BEFORE THE OIL CONSERVATION DIVISION EXAMINER HEARING NOVEMBER 2, 2023

CASE Nos. 23614-23617

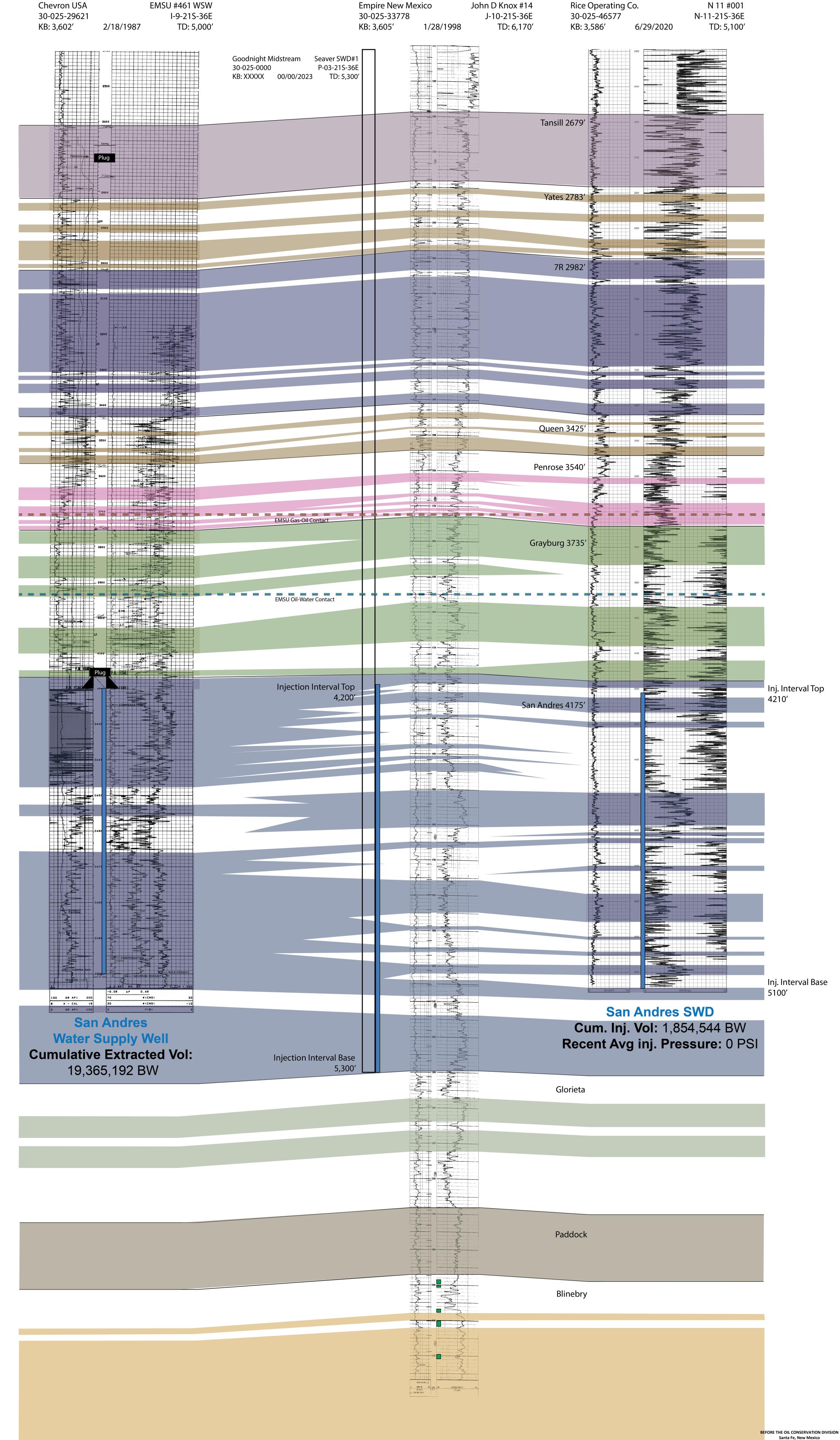
EXHIBITS B-7 THRU C

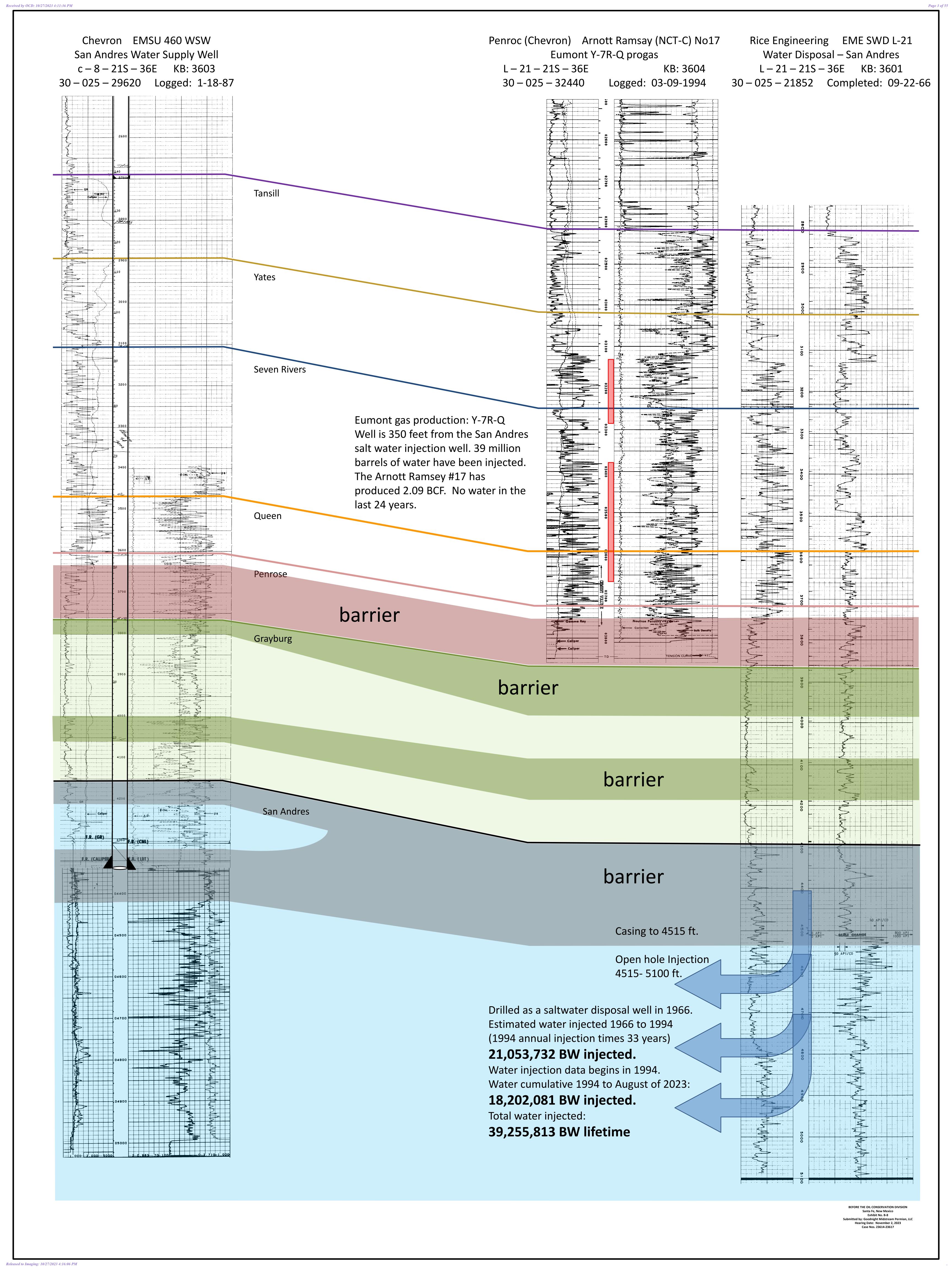
Doc Gooden SWD #1 Well Hernandez SWD #1 Well Hodges SWD #1 Well Seavers SWD #1 Well

LEA COUNTY, NEW MEXICO



Received by OCD: 10/27/2023 4:11:36 PM





Wells Providing Water for the EMSU Grayburg Water Flood

EMSU Water Supply Well NAME	АРІ	I	Location	Status	Start	End	Years as Active WSW	Documented Measured Volumes	Reconstructed from Tests and Modeled Averages	Total Water Bbls extracted from the San Andres
Chevron WSW EMSU #457	025 2	29149	Q - 5 - 21S - 36E	T&A	1987	2004	17	27,292,824	14,876,823	42,169,647
Chevron WSW EMSU #458	025 2	29618	I - 4 - 21S - 36E	T&A	1987	2012	25	35,546,076	13,986,538	49,532,614
Chevron WSW EMSU #459	025 2	29826	B - 5 - 21S - 36E	Active	1987	2023	36	75,869,112	24,744,166	100,613,278
Chevron WSW EMSU #460	025 2	29620	C - 8 - 21S - 36E	P&A	1987	2002	15	33,145,521	31,972,778	65,118,299
Chevron WSW EMSU #461	025 2	29621	I - 9 - 21S - 36E	P&A	1987	2002	15	8,452,395	10,912,797	19,365,192
Chevron WSW EMSU #462	025 2	29622	L - 9 - 21S - 36E	Convert to Oil	1987	2005	18	45,502,836	25,974,689	71,477,525
							Sum:	225,808,764	122,467,791	348,276,555

OCD case document 08397_4659 EMSU Tech Committee Report provides monthly WSW production volumes for 1978 and 1988.

OCD case document 08397_4658 EMSU Tech Committee Report provides monthly WSW production volumes for 1989.

Years 1989 to 1994 were reconstructed from well tests and Tech Committee Charts.

OCD online database was used for years 1994 to present.



RE: Goodnight Midstream, LLC Doc Gooden SWD well permit

Lot P, Section 3, Township 21S Range 36E Lea County, New Mexico

Goodnight Midstream conducted a hydrogeologic investigation related to the proposed injection well. The scope of the investigation was to determine if there is any hydrologic connection between the proposed injection interval and any sources of underground drinking water.

Goodnight geologist performed an analysis of subsurface well log data. It is our conclusion that there is no evidence of faulting in the data we evaluated at the depths that are being considered. There are small scale flexures which may or may not be associated with small scale faults. None of these flexures extend above the Wolfcamp unconformity and are not seen in the Leonard intervals.

Goodnight acquired and evaluated 3D seismic to the west but does not cover the lands that this salt water disposal well is located upon. This data shows the geologic setting in the area. No faults are seen in the Artesia Group, San Andres, Glorieta, or Leonard series. The San Andres contains small scale flexures and changes in seismic velocity that may indicate karsting. These flexures and velocity anomalies are being used to target disposal reservoir opportunities. The Grayburg thickens over the San Andres sag. There is also a thickening of the Yates relative to the low in the San Andres. These stratigraphic changes do not indicate the presence of faulting and there is no communication between these intervals.

Water has been disposed into the San Andres in this area since 1966. There is a good record of pressure separation. Production from the Artesia group has proceeded without interruption or encroachment from San Andres disposal for more than 50 years. Containment and isolation from the hydrocarbon intervals would then also be isolated from any sources of fresh water above.

ween the injection

BEFORE THE OIL CONSERVATION DIVISION

Santa Fe. New Mexico We see no evidence of faulting that would extend to or form a connection between the injection zone and any underground sources of drinking water.

Geology and Reservoir Engineering Manager

Goodnight Midstream, LLC

Santa Fe, New Mexico
Exhibit No. B-10
Submitted by: Goodnight Midstream Permian

Hearing Date: November 2, 2023



RE: Goodnight Midstream, LLC Hernandez SWD well permit

Lot P, Section 10, Township 21S Range 36E Lea County, New Mexico

Goodnight Midstream conducted a hydrogeologic investigation related to the proposed injection well. The scope of the investigation was to determine if there is any hydrologic connection between the proposed injection interval and any sources of underground drinking water.

Goodnight geologist performed an analysis of subsurface well log data. It is our conclusion that there is no evidence of faulting in the data we evaluated at the depths that are being considered. There are small scale flexures which may or may not be associated with small scale faults. None of these flexures extend above the Wolfcamp unconformity and are not seen in the Leonard intervals.

Goodnight acquired and evaluated 3D seismic to the west but does not cover the lands that this salt water disposal well is located upon. This data shows the geologic setting in the area. No faults are seen in the Artesia Group, San Andres, Glorieta, or Leonard series. The San Andres contains small scale flexures and changes in seismic velocity that may indicate karsting. These flexures and velocity anomalies are being used to target disposal reservoir opportunities. The Grayburg thickens over the San Andres sag. There is also a thickening of the Yates relative to the low in the San Andres. These stratigraphic changes do not indicate the presence of faulting and there is no communication between these intervals.

Water has been disposed into the San Andres in this area since 1966. There is a good record of pressure separation. Production from the Artesia group has proceeded without interruption or encroachment from San Andres disposal for more than 50 years. Containment and isolation from the hydrocarbon intervals would then also be isolated from any sources of fresh water above.

We see no evidence of faulting that would extend to or form a connection between the injection zone and any underground sources of drinking water.

