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

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

CASE NOS. 23614-23617

APPLICATION OF GOODNIGHT MIDSTREAM PERMIAN LLC TO AMEND ORDER NO. R-22026/SWD-2403 TO INCREASE THE APPROVED INJECTION RATE IN ITS ANDRE DAWSON SWD #1, LEA COUNTY, NEW MEXICO.

CASE NO. 23775

APPLICATIONS OF EMPIRE NEW MEXICO LLC TO REVOKE INJECTION AUTHORITY, LEA COUNTY, NEW MEXICO.

CASE NOS. 24018-24020, 24025

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

DIVISION CASE NO. 24123
ORDER NO. R-22869-A

GOODNIGHT MIDSTREAM PERMIAN, LLC'S RESPONSE BRIEF

Goodnight Midstream Permian, LLC ("Goodnight" or "GNM") submits this response to Empire's Closing Brief ("ECB").

INTRODUCTION

As the engineering data and production history conclusively establish, the San Andres disposal zone and overlying reservoir (Lower Penrose/Grayburg/Upper San Andres[1]) are functionally separate. Rather than regulate the San Andres/Grayburg based on an inapposite chronostratigraphic or geologic definition, the OCC should manage this system based on reservoir behavior, as indicated by the Oil and Gas Act.[2] *See, e.g.*, §§ 70-2-12(B)(12), 70-2-3(A), 70-2-33(B), (H). While the geologic evidence clearly establishes isolation, the engineering data is conclusive. That leads to the ineluctable conclusion that the San Andres disposal zone—with pre-existing commercial SWDs—was erroneously included in the EMSU. What is unique is not the fact that San Andres disposal is authorized in the EMSU unitized interval, it is that OCC approved inclusion of the San Andres when it was known to be a non-productive aquifer with pre-existing, third-party commercial disposal. Inclusion of the San Andres in the EMSU has been proven to be a mistake. There is no economic ROZ in the disposal zone and no basis to grant Empire's applications.

Empire's applications lack merit under the law and facts. For the reasons stated here and in Goodnight's Closing Brief ("GCB") and its Findings of Fact ("GNM FOF"), incorporated herein, the Commission ("OCC") should approve Goodnight's applications and deny Empire's applications.

ARGUMENT

1. New Mexico Law Requires the OCC to Balance Interests for the Maximum Benefit of the People.

Empire asserts the New Mexico Constitution requires protection of natural resources "consistent with the use and development of these resources for the maximum benefit of the people." ECB at IV.A (citing N.M. Const. Art. XX, § 21). The Court of Appeals recently addressed this provision, holding it requires "balancing competing interests, neither of which will attain all that its advocates wish." *Atencio v. State*, No. A-1-CA-42006, 2025 N.M. App. LEXIS 34 (Ct. App. June 3, 2025). That means the OCC, through

[1] The "Upper San Andres" is the portion of the San Andres, as defined by Empire, that is above Goodnight's confining layer. *See* GNM FOF 141; *see also id.* 47, 118.

[2] OCC's authority to regulate waste, correlative rights, and production are all related/limited to hydrocarbon-bearing reservoirs or pools.

the Oil and Gas Act, must balance competing interests—including claims of waste and impairment of correlative rights—for the maximum benefit of the people. Here, similar to prior cases where disposal was authorized in preference over oil production,[3] maximum benefit is achieved through Goodnight's operations **critical to existing production** balanced against unproven and hypothetical exploratory operations. Empire has failed to prove otherwise or that an ROZ project cannot coexist with disposal.

2. Empire Both Expands and Misinterprets the Documents Governing the EMSU.

A. Section 10 of the Unit Agreement Does Not Preclude Third-Party SWD Operations.

Empire argues Goodnight's disposal should be terminated because Empire has the right of exclusive operations within the EMSU. ECB at 1-2, 9. Empire misapprehends its rights. Empire has the exclusive right **to produce Unitized Substances** within the EMSU, not to preclude surface owners, or their lessees, from exercising their valid rights, including disposal into pore space within the unitized interval.

