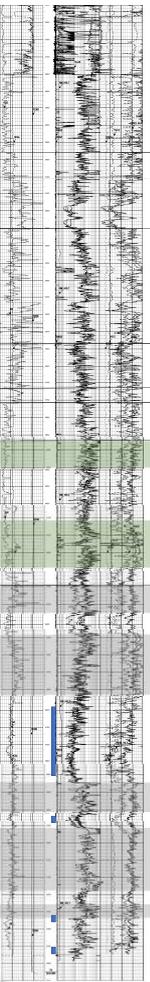
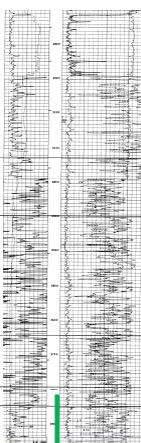
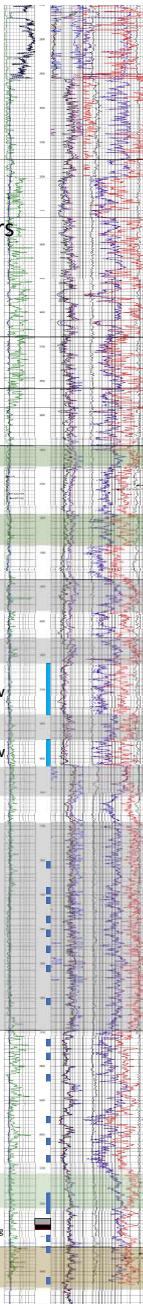
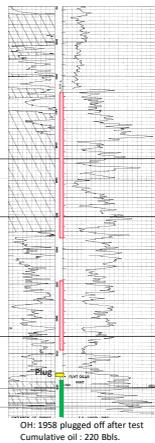
Barrier

Add New  
 Cement  
 Cast Iron Bridge Plug

Blinebry

Barrier

600 ft.