Geology and Reservoir Engineering Manager

Goodnight Midstream, LLC

BEFORE THE OIL CONSERVATION DIVISION

Santa Fe, New Mexico Exhibit No. B-11

Maging: 10/27/2023 4:16:06 PM Submitted by: Goodnight Midstream Permian, Hearing Date: November 2, 2023

RE: Goodnight Midstream, LLC Hodges SWD well permit

Lot 11, Section 4, Township 21S Range 36E Lea County, New Mexico

Goodnight Midstream conducted a hydrogeologic investigation related to the proposed injection well. The scope of the investigation was to determine if there is any hydrologic connection between the proposed injection interval and any sources of underground drinking water.

Goodnight geologist performed an analysis of subsurface well log data. It is our conclusion that there is no evidence of faulting in the data we evaluated at the depths that are being considered. There are small scale flexures which may or may not be associated with small scale faults. None of these flexures extend above the Wolfcamp unconformity and are not seen in the Leonard intervals.

Goodnight acquired and evaluated 3D seismic covering the lands that this salt water disposal well is located upon. This data shows the geologic setting in the area. No faults are seen in the Artesia Group, San Andres, Glorieta, or Leonard series. The San Andres contains small scale flexures and changes in seismic velocity that may indicate karsting. These flexures and velocity anomalies are being used to target disposal reservoir opportunities. The Grayburg thickens over the San Andres sag. There is also a thickening of the Yates relative to the low in the San Andres. These stratigraphic changes do not indicate the presence of faulting and there is no communication between these intervals.

Water has been disposed into the San Andres in this area since 1966. There is a good record of pressure separation. Production from the Artesia group has proceeded without interruption or encroachment from San Andres disposal for more than 50 years. Containment and isolation from the hydrocarbon intervals would then also be isolated from any sources of fresh water above.

We see no evidence of faulting that would extend to or form a connection between the injection zone and any underground sources of drinking water.

Geology and Reservoir Engineering Manager

Goodnight Midstream, LLC

between the injection

BEFORE THE OIL CONSERVATION DIVISION

Santa Fe, New Mexico
Exhibit No. B-12

Submitted by: Goodnight Midstream Permian, Hearing Date: November 2, 2023 Hearing Date: November 2, 2023



RE: Goodnight Midstream, LLC Seaver SWD well permit

Lot K, Section 10, Township 21S Range 36E Lea County, New Mexico

Goodnight Midstream conducted a hydrogeologic investigation related to the proposed injection well. The scope of the investigation was to determine if there is any hydrologic connection between the proposed injection interval and any sources of underground drinking water.

Goodnight geologist performed an analysis of subsurface well log data. It is our conclusion that there is no evidence of faulting in the data we evaluated at the depths that are being considered. There are small scale flexures which may or may not be associated with small scale faults. None of these flexures extend above the Wolfcamp unconformity and are not seen in the Leonard intervals.

Goodnight acquired and evaluated 3D seismic to the west but does not cover the lands that this salt water disposal well is located upon. This data shows the geologic setting in the area. No faults are seen in the Artesia Group, San Andres, Glorieta, or Leonard series. The San Andres contains small scale flexures and changes in seismic velocity that may indicate karsting. These flexures and velocity anomalies are being used to target disposal reservoir opportunities. The Grayburg thickens over the San Andres sag. There is also a thickening of the Yates relative to the low in the San Andres. These stratigraphic changes do not indicate the presence of faulting and there is no communication between these intervals.

Water has been disposed into the San Andres in this area since 1966. There is a good record of pressure separation. Production from the Artesia group has proceeded without interruption or encroachment from San Andres disposal for more than 50 years. Containment and isolation from the hydrocarbon intervals would then also be isolated from any sources of fresh water above.

We see no evidence of faulting that would extend to or form a connection between the injection zone and any underground sources of drinking water.

Preston McGuire

Geology and Reservoir Engineering Manager

Goodnight Midstream, LLC

10/23/23 Date BEFORE THE OIL CONSERVATION DIVISION Santa Fe, New Mexico

Exhibit No. B-13
Submitted by: Goodnight Midstream Permien,

LLC Hearing Date: November 2, 2023 Case Nos. 23614-23617



EUNICE MONUMENT SOUTH SECONDARY RECOVERY UNIT

(Royalty Owners Overview)
LEA COUNTY, NEW MEXICO

BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Exhibit No. B-14
Submitted by: Goodnight Midstream Permian, LLC
Hearing Date: November 2, 2023
Case Nos. 23614-23617

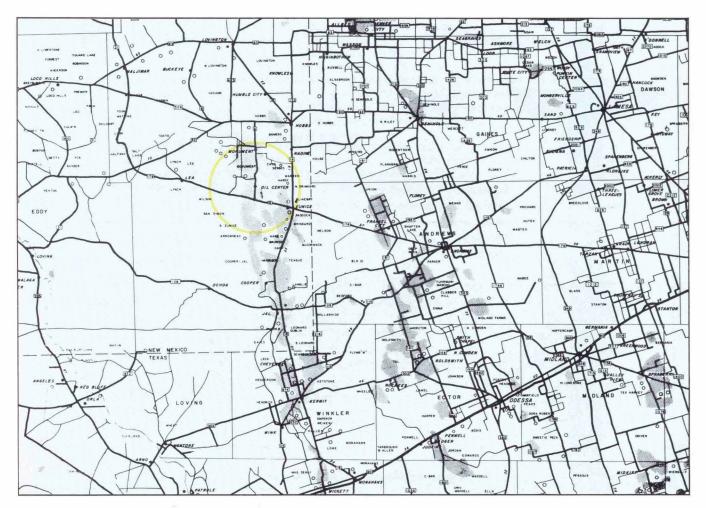
INTRODUCTION

The Proposed Eunice Monument South Secondary Recovery Unit in Lea County, New Mexico, encircles the Town of Oil Center, is approximately four miles south of the Town of Monument, and is fifteen miles southwest of the City of Hobbs. The unit area covers 14,190 acres in Townships 20 and 21 South, Ranges 36 and 37 East, New Mexico Principal Meridian, and includes all or portions of 24 sections of land. At its longest and widest portions, the unit area is six miles by five and one-fourth miles.

The field was discovered March 21, 1929 with the completion of the Continental Lockhart "B-31" well in Section 31, Township 21 South, Range 36 East, N.M.P.M., Lea County, New Mexico. Following discovery, the field was designated as the Eunice (Queen-Penrose, Grayburg and San Andres geological formations) Pool. In 1953, the Eunice Pool was separated into the Eumont Gas Pool and Eunice Monument Oil Pool.

The oil field was developed on 40-acre spacing with the majority of wells being drilled and completed during the three-year period from 1934 through 1937. Peak oil production from the collective wells occurred in May of 1937 when the monthly production was 791,800 barrels of oil, or 25,542 barrels per day.

Since May of 1937, oil production within the unit has steadily declined. Twenty-three companies have drilled and completed 344 oil wells, but because of production decline, only 200 oil wells are active. The remaining wells have been temporarily abandoned, plugged, or recompleted in other zones. The oil production is now approximately 60,000 barrels of oil per month, or $7\frac{1}{2}$ % of the peak (1937) monthly production.



HOW CAN WE EXTEND THE LIFE OF THIS FIELD — 1929 TO _

As with all oil fields, production has declined with time. In 1979, the Working Interest Owners (companies operating the wells and paying the maintenance costs) began a series of meetings and engineering studies to attempt to extend the productive life of this field by recovering oil that can never be produced with the present method of operation and existing facilities.





QUEEN lab

WATER INJECTION

After the various company geologists and engineers completed their laboratory and reservoir studies, they concluded that a unit should be formed to inject water into the oil producing formations to force oil trapped in the rocks to the pumping units of the producing wells. This method of recovery is being successfully employed in many of the older oil fields in the area

For this proposed unit, salt water from the <u>non-productive San Andres</u> formation, supplemented by the reinjection of produced water, was recommended for pressurized injection into the oil producing portions of the Grayburg and Lower Penrose formations.

To understand the benefits of water injection, a brief discussion of primary and secondary recovery is helpful.

GLORIETA

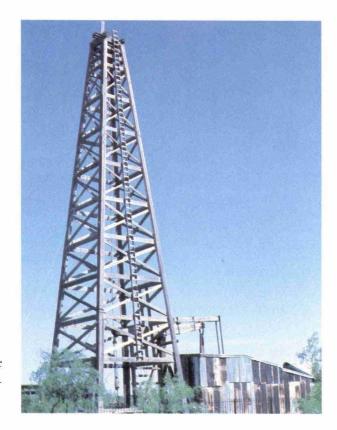
GRAY BURG

SAN ANDRES

PRIMARY RECOVERY

Water, oil and gas existed under high temperature and high pressure when the first well was drilled into the oil producing formations. Because of the high gas pressure, the Continental Lockhart "B-31" well was a true gusher when it was drilled in 1929. The oil, along with some water and gas, was pushed out the well bore by the pressure of the gas. As more wells were drilled, the pressure decreased and pumps had to be installed on the wells.

With the decreased reservoir pressure, a large amount of oil was trapped in the pore spaces of the reservoir rocks. The diagram shown below represents the pore spaces in the reservoir at different times during the life of the field. The original condition of the reservoir at the time of discovery is shown in Figure (a), with only oil and water filling the pore spaces. It is seen that as oil is produced, gas bubbles, water, and the small pore spaces prevent recovery of 80% of the oil in place. At this point, as shown in Figure (b), a large amount of oil remains trapped in the reservoir.

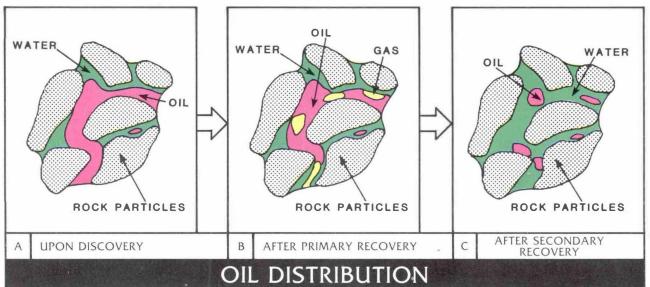


SECONDARY RECOVERY

Two natural forces provide the energy necessary to move oil from the reservoir to a producing well. One is the expansion of the gas that is dissolved in the oil (solution gas drive) and the second is the movement of water which displaces the oil (water drive).

Generally speaking, a reservoir that has a water drive (natural or man-made) will yield significantly more oil than if subjected only to a solution gas drive. When it is determined that a reservoir is primarily producing by gas expansion, consideration is given to supplementing the solution gas drive with the injection of water to recover additional oil.

A water injection program, also referred to as secondary recovery, requires pressurized injection of water through selected wells into the oil-bearing reservoir. The injected water forces the oil to the surrounding producing wells where it is pumped to the surface. Following a water injection program, a large portion of the original oil is recovered as shown in Figure (c).



UNITIZATION FOR WATER INJECTION

★ WHAT IS UNITIZATION?

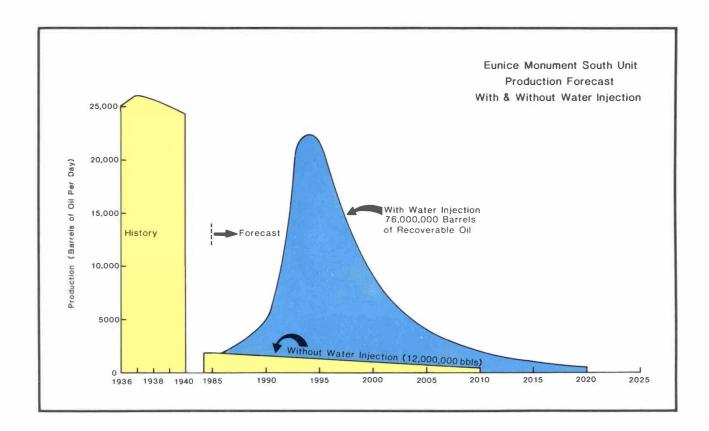
Basically, unitization is the joining of the various leases and interests within an agreed upon land area to cooperatively develop the energy resources in accordance with the best economic, geological and engineering principles applicable to the particular oil reservoir. Unitization allows for different recovery methods to be used; thereby, as a general rule, increasing production and providing more income to Royalty and Working Interest Owners.

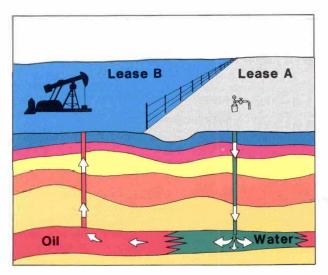
* WHY IS IT NECESSARY TO UNITIZE?

With a program of water injection, oil is displaced across property lines and some of the wells on the property may be used for the injection of water instead of the production of oil. It is therefore necessary to join all properties in a way that they can be treated and operated as a single property. This requires that Working Interest Owners and Royalty Interest Owners pool their respective interests and share in oil produced. This pooling and sharing is called "unitization" and the property formed is called a "unit."

★ WILL WATER INJECTION RESULT IN RECOVERING MORE OIL?