Empire's error stems from the plain language of Section 10 of the EMSU Unit Agreement ("UA"), which merely grants Empire the exclusive right to produce Unitized Substances. *See* GCB, Ex. 16, UA § 10. Section 10 simply establishes that, with respect to working interest owners who are parties to the UA, Empire has the exclusive right to exercise "all rights of the parties" necessary to produce "Unitized Substances." *Id*. Empire's surface rights are limited "to the extent of the [parties'] rights and interests." *Id*. § 12. Empire's surface right is limited to what "may be reasonably necessary for Unit Operations." *Id*. Unit Operations include "prospecting for and producing . . . Unitized Substances" such as "oil [and] gas." *Id*. at §§ 2(i), 10. In short, Section 10 provides Empire the exclusive right to produce Unitized Substances, not to exclude third parties from operating SWDs in an aquifer.

Empire's argument is wrong for several reasons. *First*, it ignores, and contradicts, the defined terms and Section 12 of the UA. *Second*, the exclusive operations referenced are among parties to the UA. Because Goodnight is not a party to the UA, its right to operate SWDs injecting into non-mineral pore

[3] *See* Order No. R-13922; GCB Sec. 2(B).

space is unaffected by the UA. *Third*, Empire's rights under the UA and underlying leases do not include pore space, which is reserved to the surface owner.[4] The UA does not address Goodnight's disposal, much less preclude it, because disposal relies on surface rights, not oil and gas rights addressed in the UA. *Fourth*, the OCC did not revoke pre-existing, third-party commercial SWD permits when the EMSU was created, confirming that there was no perceived (or real) conflict. *Fifth*, and most obviously, nothing in Section 10 limits third-party disposal operations because water in the San Andres aquifer is not a Unitized Substance. UA § 2(i).

B. Statutory Unitization Does Not Require the OCC to Shut In Goodnight's SWDs.

Empire contends the OCC must terminate Goodnight's SWDs without first making the requisite showing that the EMSU's San Andres is "reasonably defined by development." Empire argues the OCC "must protect the reserves underlying the Unit" and shut in Goodnight's SWDs because the OCC "approved the EMSU under the Statutory Unitization Act." ECB at 8. Empire mischaracterizes the Statutory Unitization Act ("SUA") and the basis for creating the EMSU.

The SUA applies "to any type of operation that will substantially increase recovery of oil above the amount that would be recovered by primary recovery alone and **not to what the industry understands as exploratory units**." § 70-7-1 (emphasis added); *see Santa Fe Expl. Co. v. Oil Conservation Comm'n*, 1992-NMSC-044, ¶ 31 (SUA does not apply to primary production). The OCC created the EMSU to enable secondary recovery by waterflooding a portion of a pool reasonably defined by development. *See* Order No. R-7765 ("Unit Order"). Empire's alleged plans to CO2 flood an unproven and undeveloped portion of the San Andres, if actually effected, would be an exploratory operation neither covered by the SUA nor contemplated by the Unit Order. Empire's use of the term "tertiary recovery," even though there has been no primary or secondary production in the EMSU's San Andres, does not change the facts. Without first having primary and secondary recovery, there can be no tertiary recovery. Empire's proposed

[4] Geologic Carbon Dioxide Storage Stewardship Act, H.B. 458, 57th Leg., 1st Sess. (N.M. 2025) Laws 2025, Ch. 48 (establishing that "pore space" is owned by the "surface estate").

CO2 flood is not tertiary recovery; it would instead be a **speculative exploratory operation**, far from the proven development the SUA requires and the waterflood the Unit Order approved.