Eumont Gas  
Y-7R-Q

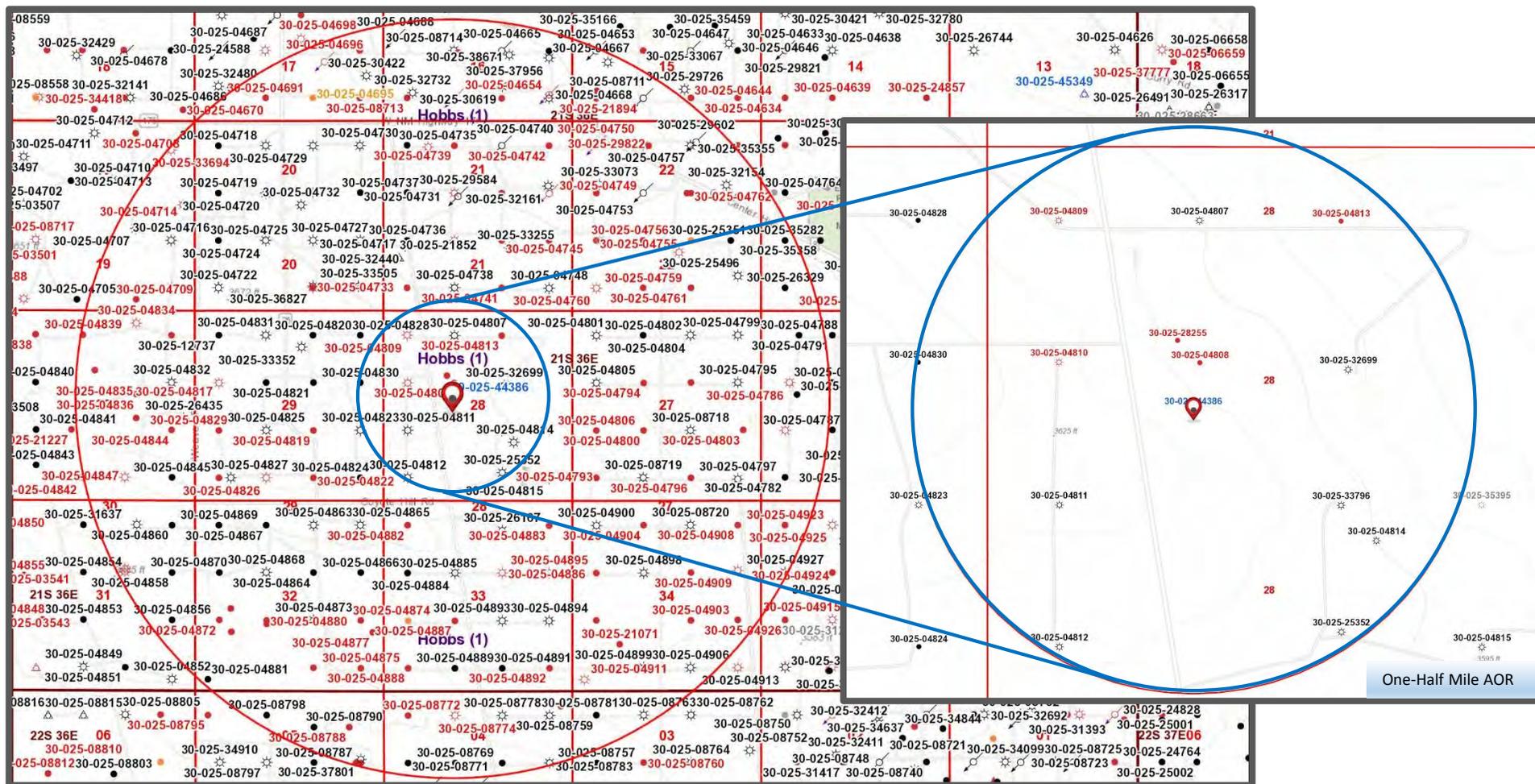
Eumont Gas  
Y-7R-Q

Eumont Oil (Y-7R-Q)  
50,991 BO + 273 MMCF + 496,710 BW

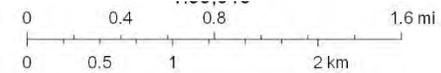
Eumont Gas  
Y-7R-Q

Goodnight Midstream, LLC  
 Llano Project  
 Lea County, New Mexico  
 Ted Williams SWD Geologic and Engineering Cross Section  
 Showing Zone of Injection and Offset Production

# AOR & All Wells Within 2 Miles - Attachment V-2



- |                              |                              |                                  |                                    |                                    |   |
|------------------------------|------------------------------|----------------------------------|------------------------------------|------------------------------------|---|
| Well Locations - Small Scale | Well Locations - Large Scale | ☀️ CO2, Temporarily Abandoned    | 🔗 Injection, Active                | ⬛ Oil, Cancelled                   | ⬆️ Salt Water Injection, New                  |
| ● Active                     | ⊙ Miscellaneous              | ☀️ Gas Active                    | 🔗 Injection, Cancelled             | ⬛ Oil, New                         | ⬆️ Salt Water Injection, Plugged              |
| ● New                        | ☀️ CO2 Active                | ☀️ Gas, Cancelled, Never Drilled | 🔗 Injection, New                   | ⬛ Oil, Plugged                     | ⬆️ Salt Water Injection Temporarily Abandoned |
| ● Plugged                    | ☀️ CO2 Cancelled             | ☀️ Gas, New                      | 🔗 Injection, Plugged               | ⬛ Oil, Temporarily Abandoned       | ⬆️ Water, Active                              |
| ● Cancelled                  | ☀️ CO2 New                   | ☀️ Gas, Plugged                  | 🔗 Injection, Temporarily Abandoned | ⬛ Salt Water Injection, Active     | ⬆️ Water, Cancelled                           |
| ● Temporarily Abandoned      | ☀️ CO2, Plugged              | ☀️ Gas, Temporarily Abandoned    | ⬛ Oil, Active                      | ⬆️ Salt Water Injection, Cancelled | ⬆️ Water, New                                 |



OCD, Bureau of Land Management, Texas Parks & Wildlife, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, NGA, EPA, USDA, BLM

○ One-Half Mile AOR      ○ Two Mile Radius

New Mexico Oil Conservation Division  
 NM OCD Oil and Gas Map. <http://nm-emnrnd.maps.arcgis.com/apps/webappviewer/>; New Mexico Oil Conservation Division



## Lease Details Within AOR – Attachment V-4

LEASE DETAILS WITHIN AOR - ATTACHMENT V-4				
Lease Area in AOR	Lessor	Lease	Lessee(s) of Record	Well Operator(s)
SWSW (M) Sec-21	NMSLO	B002290001	Chevron USA Inc.	P&A (Gulf)
SESW (N) Sec-21				Penroc Oil Corp
SWSE (O) Sec-21				P&A (Chevron)
NENE Sec-28	BLM	NMNM 090162	Apache, Burleson, Chevron USA, ConocoPhillips	none
NWNE Sec-28				P&A (Continental)
W2NW4; SW4 Sec-28				Penroc Oil Corp
E2NW; S2NE Sec-28	Private	Felton	Oxy USA WTP	Oxy USA WTP
SE Sec-28	Private	Felton SE	ConocoPhillips	Penroc Oil Corp
NENE Sec-29	NMSLO	B021500002	John H Hendrix Corp	Southwest Royalties
SENE Sec-29		B016720003	ZPZ Delaware I LLC	Southwest Royalties
E2SE Sec-29		B009350000	ExxonMobil	XTO Energy