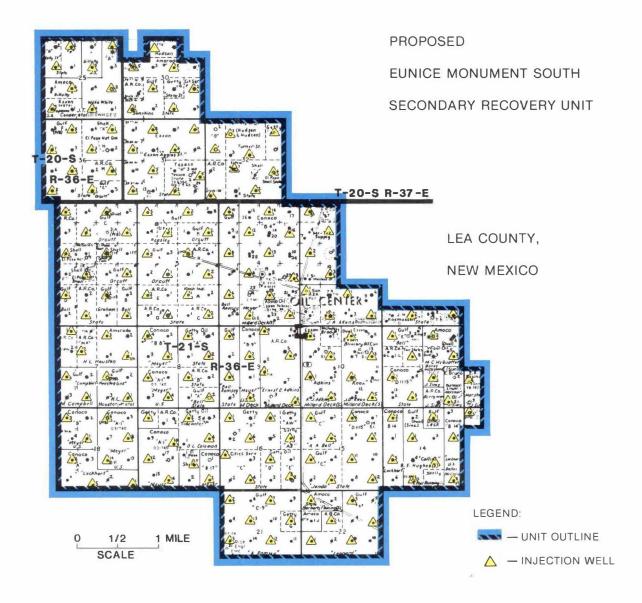
Yes, joint studies by the various companies operating wells in the area indicate that since the drilling of the first well in 1929, the area has produced 120 million barrels (yellow) of oil and, it is projected, will ultimately produce only 12 million more barrels of oil without water injection. However, with water injection, it is estimated that as much as an additional 64 million barrels (blue), may be recovered.





With a water injection program, oil may be moved from one property to another. As illustrated, oil may be moved from Lease A to Lease B and produced from the well located on Lease B. In view of this movement of oil, it is necessary to pool or unitize all interests in order for owners of both leases to receive their share of the income from the oil produced.

In comparison to this two-well illustration, Eunice Monument South Unit, as proposed, will extend over an area of 14,190 acres and will have approximately 170 injection wells and 190 producing wells.



UNITIZATION'S AFFECT UPON ROYALTY OWNERS

* ARE MOST OF THE WORKING INTEREST AND ROYALTY OWNERS IN FAVOR OF THE UNIT?

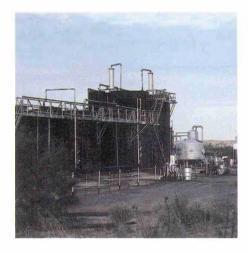
Yes, in excess of 80% of the Working Interest Owners have indicated approval of the unit and the water injection program. The State of New Mexico and the federal government own 78% of the lands within the unit, and because of the projected increase in recoverable oil and income, both have indicated preliminary approval of the unit.

★ HOW WILL UNIT PRODUCTION BE ALLOCATED?

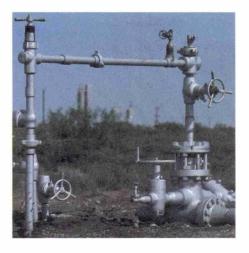
Unitization allocates to each tract in the unit a percentage of the unit's overall production based upon a formula which compares overall unit production figures to cumulative oil production from the tract, the primary oil reserves of the tract, and the oil production from January 1, 1982 through September 30, 1982 for the tract. This formula allows equitable sharing in the increased unit production even if the property contains only an injection well and no producing oil well.

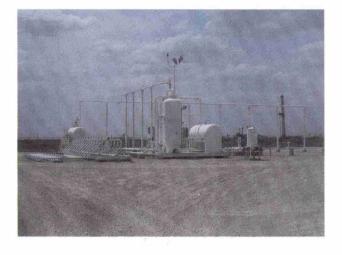
★ HOW WILL JOINING THE UNIT AFFECT MY INCOME?

As indicated in the graph on page 4, oil production (and your royalty income) has been declining annually. When unitization is completed and water injection has begun, the estimates of unit production and your income are expected to increase through 1993. After 1993 your monthly income is still projected to be greater than if no water injection were begun.











* WHEN WILL THE WATER INJECTION PROGRAM BEGIN? WHAT IS THE COST? WHO PAYS FOR IT?

The construction is expected to begin in late 1984. It is estimated to cost approximately \$60 million, all of which will be paid by the Working Interest Owners (companies) and at no cost to you, the Royalty Owner.

* WHAT WILL HAPPEN TO INCOME I RECEIVE FROM WELLS THAT PRODUCE FROM ZONES OTHER THAN THE UNITIZED FORMATIONS?

Income from gas wells or oil wells that produce from zones above or below the unitized formations will not be affected by this agreement.

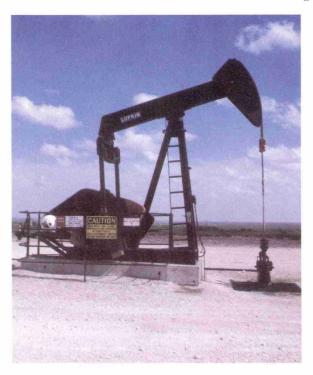
* HOW DO I KNOW I WILL BE GETTING MY "FAIR SHARE" OF THE UNIT'S PRODUCTION?

The companies owning an interest in the unit area include Gulf, Chevron, Exxon, Conoco, Cities Service, Getty, Amoco, Atlantic Richfield, Sun, Amerada Hess, Shell, Texaco, and others. Each of these companies competes with the others, each has a competent staff of geologists, engineers, accountants and attorneys, and each answers to a board of directors. Because of the competitive nature of the business, each of these companies must be assured that it is getting a fair and equitable deal or it will not join the unit. As a result of the numerous meetings and studies conducted since 1979, the majority of these Working Interest Owners have agreed that the formula, as set out in Section 13 of the attached Unit Agreement, fairly represents their interest in the tract and the unit. They are also convinced that their share of the production and revenues will increase by joining the unit.

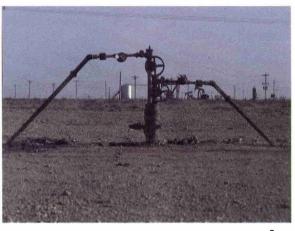
The New Mexico Oil Conservation Division is required by law to assure that the royalty owners will be benefited and that the participation formula is fair, reasonable and equitable, and protects the rights of all owners of interest within the unit area before it may approve the establishment of this

Since a Royalty Owner's interest in a tract is a set percentage, it will not change. The revenue received by the Royalty Owner will be based upon his percentage of ownership in that tract multiplied by the overall unit production allocated to that tract. For example, if the Royalty Owner's interest in a tract is 5% of that tract's production before unitization, this ownership will become 5% of the tract's interest in the overall unit's production after unitization.











A SUCCESSFUL WATER INJECTION PROGRAM REQUIRES COOPERATION

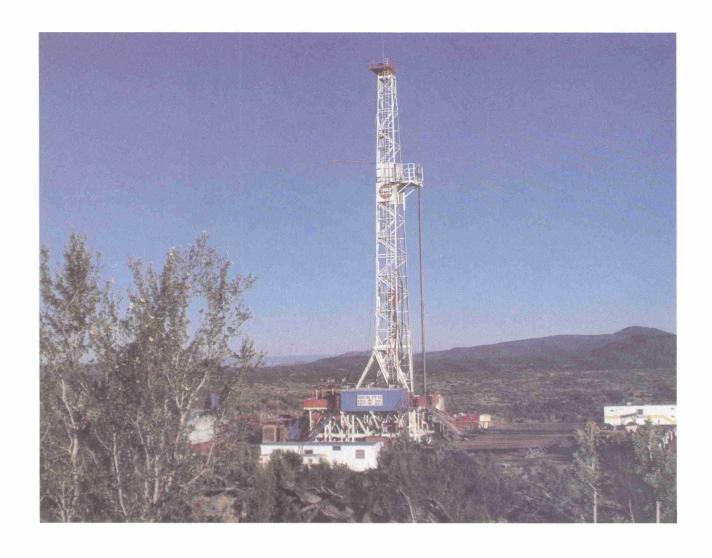
Unitization of the Eunice Monument South field requires the cooperation of the various oil companies and Royalty Owners. In forming a unit, it is necessary for Royalty and Working Interest Owners to join in a written agreement which states, among other things, the method of arriving at each tract's participation. By signing the Ratification to the agreement, the Royalty Owner is agreeing to the unitization and water injection concept, the tract participation formula, and his interest in the tract.

Since the purpose of the unitization and water injection is to increase both the amount of oil recovered and the rate of recovery, the Royalty Owner should receive more money, but does not pay any of the costs associated with increasing the production.

We urge you, therefore, to PLEASE COMMIT YOUR INTEREST to the unit BY SIGNING, BEFORE A NOTARY PUBLIC, SIX (6) COPIES of the attached "Ratification and Joinder" to the Unit Agreement and return them in the enclosed, self-addressed, postage paid envelope as soon as possible.

If you have any additional questions, please call Mr. Ray M. Vaden at (915) 687-7202, or address your correspondence to:

Land Department Manager Gulf Oil Corporation P. O. Box 1150 Midland, Texas 79702



Minutes of Technical Committee Meeting

Proposed Eunice Monument South Unit

May 4, 1982

The Technical Committee meeting began at 9:00 a.m., May 4, 1982, at the Midland Center, Midland, Texas. Representatives of 15 operators having working interests within the proposed Unit were present. The attendees represented 93% of the Unit acreage.

Mr. D. T. Berlin, chairman of the Technical Committee, opened the meeting by introducing Gulf personnel. Mr. Berlin announced the agenda items and briefly reviewed the Technical Committee voting procedure. He then turned the meeting over to Mr. Tom Wheeler to proceed with the Committee discussion.

Mr. Wheeler began by reviewing the status of the data which has been requested from Unit Operators. Approximately two thirds of the Unit Operators have not complied with all data requests, and some have not answered any Unit correspondence. Mr. Wheeler asked that the Information Request summary, Attachment 1, be reviewed by all Operators. A complete parameter table cannot be constructed until all Operators have provided correct information regarding the tract legal descriptions and Working Interest divisions.

Mr. Wheeler introduced the three agenda items for the day as follows:

- 1. Definition of the vertical limits of the unitized interval
- 2. Finalization of the Unit boundary
- 3. Committee consensus of the Tract production decline curves

 He reminded the participants that the goal of the Committee was to provide recommendations to the Working Interest Owners on these three topics.

During the discussion of the vertical interval to be unitized, Mr. Wheeler described the five alternatives which have been investigated by Gulf. The bottom of the interval must be the base of the San Andres formations to include the area's most prolific water production zone, however, the five alternatives for the top of the interval are as follows:

- 1. Top of the Grayburg Formation
- 2. Top of the Penrose Formation
- 3. An intermediate marker between the upper Penrose sand and lower
 Penrose carbonate section
- 4. A subsea datum
- 5. A combination of 1 and 4 (above)

Each alternative has advantages and disadvantages, however, after an extensive analysis of the cross sections from the Unit, Gulf engineers and geologists had concluded that the following vertical limit definition should be proposed to the Working Interest Owners: "The Unitized Interval shall include the formations from a lower limit defined by the base of the San Andres formation, to an upper limit defined by the top of the Grayburg formation or a -100 foot subsea Gatum, whichever is higher."

The significant advantages of this definition include the following:

- Includes all known Eumont Oil and Eunice Monument Oil production in the Unit area
- 2. Excludes most gas well completions in the area
- Minimizes the number of workovers required to prevent waterflooding non-unitized formations
- Exposes the total oil productive interval in the Unit area to Waterflood operations

When no other alternatives were presented by Committee members for consideration, the Committee unanimously accepted the above definition of the Unit vertical limits.

The second discussion topic, final boundary selection, involved review of all properties adjacent to the current boundary to determine whether additional acreage should be included in the Unit. After discussion the Committee voted to include three tracts which have current or past Eunice Monument oil production. The three tracts are outlined on Attachment 2, and are identified below.

- Tract 114 80 acres of Amoco "State 'C' Tract 11" Lease located in S/2 SE/4 Section 2, Township 21 South, Range 36 East, Lea County, New Mexico.
- Tract 115 Amoco "McQuatters" lease covering N/2 NE/4 Section 11,
 Township 21 South, Range 36 East, Lea County, New Mexico.
- 3. Tract 116 40 acres of Conoco "Lockhart B" Lease located in NW/4 NW/4 Section 13, Township 21 South, Range 36 East, Lea County, New Mexico.

Mr. Huan Pham presented ARCO's recommendation that the Committee consider adding three tracts as listed below:

- Arco "Ida White" Lease 80 acres in N/2 SE/4 Section 35, Township
 South, Range 36 East.
- Arco "Endure State" Lease 160 acres in SE/4 Section 12 Township
 South, Range 35 East.
- Arco "State 176" Lease 280 acres composed of N/2 NW/4, SE/4 NW/4 and W/2 E/2 Section 19, Township 21 South, Range 36 East.

The Technical Committee voted against the addition of the Arco tracts.

The Committee heard a request from Ms. Pam Morphew, representing the interests of Doyle Hartman and James Rasmussen, to delete tracts 70 and 113 from the Unit. These adjacent 40 acre tracts are located in the eastern portion of the Unit. Tract 70 is the Hartman operated Rasmussen State lease which has a high GOR Eunice Monument oil well, the #1 Rasmussen State, and an abandoned Eunice Monument well, the #1 Rasmussen State 'G'. Tract 113 has the abandoned #2 Rasmussen State 'G' Eunice Monument oil well. After discussion the Committee voted to recommend to the Working Interest Owners that the tracts not be excluded from the Unit at this time.

The last agenda item was the finalization of production decline curves.

All curves were individually reviewed, declined and approved by group consensus.

Reserve calculations will be based on these decline curves.

The meeting was adjourned following completion of the decline curve review.

The water injection plant and treating facilities will be located at the central battery site. Water will be transferred under pressure to the primary distribution headers located at each satellite battery site, then to secondary headers located in the field, each serving from three to five injection wells.

The total water requirement will be provided by reinjection of produced water, and from make-up water provided by nine San Andres supply wells. For this cost estimate, the assumption was made that new water supply wells would be drilled; however, there is a possibility that existing wellbores may be available which could be purchased and completed in the San Andres.