Empire also argues the OCC "has already" determined all "unitized operations in the EMSU" will be "profitable," implying its proposed CO2 flood falls within the Unit Order. *See* ECB at 22. Not so. The OCC found **only that the proposed waterflood**—limited to the Grayburg and Lower Penrose—would be profitable. The OCC has never found that a San Andres CO2 flood would be profitable. *See* Order No. R-7765 ¶ 22.[5] The profitability of Empire's proposed San Andres CO2 flood—including capital costs—was never presented to the OCC—and still has not—as required. *See* § 70-7-6(A)(2)-(3).[6]

The same rules apply to Empire as all other operators under the SUA. The OCC should not consider terminating Goodnight's SWD operations unless and until Empire first shows the San Andres EMSU has been "reasonably defined by development," and its proposed CO2 flood is "feasible," will return a "reasonable profit," and is not exploratory. § 70-7-1 *et seq*.

3. Empire Fails to Articulate How Goodnight Causes Waste or Impairs Correlative Rights.

Empire fails to meet its burden to show how Goodnight has caused waste or impaired correlative rights. And because Empire is not merely an applicant but is seeking the revocation of prior orders, which is an extraordinary remedy, it must meet a higher burden of proof. Empire's burden includes showing changed factual circumstances supported by new evidence, on top of its burden to prove waste and impairment of correlative rights. *See* GCB at 18-19. The OCC should deny Empire's applications because Empire failed to establish all required proof.

[5] Limiting finding of profitability to proposed waterflood operations. *See also* Ex. 1, OCC Case No. 8397-8399 Tr. 76:4-77:10, 105:11-107:5, 109:13-110:16 (outlining waterflood profitability analysis); *id*. at 224:22-25 (EMSU waterflood is limited to the Grayburg and Lower Penrose and excludes San Andres); *id*. at 214:23-215:1 (San Andres formation is a non-productive water source); Ex. 2 at 3; Ex. 3; Ex. 4.

A. Empire is Still Unable to Show Waste.

Empire alleges Goodnight's operations cause waste by "interfering with Empire's ability to implement a tertiary recovery project to develop the San Andres." ECB at IV.D(2). Notwithstanding the fact that what Empire proposes is an **exploratory operation** and outside the scope of the SUA, this is not the legal standard for a claim of waste, and Goodnight is not interfering with Empire's proposed operations. *See* GNM FOF 48-168. As explained in Goodnight's Closing Brief, Empire must carry its own burden to show (and prove) that waste is occurring and Goodnight is impairing its correlative rights. *See* GCB Sec. 4.

Empire asserts the standard for evaluating a claim of waste is whether an activity "reduces or tends to reduce the total ultimate recovery." *See* ECB at 22. While this language is part of the waste analysis, it is only a fragment of the inquiry. A complete analysis requires proof that targeted hydrocarbons can be recovered, as well as evidence recovery will yield production in commercial and/or economic quantities. Empire, unable to make such showings, instead relies on (1) the existence of the Unit Order as proof that all operations in the EMSU "will lead to recovery of oil and gas at a profitable level," and (2) its belief that capital costs are excluded when analyzing profitability. ECB at 24. Empire is wrong on both counts for at least three reasons.

First, Empire ignores the inherent economic analysis expressly included in the waste definition. *See* GCB Sec. 2. *Second*, Empire improperly relies on the OCC's Unit Order findings to suggest its proposed CO2 flood will be profitable. The Unit Order does not address or contemplate exploratory CO2 flood in an unproven and undeveloped ROZ. *Third*, Empire relies on the SUA as a basis to revoke Goodnight's permits, specifically citing Section 70-2-12(B)(4). While Empire emphasizes the latter portion of this provision, it ignores the language requiring that a formation be "**capable of producing** oil or gas or both oil and gas **in paying quantities**." *Id*. (emphasis added). Empire argues that a paying quantities analysis does not apply, but if it did, it should be the "production in paying quantities" analysis used in common law to evaluate lease termination, which specifically excludes capital costs. ECB at 23. But the SUA's "paying quantities" analysis is not the same as a common law analysis for leasehold termination. The plain

language of the SUA—like the definition of waste—clearly requires inclusion of capital costs when determining the economic feasibility of a unitization project. *See* § 70-7-6(A)(3); *see also* §§ 70-7-7, -17. The legislature's intent aligns with the practical reality of development: companies cannot ignore capital costs for hypothetical projects because capital costs determine whether a project is implemented or remains hypothetical. Because Empire has not established it can produce the alleged ROZ in paying quantities, it is not subject to the protections of the SUA or even the Oil and Gas Act. *See* GCB Sec. 2.

B. Empire's Reliance on *Grace v. Oil Conservation Comm'n* is Misplaced.

In *Grace*, the plaintiff (alleging waste and impairment of correlative rights) challenged OCC's order as arbitrary and capricious because it "failed to determine the amount of recoverable gas under each producer's tract or in the pool," and argued such determination was possible and required. *Grace v. Oil Conservation Comm'n*, 1975-NMSC-001, ¶ 15. But the New Mexico Supreme Court upheld OCC's findings, in part, because data in that case were "not sufficiently reliable to practicably determine recoverable reserves[.]" *Id*. ¶ 20. Empire inverts the holding in *Grace* to argue "precise proof of the loss of a specific volume of hydrocarbons is not required to establish waste." ECB. at 7. This is incorrect. *First*, the referenced holding in *Grace* applies only to correlative rights, not waste. 1975-NMSC-001, ¶ 26. *Second*, *Grace* does not provide a loophole for operators, like Empire, who elect **not** to collect data quantifying recoverable oil and gas in a pool. *Grace*, instead, allows the OCC to enter orders where the evidentiary record establishes that data "are not sufficiently reliable to **practicably** determine recoverable reserves." 1975-NMSC-001, ¶¶ 24, 30 (emphasis added). The exception created in *Grace*, applicable where evidence shows it is not possible to obtain data necessary to determine quantities of recoverable hydrocarbons, is not applicable here. Empire and its experts have stated that **such data can be obtained but Empire has elected not to obtain it**. *See* GNM FOF 167-168. The narrow exception to the "practicable" standard created in *Grace* does not shield Empire from its obligation to make the required evidentiary showing here.

C. Empire's Financial Burdens are Not Tantamount to Impairment of Correlative Rights.

Empire argues that "deprivation of an owner's opportunity to recover its equitable share of oil and/or gas causes waste if it reduces or tends to reduce the total hydrocarbons ultimately recovered." ECB at 16. This is not the standard for proving impairment to correlative rights,[7] and even if it were, Empire is unable to evidence such a claim. Empire has elected not to quantify the volume of hydrocarbons or its "equitable share" that allegedly constitute the purported ROZ. *See* GNM FOF 31-32, 167-168. Similarly, Empire has not endeavored to recover any of those alleged hydrocarbons—citing numerous financial expenses they do not wish to incur. ECB at 19. Empire argues that these alleged financial restrictions obstruct its opportunity to produce its fair share of the ROZ. *Id.* While internal economic factors may be a real-world obstacle, they are not evidence of impairment of correlative rights. Goodnight's proposed and existing operations do not preclude Empire from the opportunity to develop the alleged ROZ, rather Empire has elected to pursue this administrative action instead. GNM FOF 31-32. Moreover, Empire has not established through evidence that costs to develop its purported ROZ have actually increased or that the two operations cannot coexist. GNM FOF 116-123, 59.