COST ESTIMATE

The cost estimate for the above preliminary design can be summarized into seven major categories as listed below:

	<u>Item</u>	Tangibles	Intangibles
1.	Production and Injection Facilities	\$ 12,548,200	\$ 6,681,450
2.	Drill & Equip 9 Water Supply Wells	3,051,000	1,989,000
3.	Drill & Equip 19 Producers	2,726,500	3,543,500
4.	Drill & Equip 16 Injectors	1,336,000	2,984,000
5.	Remedial Work - 208 Wells	10,060,000	9,295,000
6.	Coring Cost - 20 Wells		1,000,000
7.	Pumping Unit Replacements	6,726,000	570,000
	Subtotal	\$ 36,447,700	\$ 26,062,950
	Grand Total	\$ 62,510,650	

1. Production and Injection Facilities

This item includes all storage, transfer, treatment, metering and sales equipment. This item also includes costs for electrifying the unit, retiring existing facilities as they are replaced, and settling right-of-way and damage claims due to construction.

2. Drill and Equip 9 Water Supply Wells

This item provides for drilling, completing, and equipping nine wells to provide water from the lower San Andres formation. The wells will be required to provide the water injection requirement which is expected to peak at 2.7 MM barrels per month during fillap.

		F NEW MEXICO INERALS DEPARTMENT	
	STATE LAN	VATION DIVISION D OFFICE BLDG. E, NEW MEXICO	
	7 Nov	ember 1984	
	COMMIS	SION HEARING	
	VOLUME I	OF II VOLUMES	
IN THE MATT	ER OF:		
fo	pplication of Gul or statutory unit ounty, New Mexico		CASE 8397
fo	pplication of Gul or a waterflood p ounty, New Mexico	roject, Lea	CASE 8398
fo		f Oil Corporation and contraction, xico.	
	chard L. Stamets ommissioner Ed Ke		
	TRANSCRI	PT OF HEARING	
	APPE	ARANCES	
For the Oil Commission	Conservation	Jeff Taylor Attorney at Law Legal Counsel to th	ne Divisior
		State Land Office E	
		Santa Fe, New Mexic	

r		
1	2	
2	APPEARANCES	
3	For Gulf Oil Corp.: W. Thomas Kellahin Attorney at Law KELLAHIN & KELLAHIN	
4 5	P. O. Box 2265 Santa Fe, New Mexico 87501	
6	Ken M. Brown Attorney at Law Gulf Oil Corporation	
7		
8	For Exxon: James M. Sperling Attorney at Law MODRALL, SPERLING, ROEHL,	
9	HARRIS & SISK Post Office Box 2168 Albuquerque, New Mexico 87103	
11	For Tract 55 Owners: Ernest L. Padilla Attorney at Law	
12	P. O. Box 2523 Santa Fe, New Mexico 87501	
13	INDEX	
14		
15	STATEMENT BY MR. KELLAHIN 5	
16	RAY M. VADEN Direct Examination by Mr. Kellahin 9 Cross Examination by Mr. Padilla 33	
17	Cross Examination by Mr. Padilla 35 Cross Examination by Mr. Sperling 39	
18	RAY HOFFMAN	
19	Direct Examination by Mr. Kellahin 43 Cross Examination by Mr. Padilla 55 Cross Examination by Mr. Sperling 59	
20	Cross Examination by Mr. Stamets 60 Redirect Examination by Mr. Kellahin 61	
21	Recross Examination by Mr. Padilla 63	
22		
23		
24		
25		

At the top of this summary is another number. It says "well" and as an example "14-4". That would indicate that it's cross section 14 and the well is at location number 4, and that is from the west.

The Penrose in this area, the lower part of the Penrose, the oil column in this area thins from the Grayburg up into the lower part of the Penrose. The middle Penrose is usually tight across the whole area except for the southern western edge of the field and this provides a pretty effective barrier between the oil column and the Penrose sand.

The Penrose sand is -- is that sand in the very top of the Penrose and generally found over the whole field.

On the western and southern edges of the field the sand, which is a dolomitic sand, changes into dolomite by a facies change or is cemented tight with dolomitic cement, with a corresponding loss of porosity and permeability along the edge of the unit.

Q All right, sir, when you look at Exhibit Number Eighteen, which is the line of cross section east to west on the southern portion of the unit, would you describe what you see in that cross section?

A Basically it's the same as you see -basically it's the same as our cross section 14 as to tops
and datums and it shows the same as cross section 14 (not
clearly audible).

```
53
1
            Q
                        When you look at the oil column in
2
    unit area, that is included generally in the Grayburg and
3
    the lower portion of the Penrose, is that correct?
4
                       That's correct.
             A
5
                       The upper portion of the Penrose is that
6
    sand that is gas productive.
7
             Α
                       Yes, it is.
8
                        When you talked about the dense dolo-
             Q
9
            are the dense dolomites between the oil column and
    the gas column?
10
                       Yes, they are.
                                         The base of the sand is
             Α
11
    the top of the Penrose.
12
                       Within the Penrose section, then, there's
             0
13
    a dolomite interval that separates the oil and the gas?
14
             Α
                       Yes, sir, dolomite stringers, long sand
15
    stringers.
                The dolomite in the area is tight.
16
                       In your opinion is that an effective bar-
17
    rier between the oil and the gas in the area?
                       Yes, it is, over most of the field.
18
             Α
                       All right, when we look at the top of the
19
    Grayburg and the base of the Penrose do we see any forma-
20
    tional barrier between the top of the Grayburg and the base
21
    of the Penrose in the oil column?
22
                       No, we don't.
             Α
23
                        Are you familiar with what Gulf proposes
24
    to use as the definition for the formation or the unit
25
    terval?
```

_				
1 2		ENERGY AND MI OIL CONSERV	NEW MEXICO NERALS DEPARTMENT VATION DIVISION	
			O OFFICE BLDG. E, NEW MEXICO	
		8 Nove	ember 1984	
		COMMISS	SION HEARING	
		VOLUME I	OF II VOLUMES	
	IN THE M	ATTER OF:		
		Application of Gulf for statutory uniti County, New Mexico.	zation, Lea	CASE 8397
		Application of Gulf for a waterflood pr County, New Mexico.	oject, Lea	CASE 8398
		Application of Gulf for pool extension Lea County, New Mex	and contraction,	
	BEFORE:	Richard L. Stamets, Commissioner Ed Kel		
		TRANSCRII	PT OF HEARING	
		АРРЕЯ	ARANCES	
	For the Commiss	Oil Conservation ion:	Jeff Taylor Attorney at Law Legal Counsel to	the Division
			State Land Offic Santa Fe, New Me	e Bldg.
				,
			•	
1				

214 1 In addition to distributing in this pack-0 2 age of exhibits Exhibit Thirty-two, I've also distributed 3 the next exhibit, which is 33-A. 4 Yes, sir. 5 All right, would you identify that for 0 6 us? 7 It lists data on the proposed operation Α 8 injection system for the waterflood project in the Eunice Monument South Unit. 9 All right, sir, would you describe for us 10 what the proposed method of operation is for the unit? 11 Okay. As shown on Exhibit Number Thirty-12 three-A, our average daily rates and maximum daily rates are 13 and 500 barrels of water per day, respectively. 14 system is going to be a closed system. The proposed average 15 and maximum injection pressures will be 350 psi and 740 psi, 16 respectively. 17 This will be until we can determine fracture gradient and obtain proper approval from the OCD 18 Director for possibly injecting at higher injection pres-19 sures. 20 To monitor and control the rates and 21 pressures at the wellhead, our plans are to install pressure 22 rate controllers on each injection well. 23 There are currently plans to drill appro-24 ximately nine water supply wells to provide make-up water 25 from the San Andres formation. This make-up water will be

1 215 used initially as the primary source of injection water and 2 once we have the unit fully developed, we will be switching 3 over to using produced water as our primary source of injec-4 tion water. 5 Do you have any estimates now of the per-6 centages between make-up water and produced water that will 7 be used by the project? 8 Not at this time. Our present plans are Α 9 initially we'll be using approximately 60,000 barrels 10 of water per day for 133 injection wells. And what is the source of produced water 0 11 in the unit? 12 Α It will be from the unitized intervals, 13 the Grayburg formation, principally. 14 Do you anticipate that the maximum injec-15 tion pressure at any individual injection well will be based 16 upon the .2 psi per foot of depth gradient established as 17 matter of practice by the Commission until you have other 18 data available to justify a higher rate? 19 Α Yes, sir, that's our plan. All right, sir, it you'll turn to Exhibit 0 20 Number Thirty-three-B, I believe, is the next one, and de-21 scribe that one for us. 22 Thirty-three-B is a water compatibility 23 analysis performed on the make-up water and the produced 24 water and it illustrates that there is no incompatibility 25 evident by the mixing of these two waters.

224 1 ation. We can plug a lot of that into the computer to check 2 you to see that -- on your reports -- to see that you're 3 really following that. That's a lot of calculations for all of us to try and figure out what individual pressure limits 5 are. 6 I'm wondering if it would be possible to 7 establish groupings of pressures in this reservoir, say per-8 haps all the wells on the two sections on the west side would have the same pressure limit, and the three down in the middle, the same pressure limit, and so on, let's say, 10 for the east side, so that we wouldn't have, what, 149 dif-11 ferent pressures; we might have, say, five or six different 12 pressure limits within the limits of the pool we would have 13 to process. 14 Α With the installation of those pressure 15 rate controllers we'd be able to control pressures and rates 16 on an individual injection well basis. 17 Where we may want a well to take -- take more water, inject more water into a well, it might require 18 different pressures, other situations. 19 It's just a suggestion. We can look into 0 20 it and if it works out, we'll try and do it. 21 Okay, sir. Α 22 Now I understand that you will in-23 only into the Grayburg and the Penrose and not jecting 24 San Andres, is that correct? 25 A That is correct.

San Andres SWD Injection

Goodnight Midstream

АРІ	Well / Formation	PLLS Location	Date Of First Injection	Volume of Water Injected	Days in Operation	Average BWPD	Inside EMSU Boundary	
30-025-43901	Ryno San Andres	H-17-21S-36E	3/14/2019	13,915,844	1,665	8,358	Yes	Re-completed: San Andres 6/2020
30-025-47947	Sosa San Andres	N-17-21S-36E	4/18/2021	15,691,240	899	17,454	Yes	
30-025-44386	Ted San Andres/Glorieta	F-28-21S-36E	3/31/2019	12,811,643	1,648	7,774	No	
30-025-46382	Yaz San Andres	A-28-21S-36E	10/8/2019	14,768,685	1,457	10,136	No	
30-025-26491	Piper* San Andres	M-18-21S-37E	1/1/2012	26,713,658	4,294	6,221	No	
30-025-45349	Nolan Ryan San Andres	O-13-21S-36E	10/31/2019	13,091,799	1,434	9,130	No	
30-025-46398	Scully San Andres	F-4-22S-36E	3/12/2020	8,616,661	1,301	6,623	No	
30-025-50079	Pedro San Andres/Glorieta	M-28-21S-36E	7/21/2022	10,749,619	440	24,431	No	
30-025-50634	Dawson San Andres	P-17-21S-36E	1/17/2023	3,650,077	260	14,039	Yes	
30-025-50633	Banks San Andres	D-17-21S-36E	5/5/2023	1,823,291	152	11,995	Yes	
Piper AKA Penroc Stat	e E 27 #2							
San Andres O	perated by Others							
30-025-21852	Rice EME SWD #021	L-21-21S-36E	9/22/1966	39,255,813	20,831	1,884	Yes	w/ volume before records
30-025-04484	Empire E M S U #001	W-4-21S-36E	3/2/1987	4,229,556	13,365	316	Yes	w/ volume before records
30-025-12786	Rice EME SWD #033M	M-33-20S-36E	4/14/1960	59,370,620	23,183	2,561	No	w/ volume before records
30-025-46579	Owl P15 #001	P-15-21S-36E	11/1/2020	2,040	1,067	2	Yes	
30-025-46577	Rice N11 #001	N-11-21s-36E	11/1/2020	1,854,544	1,067	1,738	Yes	
30-025-38789	Parker Parker SWD #005	A-24-21S-36E	3/15/2015	7,773,660	3,125	2,488	No	

35,660,864 **269,979,614** 5,467

6,523

No

10/15/2008

BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Exhibit No. B-18
Submitted by: Goodnight Midstream Permian, LLC
Hearing Date: November 2, 2023
Case Nos. 23614-23617

30-025-26317

Rice State E 27 #1

N-18-21S-37E

OCD Hobbs

Form 3160-5 (August-2007)