4. Empire's Factual Arguments are Misleading at Best and Misrepresentations at Worst.

A. Empire's C-108 Arguments Lack Merit.

Contrary to Empire's assertions, information Goodnight supplied for its existing and proposed SWDs is accurate, correct, and complies with OCD requirements. *See* ECB at 11. Form C-108 specifies what information is required. *See* 19.15.7.9(D)(108). Goodnight correctly stated its target injection formation is the San Andres for each well and that the assigned pool would be the "SWD; San Andres" with a Pool Code of 96121, based on OCD's designation to that pool of previously approved SWDs within the EMSU. *See, e.g.*, GNM Ex. A-4 at 4 (Item III B(1)) requiring "name of injection formation and, if applicable, the field or pool name"); *see also* Ex. 5; Ex. 6; Ex. 7. Goodnight was not required to conduct a compatibility

[7] A thorough analysis of correlative rights is in Goodnight's Closing Brief. *See* GCB at Sec. 3.

analysis because Form C-108 does not require one for disposal in **a non-productive interval**. *See, e.g.*, GNM Ex. A-4 at 3 (Item VII, ¶ 5).[8] Nor does the Form require Goodnight to identify the location of statutory units. It simply requires Goodnight to "Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius[.]" *See, e.g.*, GNM Ex. A-4 (Item V). Goodnight provided that information and met with OCD to discuss the location of its wells in the EMSU. GNM FOF 11. Goodnight also correctly disclosed that the overlying Grayburg is productive and that the target injection zone is non-productive. *See, e.g.*, GNM Ex. A-4; *see also* Ex. 8;[9] GNM FOF 44.[10] Empire argues that Goodnight misled OCD by interpreting the requirement to confirm the target injection zone is non-productive as applying only to existing production, but that is exactly what the Form specifies—that the target interval is "not productive of oil or gas at or within one mile[.]" *See* ECB at 10-12; *see also* GNM Ex. A-4 (Item VII, ¶ 5). OCD's SWD orders approving disposal address the potential for future production by requiring submission of logs and swab tests after the well is drilled to confirm there is no hydrocarbon potential. *See, e.g.*, Order R-21190, ¶ 6; SWD-1750.

Empire falsely contends Goodnight failed to provide notice of its applications and hearings. Goodnight "furnish[ed]" notice to affected parties by certified mail, including XTO, at addresses listed of record with OCD, as required. 19.15.26.9(B)(2) NMAC; GNM FOF 12-13. Proof of receipt is not required. *Id.* And, after an administrative application is timely protested, the rules—cited and relied on by Empire—**require OCD to set a hearing and provide notice**. *See* 19.15.26.8(D) NMAC.[11]

Empire's argument that Goodnight's Ryno SWD should be revoked because its newspaper notice identified the incorrect depth for the top of its injection interval (4,500 feet instead of 4,320 feet) also fails.

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[8] "If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well," the applicant is to "attach a chemical analysis of the disposal zone formation water[]" not a compatibility analysis.

[9] OCD's C-108 Technical Review Summary for Ryno confirming hydrocarbon potential ("HC") for the San Andres as a "producing interval" or "formerly producing" is not applicable, "NA."

[10] It is undisputed the San Andres is not productive. *See* GCB at 8.

[11] "[T]he division shall set the application for hearing and give notice of the hearing."

First, all affected parties with standing to object were properly furnished personal notice by certified mail with the correct injection interval identified, so constructive notice by publication, while required, was redundant. *See* Alleman 4/24/25 Tr. 71:3-72:3; SWD-2307; GNM FOF 12-13; *see also* 19.15.4.11(A) NMAC. *Second*, any potential notice deficiency has been cured because Empire has actual knowledge of the Ryno injection interval and is actively seeking its revocation on the merits. *Third*, injection is not occurring in the interval that may not have been properly subject to public notice between 4,320 feet to 4,500 feet because that depth is within the confining layer and does not take disposal fluids, as confirmed by an injection spinner survey. *See* Ex. 9;[12] GNM B-9. Because that portion of the formation is not receiving injection, the public notice argument is moot. *Fourth*, revocation of the entire permit is not required; OCC can simply suspend injection within the interval between 4,320 feet to 4,500 feet that was not subjected to public notice.

B. EMSU, AGU & NMGSAU Included Existing Third-Party SWDs in the Unitized Interval

Empire falsely claims Goodnight's witnesses were unable to identify another unit where SWDs are authorized by OCD. Goodnight identified two additional statutory units—the North Monument Grayburg San Andres Unit (NMGSAU) and the Arrowhead Grayburg Unit (AGU)—where commercial disposal is occurring.[13] The NMGSAU has at least two active commercial SWDs[14] disposing into the unitized interval within the San Andres and the AGU has at least one.[15] What is unique about these units, including the EMSU, is not the fact that San Andres disposal is occurring in the unitized interval, it is that the OCC/OCD approved inclusion of the San Andres within statutory units when it was known to be a non-productive aquifer with pre-existing, third-party commercial disposal. The reason third-party disposal is not

[12] McGuire 5/19/25 Tr. 283:1-3 ("[T]he top perfs of the Ryno are not taking fluid."); *id.* 284:23-24.

[13] Ex. 9, McGuire 5/20/25 Tr. 138:9-24.

[14] Targa's Graham State NCT-F #7 (API No. 30-025-12482) and Rice's EME SWD #3 (API No. 30-025-21496); *see also* GNM Ex. B-47.

[15] Rice's Blinebry Drinkard #18 (API No. 30-025-25616); *see also* GNM Ex. B-47.

commonly seen in units is because non-productive disposal aquifers, such as the San Andres, should never be included within unitized intervals—but was erroneously included in the EMSU, NMGSAU, and AGU.

CONCLUSION

Despite years of commercial disposal and millions of barrels injected into the San Andres within the EMSU, Empire was unaware of the injection for **more than two years** after it acquired the EMSU in 2021 while Goodnight and other commercial SWD operators continually injected into the San Andres. Only after seeing Goodnight's facility in August 2023 did Empire begin engaging experts in a post-hoc effort to construct evidence of waste and impairment that have now been extended to depths Empire did not initially believe even contained a potential ROZ. *See* GNM FOF 26. The chronology of events and evolution of Empire's arguments demonstrate it was not actual evidence of impairment that gave rise to Empire's objections,[16] but rather Empire's desire to exclude Goodnight from the EMSU that prompted formulation of its waste and impairment claims. Empire's unsupported claim that Goodnight's disposal causes quantifiable harm to its existing and proposed operations, its lawsuit against Goodnight and other SWD operators for damages, and its refusal to obtain data to evidence harm presents a stark dissonance and exposes Empire's true motive before the OCC. It aims to obtain a favorable outcome from the OCC to advance its claims in district court against Goodnight and other SWD operators for economic damages to make up for its failure during due diligence to identify substantial financial liabilities from inactive wells and environmental remediation, as well as its crushing financial condition. But Empire has not met its burden necessary to deny Goodnight's pending applications, let alone to revoke its existing permits. Until Empire can bring forward concrete evidence of waste and impairment, and evidence of changed circumstances, the OCC should grant Goodnight's applications and allow existing disposal to proceed.

[16] Empire initially opposed Goodnight's SWD applications in June 2022 by arguing Goodnight was precluded from disposing within the EMSU because the San Andres was unitized without reference to potential ROZ. *See* Ex. 10. In September 2022, Empire's opposition evolved to allege it intended to evaluate all the San Andres for potential hydrocarbon recovery, without claiming an ROZ. Ex. 11. In the contested September 2022 hearing, Goodnight offered extensive testimony on its existing EMSU San Andres disposal. Now Empire testifies, inexplicably, that it was unaware of this disposal until August 2023, when Empire management first saw Goodnight's facilities. GNM FOF 27.

Respectfully submitted,

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EXHIBIT 1

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO

7 November 1984

COMMISSION HEARING

VOLUME I OF II VOLUMES

IN THE MATTER OF:

Application of Gulf Oil Corporation for statutory unitization, Lea County, New Mexico.	CASE 8397
Application of Gulf Oil Corporation for a waterflood project, Lea County, New Mexico.	CASE 8398
Application of Gulf Oil Corporation for pool extension and contraction, Lea County, New Mexico.	CASE 8399

BEFORE: Richard L. Stamets, Chairman
Commissioner Ed Kelley

TRANSCRIPT OF HEARING

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I N D E X

I N D E X CONT'D

E X H I B I T S

the working interest owners committee?