UNITED STATES

FORM APPROVED

(August-2007)		PARTMENT OF THE D		UOPEC OO		es: July 31, 2010
·		UREAU OF LAND MANA		noss oct	5. Lease Serial No NMLC03174	NB
	Do not use thi	NOTICES AND REPO is form for proposals to	drill or to re-enter an	1111 0 1 004	(_
	abandoned wel	II. Use form 3160-3 (AP	D) for such proposals.	JUL U 1 ZUI	6. If Indian, Allotte	ee of Tribe Name
 	SUBMIT IN TRI	PLICATE - Other instruc	tions on reverse side.		7. If Unit or CA/A	greement, Name and/or No.
				RECEIVED		·
1. Type of Well	5 6 W W 5 04				8. Well Name and I EMSU CTB 20	
2. Name of Opera	Gas Well Oth		SHERRY P PACK		9. API Well No.	
XTO ENERG		E-Mail: sherry_pac			30-025-0449	2
3a. Address 200 N. LORA MIDLAND, T	AINE, SUITE 800 X 79701		3b. Phone No. (include are Ph: 432-620-6709 Fx: 432-224-1126	a code)	10. Field and Pool 23000	, or Exploratory
4. Location of We	ll (Footage, Sec., T.	., R., M., or Survey Description)		11. County or Pari	sh, and State
Sec 4 T21S	R36E Mer NMP 1	980FNL 660F W L			LEA COUNT	Y, NM
12	2. CHECK APPR	ROPRIATE BOX(ES) TO) INDICATE NATURE	OF NOTICE, R	EPORT, OR OTH	HER DATA
TYPE OF SI	JBMISSION		TY	PE OF ACTION		
		☐ Acidize	☐ Deepen	☐ Product	tion (Start/Resume)	☐ Water Shut-Off
Notice of Ir	ntent	☐ Alter Casing	☐ Fracture Treat	☐ Reclam		☐ Well Integrity
■ Subsequent	Report	Casing Repair	☐ New Constructi	_		☑ Other
□ Final Abane	donment Notice	☐ Change Plans	☐ Plug and Aband		arily Abandon	Venting and/or Flari
_		☐ Convert to Injection	☐ Plug Back	☐ Water I	=	ng
Attach the Bond following comp testing has been	l under which the wor letion of the involved	illy or recomplete horizontally, k will be performed or provide operations. If the operation re andonment Notices shall be fil nal inspection.)	the Bond No. on file with BI sults in a multiple completion	M/BIA. Required su or recompletion in a	bsequent reports shall new interval, a Form	be filed within 30 days 3160-4 shall be filed once
EMSU CTB S	SEE ATTACHED	SPREADSHEET				
DCP LINE R	EPAIR AND DCP	LIS NOT ABLE TO HAND	OLE ALL OUR PRODUC	ED GAS. ESTIM	IATE FLARE TO I	BE 30 MCF/D
\$UB.	Valice ECT TO LIKE VAL BY STA		, to 8/18/2	0013 COI	NDITIONS (CHED FOR OF APPROVAL E OIL CONSERVATION DIVISION
14. I hereby certify	that the foregoing is	true and correct.			S	anta Fe, New Mexico
		Electronic Submission #3 For XTO)ENERGY IN¢., sent to t	he Hobbs	Submitted	Exhibit No. C-10 by: Goodnight Midstream, LLC
Name (Printad)	ryped) SHERRY I		or processing by KURT S	I IMMONS on 05/22/ EGULATORY AN		Date: September 15, 2022 Case No. 22626
Taille(17titlear)	ypea, Oricinii i	TAOK	Tide [1]	LGOLATOTT AN	ALIGI	(1110.111.121.11)
Signature	(Electronic S			5/20/2013		
		THIS SPACE FO	R FEDERAL OR ST	ATE OFFICE H	BOVED	
	1/1/1/	1/1/1/1			NOVED	Det
Approved By	YU V- 714	15-15-	Title		0.7.0010	Date
certify that the application	ant holds legal or equ	 Approval of this notice does itable title to those rights in the 	subject lease	I JUN	2 7 2013	1
which would entitle t	he applicant to condu	ct operations thereon.	Office			
Fitle 18 U.S.C. Section States any false, fic	on 1001 and Fitte 43 titlous or fraudalent s	U.S.C. Section 1212, make is a catements of representations a	crime for any person knowing to any matter within its juriso	ly and willfully to me ctiorBUREAU OF L	AND MANAGEMEN	or agency of the United
				CARLSBA	D FIELD OFFICE_	

EMSU CTB

scompletionname		
EUNICE MONUMENT SO. UNIT 101 GRBG/SA		30-025-30220
EUNICE MONUMENT SO. UNIT 103 GRBG/SA 🗸	FEDERAL	30-025-04331
EUNICE MONUMENT SO. UNIT 105 GRBG/SA 🖊		30-025-04335
EUNICE MONUMENT SO. UNIT 109 GRBG/SA	Р	30-025-04324
EUNICE MONUMENT SO. UNIT 110 GRBG/SA		30-025-06284
EUNICE MONUMENT SO. UNIT 112 GRBG/SA		30-025-06282
EUNICE MONUMENT SO. UNIT 115 GRBG/SA —		30-025-06295
EUNICE MONUMENT SO. UNIT 117 GRBG/SA		30-025-29396
EUNICE MONUMENT SO. UNIT 122 GRBG/SA 🗸	FEDERAL	30-025-30277
EUNICE MONUMENT SO. UNIT 123 GRBG/SA	FEDERAL	30-025-29957
EUNICE MONUMENT SO. UNIT 125 GRBG/SA 🗸	Р	30-025-04322
EUNICE MONUMENT SO. UNIT 139 GRBG/SA /		30-025-12544
EUNICE MONUMENT SO. UNIT 141 GRBG/SA		30-025-04429
EUNICE MONUMENT SO. UNIT 142 GRBG/SA		30-025-04428
EUNICE MONUMENT SO. UNIT 143 GRBG/SA		30-025-04424
EUNICE MONUMENT SO. UNIT 145 GRBG/SA 🗸		30-025-12545
EUNICE MONUMENT SO. UNIT 161 GRBG/SA 🖍		30-025-06305
EUNICE MONUMENT SO. UNIT 165 GRBG/SA		30-025-04427
EUNICE MONUMENT SO. UNIT 169 GRBG/SA 🖊		30-025-29583
EUNICE MONUMENT SO. UNIT 171 GRBG/SA 🦟		30-025-06296
EUNICE MONUMENT SO. UNIT 182 GRBG/SA 🗸	FEDERAL	30-025-29868
EUNICE MONUMENT SO. UNIT 184 GRBG/SA 🛩		30-025-04513
EUNICE MONUMENT SO. UNIT 186 GRBG/SA -	FEDERAL	30-025-04516
EUNICE MONUMENT SO. UNIT 188 GRBG/SA -		30-025-04533
EUNICE MONUMENT SO. UNIT 190 GRBG/SA	Р	30-025-04536
EUNICE MONUMENT SO. UNIT 194 GRBG/SA 🖊		30-025-29599
EUNICE MONUMENT SO. UNIT 196 GRBG/SA		30-025-04514
EUNICE MONUMENT SO. UNIT 198 GRBG/SA		30-025-29682
EUNICE MONUMENT SO. UNIT 200H GRBG/SA -	FEDERAL	30-025-04492
EUNICE MONUMENT SO. UNIT 202 GRBG/SA	FEDERAL	30-025-29866
EUNICE MONUMENT SO. UNIT 208 GRBG/SA 🗸	Р	30-025-04470
EUNICE MONUMENT SO. UNIT 209 GRBG/SA 🖊		30-025-04473
EUNICE MONUMENT SO. UNIT 212 GRBG/SA 🖍		30-025-04504
EUNICE MONUMENT SO. UNIT 214 GRBG/SA —		30-025-04507
EUNICE MONUMENT SO. UNIT 216 GRBG/SA -		30-025-08704
EUNICE MONUMENT SO. UNIT 224 GRBG/SA /		30-025-04506
EUNICE MONUMENT SO. UNIT 232 GRBG/SA -		30-025-04452
EUNICE MONUMENT SO. UNIT 238 GRBG/SA ∽		30-025-04466
EUNICE MONUMENT SO. UNIT 244 GRBG/SA 🛩	FEDERAL	30-025-04497
EUNICE MONUMENT SO. UNIT 246 GRBG/SA		30-025-04527
EUNICE MONUMENT SO. UNIT 249 GRBG/SA	Р	30-025-04525
EUNICE MONUMENT SO. UNIT 250 GRBG/SA		30-025-04526
EUNICE MONUMENT SO. UNIT 254 GRBG/SA		30-025-04500
EUNICE MONUMENT SO. UNIT 256 GRBG/SA		30-025-04495
EUNICE MONUMENT SO. UNIT 260 GRBG/SA	FEDERAL	30-025-04463

EUNICE MONUMENT SO. UNIT 262 GRBG/SA /	Р	30-025-04454
EUNICE MONUMENT SO. UNIT 264 GRBG/SA		30-025-04457
EUNICE MONUMENT SO. UNIT 266 GRBG/SA		30-025-26101
EUNICE MONUMENT SO. UNIT 267 GRBG/SA		30-025-04440
EUNICE MONUMENT SO. UNIT 274 GRBG/SA		30-025-04602
EUNICE MONUMENT SO. UNIT 276 GRBG/SA		30-025-04603
EUNICE MONUMENT SO. UNIT 278 GRBG/SA		30-025-20133
EUNICE MONUMENT SO. UNIT 280 GRBG/SA		30-025-04573
EUNICE MONUMENT SO. UNIT 282 GRBG/SA		30-025-21902
EUNICE MONUMENT SO. UNIT 284 GRBG/SA		30-025-04561
EUNICE MONUMENT SO. UNIT 286 GRBG/SA		30-025-04540
EUNICE MONUMENT SO. UNIT 290 GRBG/SA		30-025-04543
EUNICE MONUMENT SO. UNIT 294 GRBG/SA ∽	FEDERAL	30-025-04562
EUNICE MONUMENT SO. UNIT 296 GRBG/SA		30-025-04566
EUNICE MONUMENT SO. UNIT 298 GRBG/SA	FEDERAL	30-025-04575
EUNICE MONUMENT SO. UNIT 300 GRBG/SA		30-025-04579
EUNICE MONUMENT SO. UNIT 302 GRBG/SA	Р	30-025-04588
EUNICE MONUMENT SO. UNIT 304 GRBG/SA		30-025-04601
EUNICE MONUMENT SO. UNIT 306 GRBG/SA		30-025-04604
EUNICE MONUMENT SO. UNIT 308 GRBG/SA		30-025-04618
EUNICE MONUMENT SO. UNIT 311 GRBG/SA	Р	30-025-29600
EUNICE MONUMENT SO. UNIT 313 GRBG/SA 🛩	FEDERAL	30-025-04608
EUNICE MONUMENT SO. UNIT 315 GRBG/SA 🛩	Р	30-025-04600
EUNICE MONUMENT SO. UNIT 317 GRBG/SA 🗸		30-025-04590
EUNICE MONUMENT SO. UNIT 319 GRBG/SA 🛹		30-025-04584
EUNICE MONUMENT SO. UNIT 321 GRBG/SA 🖍		30-025-04570
EUNICE MONUMENT SO. UNIT 323 GRBG/SA -		30-025-04555
EUNICE MONUMENT SO. UNIT 325 GRBG/SA ∽		30-025-04556
EUNICE MONUMENT SO. UNIT 335 GRBG/SA 🗻		30-025-04558
EUNICE MONUMENT SO. UNIT 351 GRBG/SA 🥒		30-025-04622
EUNICE MONUMENT SO. UNIT 352 GRBG/SA 🛩		30-025-04625
EUNICE MONUMENT SO. UNIT 353 GRBG/SA		30-025-04630
EUNICE MONUMENT SO. UNIT 355 GRBG/SA 🖊		30-025-04636
EUNICE MONUMENT SO. UNIT 361 GRBG/SA		30-025-04655
EUNICE MONUMENT SO. UNIT 369 GRBG/SA	FEDERAL	30-025-04676
EUNICE MONUMENT SO. UNIT 375 GRBG/SA	Р	30-025-29837
EUNICE MONUMENT SO. UNIT 377 GRBG/SA		30-025-04689
EUNICE MONUMENT SO. UNIT 385 GRBG/SA		30-025-04650
EUNICE MONUMENT SO. UNIT 387 GRBG/SA		30-025-04645
EUNICE MONUMENT SO. UNIT 389 GRBG/SA		30-025-04631
EUNICE MONUMENT SO. UNIT 392 GRBG/SA		30-025-04632
EUNICE MONUMENT SO. UNIT 395 GRBG/SA		30-025-29821
EUNICE MONUMENT SO. UNIT 397 GRBG/SA 🗻		30-025-04646
EUNICE MONUMENT SO. UNIT 401 GRBG/SA		30-025-04667
EUNICE MONUMENT SO. UNIT 407 GRBG/SA	FEDERAL	30-025-24588
EUNICE MONUMENT SO. UNIT 409 GRBG/SA		30-025-04678
EUNICE MONUMENT SO. UNIT 413 GRBG/SA	F	30-025-04673