A The final Technical Committee report was published in April of 1983 and distributed to all known working interest owners by mail.

Q All right, sir. All right, Mr. Wheeler, would you begin on page one and read through page 350 on behalf of Gulf?

A I think I could best summarize it by saying that the Technical Committee Report basically summarizes the waterflood feasibility study which was done by the Technical Committee and provides the unitization parameters which were requested by the working interest owners committee for their use.

And in short, that's what those pages contain.

Q The report that we have before us as Exhibit Twenty-two, Mr. Wheeler, was made available to the various working interest owners approximately when?

A At the publication date, approximately April -- I do not remember the exact date of mailing but April or early May of 1983.

Q Now we talked about the Technical Committee having a list of charges that they were supposed to report back to the working interest committee on, and let's go through some of those general charges and have you tell me whether or not the Technical Committee in response to these charges determined whether or not the waterflood project as

outlined by the ownership committee would be feasible and profitable?

A Yes, sir, the Technical Committee did determine that the waterflood project would be technically feasible and profitable, and we did so by examining a number of parameters which relate to the waterflood, proposed waterflood area.

Q All right, sir, let's examine the general parameters, then, that go into the reasons behind your conclusion that the waterflood project is feasible and profitable.

Such parameters were what? What did you examine?

A The committee made an estimate of such things as original oil in place, primary recovery, expected secondary recovery, and estimates of future investments and expenses which could be expected as a result of installing the waterflood project.

Q All right, sir, based upon those general parameters and the other information that you've studied, what did the committee conclude?

A The committee concluded that there would be significant volumes of oil which would not be recovered by continued primary means in the area which we're calling the proposed unit area.

They also concluded that the secondary recovery unit could recover additional oil and estimated

that that could be as much as 64.2-million barrels of additional recovery if we installed a waterflood, and they also concluded that the installation and operation of the proposed waterflood unit would be profitable to the owners in the area.

Q Missed the number, the 64.2-million barrel number is not a total number, it's an additional recovery.

A It's incremental recovery above what could be expected under continued primary operations.

Q With regards to the study being made by the Technical Committee, what other kinds of data did the Technical Committee develop?

A During the course of our study we developed and analyzed numerous kinds of data.

For example, we produced the geologic cross sections and structure maps which have been previously introduced by Mr. Hoffman, using what logs we were able to locate for the unit area.

We generated some computer contour and mesh perspective maps based on such parameters as the cumulative oil production through 1981; the oil, gas, and water production rates of 1981, and used these computer products to help us to analyze the characteristics, the production characteristics of the area, and these products are included in the Technical Committee report.

We also generated some water production

the Technical Committee?

A Yes, sir, it was.

Q And is that an injection pattern that's been accepted by the working interest owners?

A Yes, sir, it has.

Q Let me ask you this with regards to the entire package of information in the Technical Committee report, which is Exhibit Number 22, Mr. Wheeler, does this not constitute the plan of operation for the unit?

A Yes, sir, it does.

Q Did the Technical Committee go on to summarize the capital requirements needed for unit operation?

A Yes, sir, we did provide a cost estimate.

Q And have you put that together in the form of an exhibit?

A Yes, sir, Exhibit Number Twenty-five.

Q All right, sir, Mr. Wheeler, would you identify Exhibit Twenty-five for me?

A This exhibit is an update fo the tabulation which is found in the Technical Committee report as Table No. 4.

The estimates on this exhibit were updated to reflect current costs of equipment and labor.

As you can see from the front page of this exhibit, there are seven major categories into which costs have been grouped. The production and injection facilities include all storage and transfer and treatment and

sales facilities, and things of that nature.

The Technical Committee has estimated that we would drill and equip nine water supply wells to handle the water injection requirements for the unit. You see the cost associated with those wells.