EUNICE MONUMENT SO.	UNIT 417 GRBG/SA	_		30-025-04686
EUNICE MONUMENT SO.	UNIT 419 GRBG/SA			30-025-04695
EUNICE MONUMENT SO.	UNIT 440 GRBG/SA	اختف		30-025-04735
EUNICE MONUMENT SO.				30-025-25351
EUNICE MONUMENT SO.	•		Р	30-025-25320
EUNICE MONUMENT SO.			FEDERAL	30-025-25320
EUNICE MONUMENT SO.	•	•		30-025-29618
EUNICE MONUMENT SO.	•		Р	30-025-29826
EUNICE MONUMENT SO.	•			30-025-34845
EUNICE MONUMENT SO.				30-025-35461
EUNICE MONUMENT SO.	UNIT 561 GRBG/SA			30-025-33595
EUNICE MONUMENT SO.	UNIT 562 GRBG/SA	•		30-025-35462
EUNICE MONUMENT SO.	UNIT 574 GRBG/SA			30-025-35160
EUNICE MONUMENT SO.	UNIT 575 GRBG/SA			30-025-34824
EUNICE MONUMENT SO.	UNIT 576 GRBG/SA	_		30-025-34640
EUNICE MONUMENT SO.	UNIT 577 GRBG/SA	1		30-025-37318
EUNICE MONUMENT SO.	UNIT 584 GRBG/SA	∕		30-025-34139
EUNICE MONUMENT SO.				30-025-35157
EUNICE MONUMENT SO.				30-025-35158
EUNICE MONUMENT SO.				30-025-31406
EUNICE MONUMENT SO.		•		30-025-31407
EUNICE MONUMENT SO.				30-025-35159
EUNICE MONUMENT SO.				30-025-35161
EUNICE MONUMENT SO.				
		_		30-025-35453
EUNICE MONUMENT SO.				30-025-30511
EUNICE MONUMENT SO. I				30-025-33186
EUNICE MONUMENT SO. I		•		30-025-35455
EUNICE MONUMENT SO. I				30-025-31408
EUNICE MONUMENT SO. I				30-025-31465
EUNICE MONUMENT SO. I	•			30-025-37279
EUNICE MONUMENT SO. I				30-025-31426
EUNICE MONUMENT SO. I		-		30-025-31409
EUNICE MONUMENT SO. U	UNIT 640 GRBG/SA 🏻	-		30-025-34212
EUNICE MONUMENT SO. U	JNIT 641 GRBG/SA 🛎	<i>5</i>	FEDERAL	30-025-33189
EUNICE MONUMENT SO. U	JNIT 642 GRBG/SA 🗝	~		30-025-30958
EUNICE MONUMENT SO. U	JNIT 649 GRBG/SA.		FEDERAL	30-025-33187
EUNICE MONUMENT SO. U	JNIT 650 GRBG/SA		Р	30-025-33800
EUNICE MONUMENT SO. U	JNIT 653 GRBG/SA			30-025-34213
EUNICE MONUMENT SO. U	JNIT 658 GRBG/SA	•		30-025-37280
EUNICE MONUMENT SO. U				30-025-37319
EUNICE MONUMENT SO. U		_		30-025-34138
EUNICE MONUMENT SO. L				30-025-34214
EUNICE MONUMENT SO. L				30-025-35456
EUNICE MONUMENT SO. L				30-025-37320
EUNICE MONUMENT SO. L		~		30-025-35457
EUNICE MONUMENT SO. L				
				30-025-37281
EUNICE MONUMENT SO. U	אכןטמאט ססס וואוכ A -	-		30-025-35205

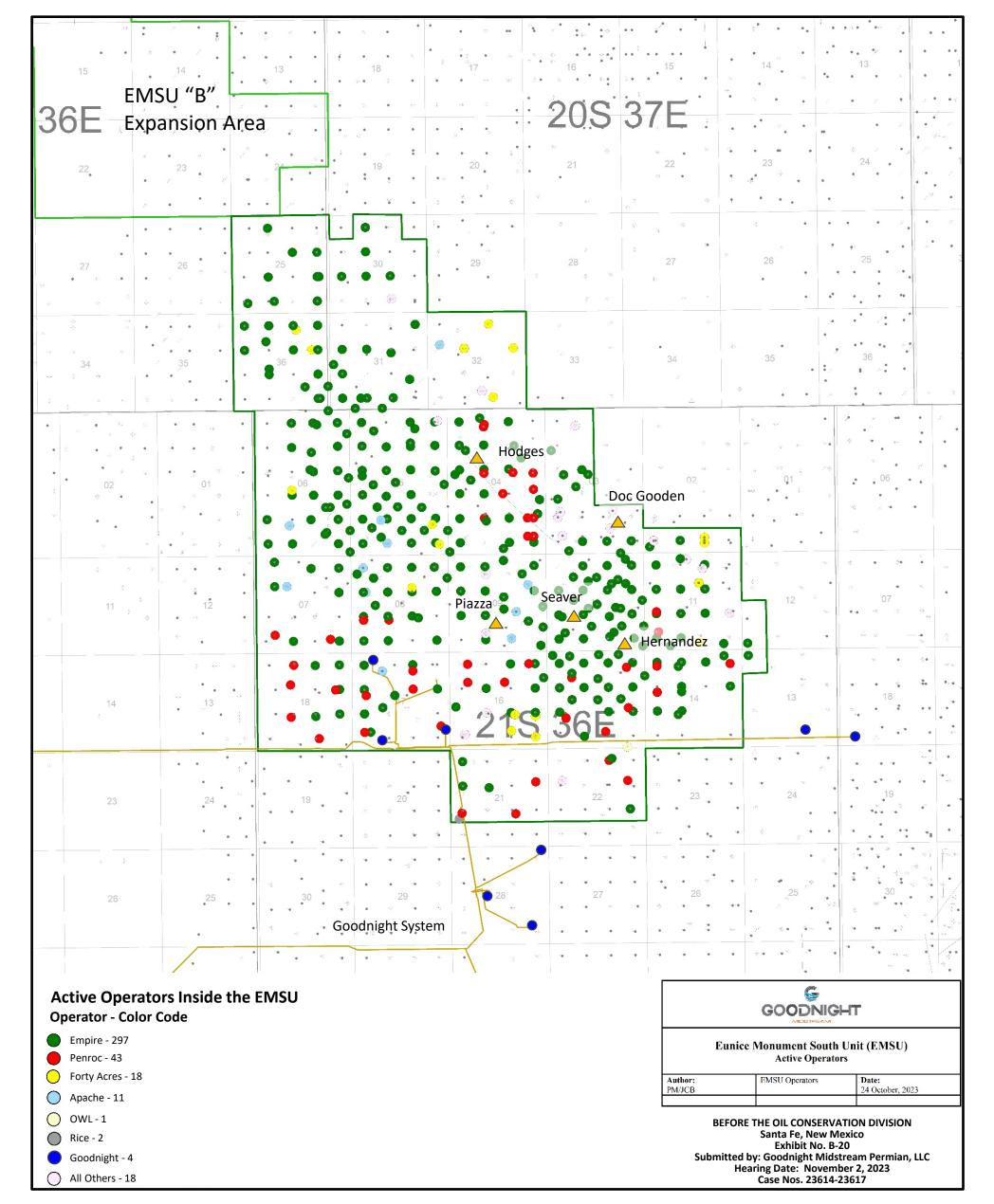
EUNICE MONUMENT SO. UNIT 695 GRBG/SA —		30-025-35162
EUNICE MONUMENT SO. UNIT 697 GRBG/SA 🗻		30-025-35163
EUNICE MONUMENT SO. UNIT 698 GRBG/SA_		30-025-34847
EUNICE MONUMENT SO. UNIT 699 GRBG/SA _		30-025-34215
EUNICE MONUMENT SO. UNIT 707 GRBG/SA		30-025-35164
EUNICE MONUMENT SO. UNIT 708 GRBG/SA /		30-025-34848
EUNICE MONUMENT SO. UNIT 709 GRBG/SA		30-025-34849
EUNICE MONUMENT SO. UNIT 711 GRBG/SA 🗩		30-025-34850
EUNICE MONUMENT SO. UNIT 713 GRBG/SA		30-025-37321
EUNICE MONUMENT SO. UNIT 734 GRBG/SA		30-025-34851
EUNICE MONUMENT SO. UNIT 735 GRBG/SA —		30-025-34826
EUNICE MONUMENT SO. UNIT 736 GRBG/SA		30-025-34852
EUNICE MONUMENT SO. UNIT 737 GRBG/SA		30-025-34853
EUNICE MONUMENT SO. UNIT 738 GRBG/SA		30-025-35165
EUNICE MONUMENT SO. UNIT 739 GRBG/SA —		30-025-35458
EUNICE MONUMENT SO. UNIT 746 GRBG/SA .		30-025-37356
EUNICE MONUMENT SO. UNIT 747 GRBG/SA ∽		30-025-35167
EUNICE MONUMENT SO. UNIT 748 GRBG/SA 🔑		30-025-34632
EUNICE MONUMENT SO. UNIT 749 GRBG/SA		30-025-34641
EUNICE MONUMENT SO. UNIT 750 GRBG/SA —		30-025-35168
EUNICE MONUMENT SO. UNIT 774 GRBG/SA —	FEDERAL	30-025-35166
EUNICE MONUMENT SO. UNIT 775 GRBG/SA	FEDERAL	30-025-35459
EUNICE MONUMENT SO. UNIT 776 GRBG/SA	S	30-025-35460

BUREAU OF LAND MANAGEMENT Carlsbad Field Office 620 East Greene Street Carlsbad, New Mexico 88220 575-234-5972

6/27/2013 Condition of Approval to Flare Gas

- 1. Report all volumes on OGOR reports.
- 2. Comply with NTL-4A requirements
- 3. Subject to like approval from NMOCD
- 4. Flared volumes will still require payment of royalties
- 5. Install gas meter on vent/flare line to measure gas prior to venting/flaring operations if it is not equipped as such at this time. Gas meter to meet all requirements for sale meter as Federal Regulations and Onshore Order #5.
- 6. This approval does not authorize any additional surface disturbance.
- 7. Submit updated facility diagram as per Onshore Order #3.
- 8. Approval not to exceed 90 days for date of approval.
- 9. Submit Subsequent Report with actual volumes of gas flared for each month gas is flared.
- 10. If flaring is still required past 90 days submit new request for approval.
- 11. If a portable unit is used to flare gas it must be monitored at all times.
- 12. Comply with any restrictions or regulations when on State or Fee surface.

JDB6272013



Received by OCD: 10/27/2023 4:11:36 PM

Page 41 of 55

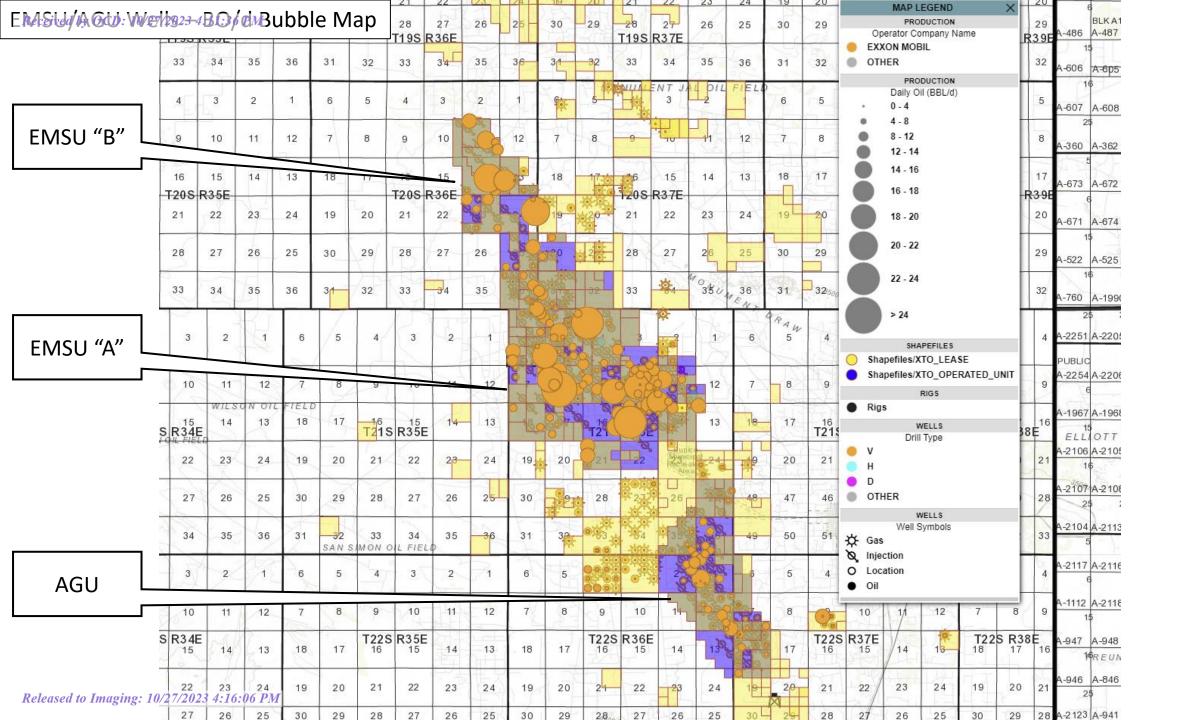


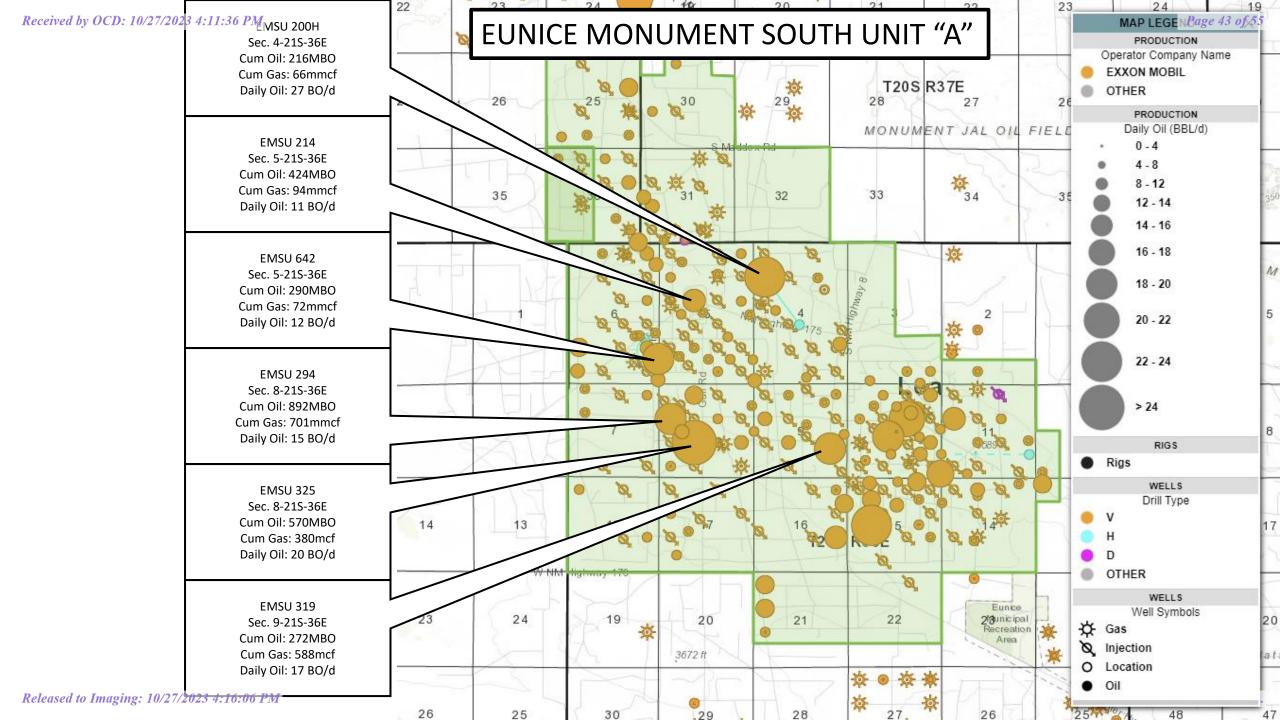
BO/d Bubble Maps
Log Data Coverage (XOM & NUTECH)
EMSU "A" – CO2 Pilot High-Grade

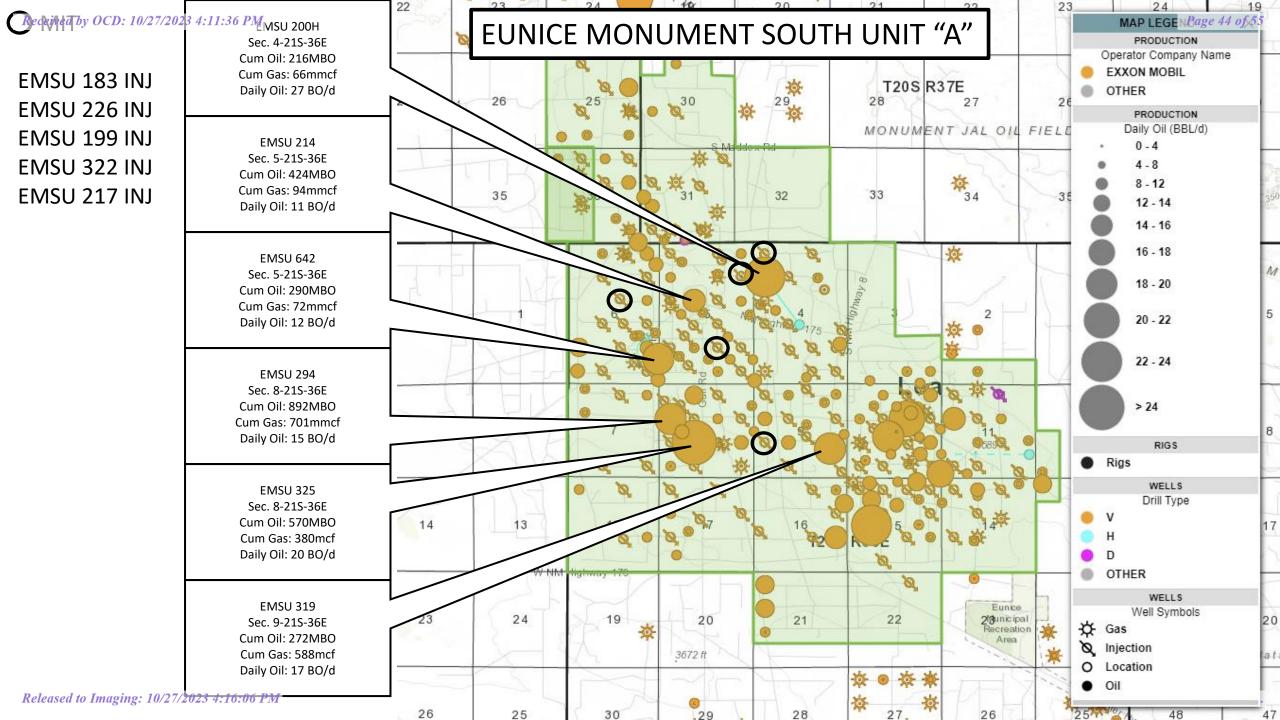
BEFORE THE OIL CONSERVATION DIVISION

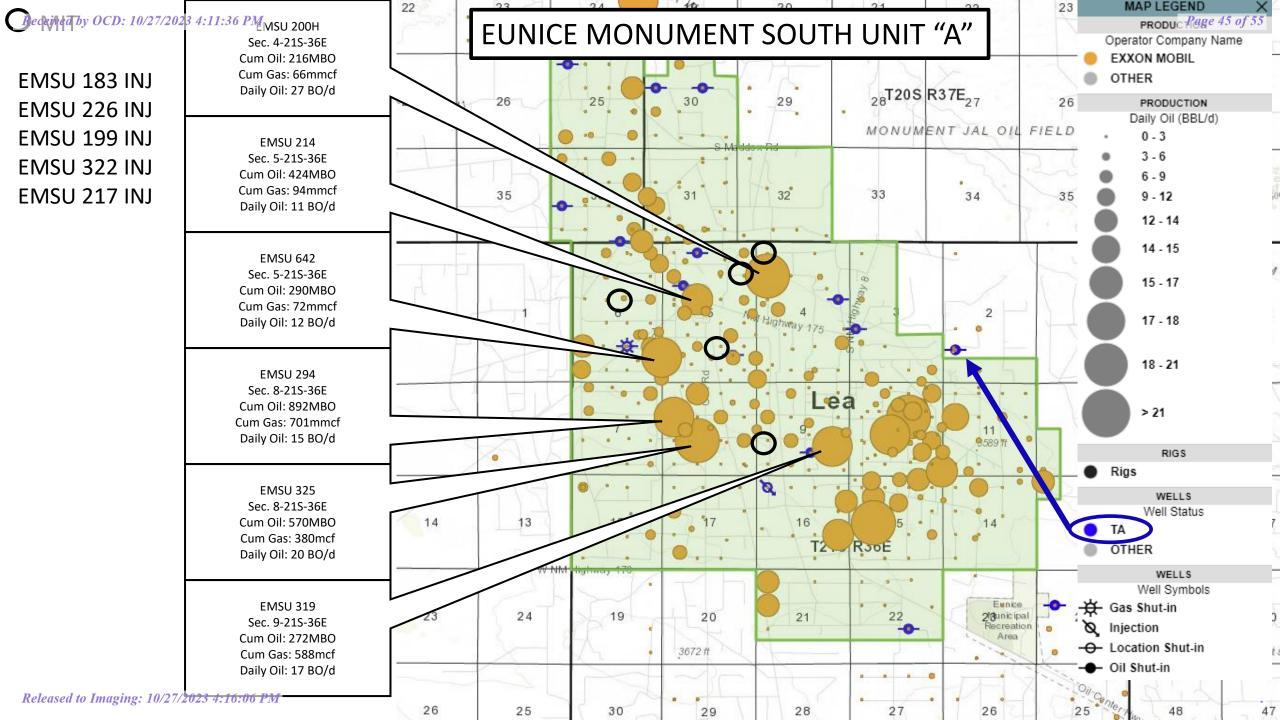
Santa Fe, New Mexico Exhibit No. B-21

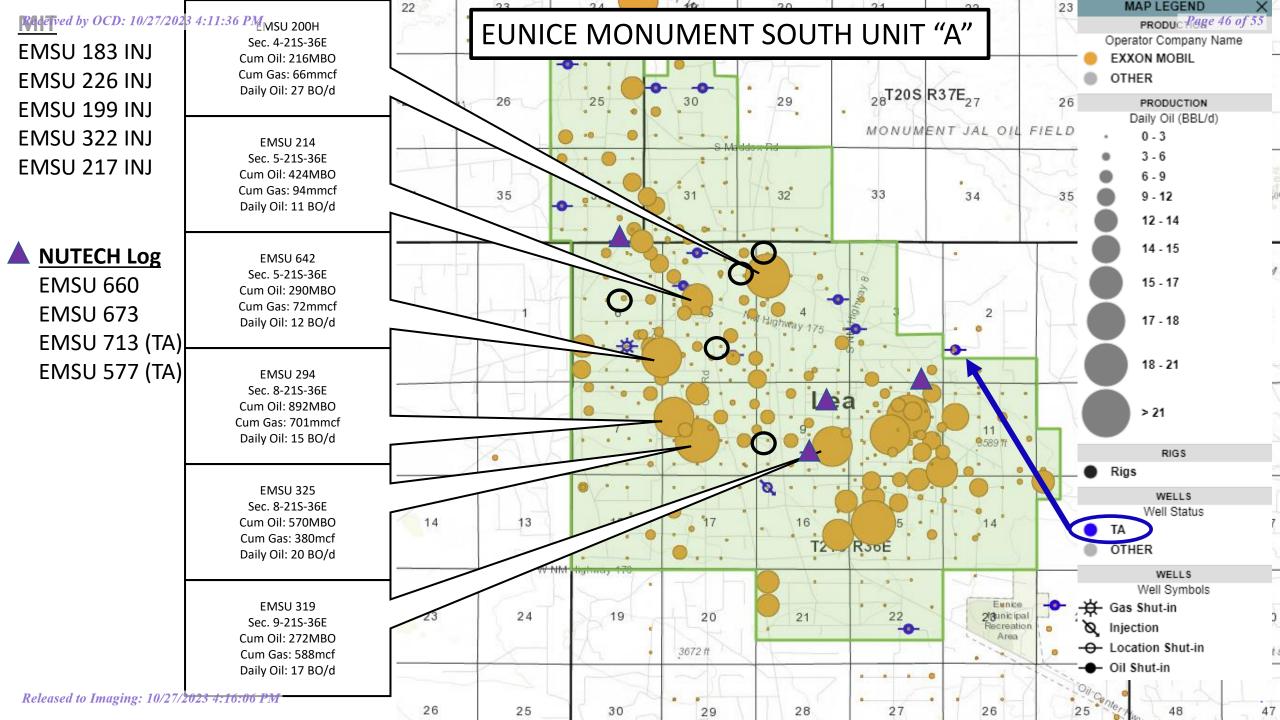
Submitted by: Goodnight Midstream Permian, LLC Hearing Date: November 2, 2023 Case Nos. 23614-23617



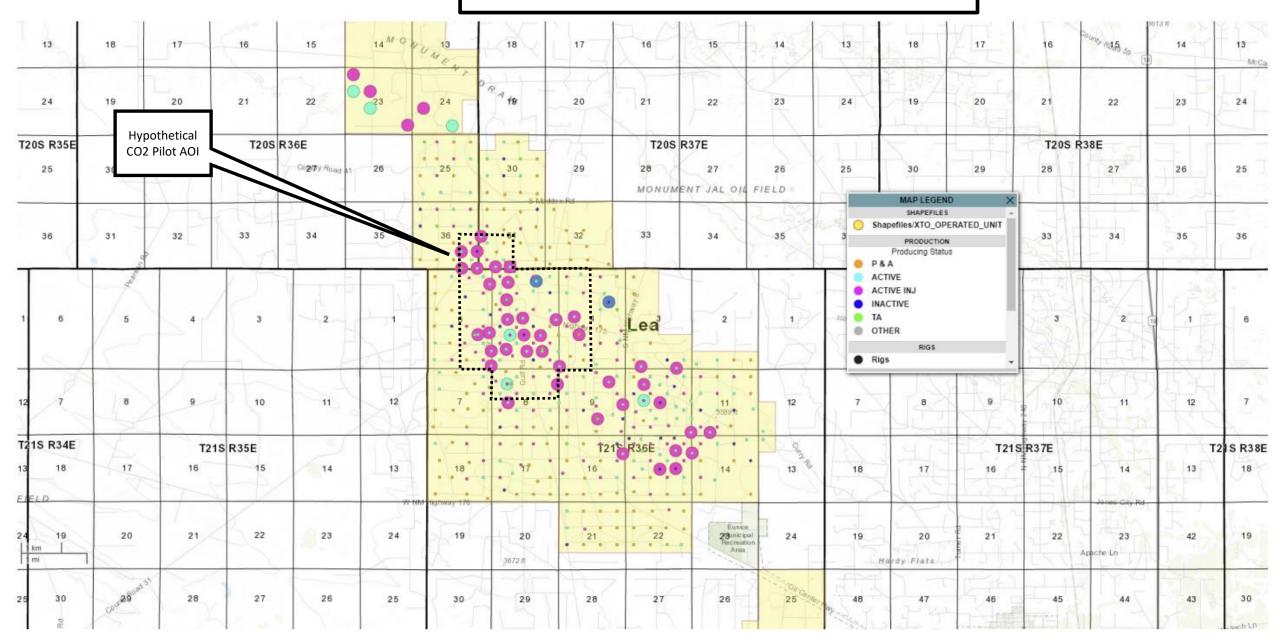


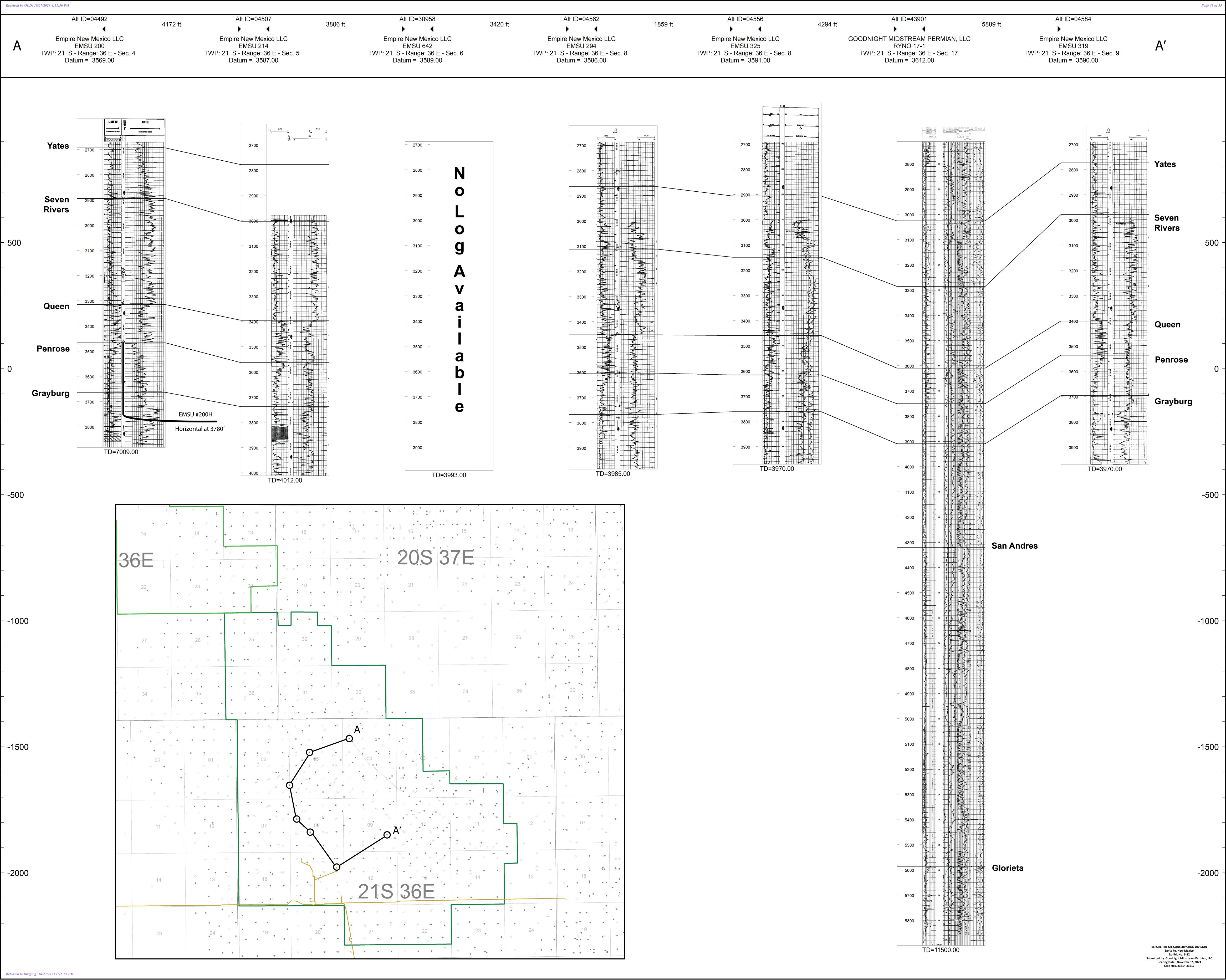






LOG DATA COVERAGE





STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

APPLICATIONS OF GOODNIGHT MIDSTREAM PERMIAN, LLC FOR APPROVAL OF A SALTWATER DISPOSAL WELL, LEA COUNTY, NEW MEXICO.

CASE NOS. 23614-23617

AFFIDAVIT

STATE OF NEW MEXICO)
) ss
COUNTY OF SANTA FE)

Adam G. Rankin, attorney in fact and authorized representative of the Applicant herein, being first duly sworn, upon oath, states

- 1. The above-referenced applications and notice of the hearing on these applications were sent by certified mail to the affected parties on the date set forth in the letter attached hereto.
- 2. The spreadsheet attached hereto contains the names of the parties to whom notice was provided.
- 3. The spreadsheet attached hereto contains the information provided by the United States Postal Service on the status of the delivery of this notice as of October 26, 2023.

Adam G. Rankin

SUBSCRIBED AND SWORN to before me this 26th day of October, 2023 by Adam G.

Rankin.

My Commission Expires:

STATE OF NEW MEXICO NOTARY PUBLIC KARI D PEREZ

Notary Public

COMMISSION # 1138272 COMMISSION EXPIRES 06/28/2026



Adam G. Rankin Partner Phone (505) 988-4421 Fax: (505) 983-6043

agrankin@hollandhart.com

June 16, 2023

<u>VIA CERTIFIED MAIL</u> <u>CERTIFIED RECEIPT REQUESTED</u>

TO: Empire New Mexico LLC

Re: Application of Goodnight Midstream Permian, LLC for Approval of a

Saltwater Disposal Well, Lea County, New Mexico.

Doc Gooden SWD #1 Well

Ladies & Gentlemen:

This letter is to advise you that Goodnight Midstream Permian, LLC has filed the enclosed application with the New Mexico Oil Conservation Division. A hearing has been requested before a Division Examiner on July 6, 2023, and the status of the hearing can be monitored through the Division's website at https://www.emnrd.nm.gov/ocd/.

Due to the remodeling of the state building where the New Mexico Oil Conservation Division is located, hearings will be conducted remotely beginning at 8:15 a.m. To participate in the electronic hearing, see the instructions posted on the OCD Hearings website: https://www.emnrd.nm.gov/ocd/hearing-info/.

You are not required to attend this hearing, but as an owner of an interest that may be affected by this application, you may appear and present testimony. Failure to appear at that time and become a party of record will preclude you from challenging the matter at a later date. Parties appearing in cases are required to file a Pre-hearing Statement four business days in advance of a scheduled hearing that complies with the provisions of NMAC 19.15.4.13.B.

If you have any questions about this matter please contact Nate Alleman at Ace Energy Advisors at (918) 237-0559 or nate.alleman@aceadvisors.com.

Sincerely.

Adam G. Rankin

ATTORNEY FOR GOODNIGHT MIDSTREAM PERMIAN, LLC

Location 110 North Guadalupe, Suite 1 Santa Fe, NM 87501-1849 Mailing Address
P.O. Box 2208
Santa Fe, NM 87504-2208

Contact p: 505.988.4421 | f: 595.983.6043 www.hollandhart.com

Holland & Hart LLP Anchorage Aspen Billings Boise Boulder Cheyenne Denver Jackson Hole Las Vegas Reno Salt Lake City Santa Fe Washington, D.C.



Adam G. Rankin Partner Phone (505) 988-4421

Fax: (505) 9836043 agrankin@hollandhart.com

June 16, 2023

VIA CERTIFIED MAIL CERTIFIED RECEIPT REQUESTED

TO: Empire New Mexico LLC

Re: Application of Goodnight Midstream Permian, LLC for Approval of a

Saltwater Disposal Well, Lea County, New Mexico.

Hernandez SWD #1 Well

Ladies & Gentlemen:

This letter is to advise you that Goodnight Midstream Permian, LLC has filed the enclosed application with the New Mexico Oil Conservation Division. A hearing has been requested before a Division Examiner on July 6, 2023, and the status of the hearing can be monitored through the Division's website at https://www.emnrd.nm.gov/ocd/.

Due to the remodeling of the state building where the New Mexico Oil Conservation Division is located, hearings will be conducted remotely beginning at 8:15 a.m. To participate in the electronic hearing, see the instructions posted on the OCD Hearings website: https://www.emnrd.nm.gov/ocd/hearing-info/.

You are not required to attend this hearing, but as an owner of an interest that may be affected by this application, you may appear and present testimony. Failure to appear at that time and become a party of record will preclude you from challenging the matter at a later date. Parties appearing in cases are required to file a Pre-hearing Statement four business days in advance of a scheduled hearing that complies with the provisions of NMAC 19.15.4.13.B.

If you have any questions about this matter please contact Nate Alleman at Ace Energy Advisors at (918) 237-0559 or nate.alleman@aceadvisors.com.

Sincerely.

Adam G. Rankin

ATTORNEY FOR GOODNIGHT MIDSTREAM PERMIAN, LLC

Location 110 North Guadalupe, Suite 1 Santa Fe, NM 87501-1849 Mailing Address
P.O. Box 2208
Santa Fe, NM 87504-2208

Contact p: 505.988.4421 | f: 595.983.6043 www.hollandhart.com

Holland & Hart LLP Anchorage Aspen Billings Boise Boulder Cheyenne Denver Jackson Hole Las Vegas Reno Salt Lake City Santa Fe Washinaton, D.C.



Adam G. Rankin Partner Phone (505) 988-4421 Fax: (505) 9836043

agrankin@hollandhart.com

June 16, 2023

<u>VIA CERTIFIED MAIL</u> CERTIFIED RECEIPT REQUESTED

TO: Empire New Mexico LLC

Re: Application of Goodnight Midstream Permian, LLC for Approval of a

Saltwater Disposal Well, Lea County, New Mexico.

Hodges SWD #1 Well

Ladies & Gentlemen:

This letter is to advise you that Goodnight Midstream Permian, LLC has filed the enclosed application with the New Mexico Oil Conservation Division. A hearing has been requested before a Division Examiner on July 6, 2023, and the status of the hearing can be monitored through the Division's website at https://www.emnrd.nm.gov/ocd/.

Due to the remodeling of the state building where the New Mexico Oil Conservation Division is located, hearings will be conducted remotely beginning at 8:15 a.m. To participate in the electronic hearing, see the instructions posted on the OCD Hearings website: https://www.emnrd.nm.gov/ocd/hearing-info/.

You are not required to attend this hearing, but as an owner of an interest that may be affected by this application, you may appear and present testimony. Failure to appear at that time and become a party of record will preclude you from challenging the matter at a later date. Parties appearing in cases are required to file a Pre-hearing Statement four business days in advance of a scheduled hearing that complies with the provisions of NMAC 19.15.4.13.B.

If you have any questions about this matter please contact Nate Alleman at Ace Energy Advisors at (918) 237-0559 or nate.alleman@aceadvisors.com.

Sincerely.

Adam G. Rankin

ATTORNEY FOR GOODNIGHT MIDSTREAM

PERMIAN, LLC

Location 110 North Guadalupe, Suite 1 Santa Fe, NM 87501–1849 Mailing Address
P.O. Box 2208
Santa Fe, NM 87504-2208

Contact p: 505.988.4421 | f: 595.983.6043 www.hollandhart.com

Holland & Hart LLP Anchorage Aspen Billings Boise Boulder Cheyenne Denver Jackson Hole Las Vegas Reno Salt Lake City Santa Fe Washington, D.C.



Adam G. Rankin Partner Phone (505) 988-4421

Fax: (505) 9836043 agrankin@hollandhart.com

June 16, 2023

VIA CERTIFIED MAIL CERTIFIED RECEIPT REQUESTED

TO: Empire New Mexico LLC

Re: Application of Goodnight Midstream Permian, LLC for Approval of a Salt

Water Disposal Well, Lea County, New Mexico.

Seaver SWD #1 Well

Ladies & Gentlemen:

This letter is to advise you that Goodnight Midstream Permian, LLC has filed the enclosed application with the New Mexico Oil Conservation Division. A hearing has been requested before a Division Examiner on July 6, 2023, and the status of the hearing can be monitored through the Division's website at https://www.emnrd.nm.gov/ocd/.

Due to the remodeling of the state building where the New Mexico Oil Conservation Division is located, hearings will be conducted remotely beginning at 8:15 a.m. To participate in the electronic hearing, see the instructions posted on the OCD Hearings website: https://www.emnrd.nm.gov/ocd/hearing-info/.

You are not required to attend this hearing, but as an owner of an interest that may be affected by this application, you may appear and present testimony. Failure to appear at that time and become a party of record will preclude you from challenging the matter at a later date. Parties appearing in cases are required to file a Pre-hearing Statement four business days in advance of a scheduled hearing that complies with the provisions of NMAC 19.15.4.13.B.

If you have any questions about this matter please contact Nate Alleman at Ace Energy Advisors at (918) 237-0559 or nate.alleman@aceadvisors.com.

Sincerely.

Adam G. Rankin

ATTORNEY FOR GOODNIGHT MIDSTREAM PERMIAN, LLC

Location 110 North Guadalupe, Suite 1 Santa Fe, NM 87501-1849 Mailing Address
P.O. Box 2208
Santa Fe, NM 87504-2208

Contact p: 505.988.4421 | f: 595.983.6043 www.hollandhart.com

Holland & Hart LLP Anchorage Aspen Billings Boise Boulder Cheyenne Denver Jackson Hole Las Vegas Reno Salt Lake City Santa Fe Washington, D.C.

Goodnight - Doc Gooden, Hernandez, Hodges and Seavers SWD #1 wells Case nos. 23614-23617 - Postal Delivery Report

Tracking Number	Recipient	Status
921489019403831938759	Empire New Mexico LLC 2200 S Utice Pl Suite 150 Tulsa OK 74114	In-Transit