We'd estimated that we would drill and equip nineteen producers, sixteen injectors as replacements for P&A'd locations; possibly some vacant locations.

These are -- these cost estimates are shown in page one, also.

We believe that there will be a considerable remedial effort to be undertaken in the unit area on existing wellbores and that cost is roughly $10,000,000 worth of tangible equipment and $9,000,000 worth of intangible costs associated with that.

We anticipate coring a number of wells and we've included in the cost of coring and analyzing core on twenty wells to help us to gather reservoir data, and we anticipate as the flood begins to respond that we'll need to replace much of the existing equipment in the field and the item pumping and replacements is for that new equipment to upgrade the size of units.

You can see that the grand total here, which is a gross cost, is $60.6-million we expect to invest to get the unit installation.

Page two is a detail of those costs by year and we expect to spend the money which we've talked

about on page one.

You can see that we have a considerable investment to be made and that's over a relatively short period of time from 1984 through 1989, essentially.

Q Using the estimated cost figures for the unit operations of the project, Mr. Wheeler, did the Technical Committee go on and then calculate what the benefit would be if the project was operated on a unit basis?

A Yes, sir, we did.

Q Por instance, what would happen if it was operated without a unit?

A Yes, sir, we did, and that's our Exhibit Number Twenty-six.

Q All right, sir, would you describe for us Exhibit Twenty-six?

A Yes, sir. Exhibit Twenty-six is a summary of some financial and operating measures which can be used to compare the profitability of the proposed waterflood model versus continuing present operation.

Q Would you describe for us what is meant when we look at the first column that says, Base Case without Waterflood?

A Yes, sir, that is -- that is the case of continued primary operations if you consider the unit properties as single property as opposed to column two, which is the incremental case, or the parameters which will help us to evaluate the increased recovery when we have an incre-

mental or increased cost over the current operations.

Q Would you describe for us what basic criteria that was used by the Technical Committee in making this analysis?

A Yes. First of all, let me say that there were some simplifying assumptions made for this economic analysis. It was impossible for us to consider each and every owner's economic situation, so what we did in this case was consider that all properties in the proposed unit area are essentially one property for the treatment of this economic model, as though there were a single operator being considered as a single economic enterprise.

The data that you see here was extracted from Gulf's proprietary appraised economic program. We input the updated cost estimate which we have just discussed as Exhibit Number Twenty-five. We input the secondary recovery estimate which is available in the Technical Committee report and we also had to update the date of that instrument in the Technical Committee report, by the way. That -- that curve is from 1984, which is obviously outdated at this point, but combining the cost estimate and secondary recovery estimate, and we placed those into our economic model.

We had to assume that Gulf's oil split between tiers in the Eunice Monument area is representative of the other owners and for that purpose and for the purpose of calculating windfall profits tax, we assumed that there

was a 60 percent tier one split to 40 percent tier two.

We also assumed that Gulf's average oil and gas prices are representative of the area, and that producton expense number that was placed into the model was based on an average of ten other floods in the area.

When we ran our model we obtained the results which you see here on Exhibit Number Twenty-six. We have a number of financial measures which we could use to evaluate an economic enterprise. One of the important ones we see here is the net present value of continued operations of $42-million as opposed to net present value of the incremental waterflood case of $183 or almost $184-million.

Looking at the operating measure, you see that oil production for continued primary operations, is roughly 14,000,000 barrels as opposed to an incremental recovery of 64.2-million barrels for the waterflood case.

You see the investments. We assumed that there'd be no continued or large investments under current operations, as opposed to the $60.6-million worth of investments that need to be made for the waterflood.

Some other operating expenses which I've noted here, Federal excise taxes for the base case of $171-million as opposed to $669-million for the waterflood case; State production and property taxes of roughly $105-million for continued operation as opposed to $370-million for the waterflood, if installed; U. S. income taxes to the owners of $208-million for the base case and almost $1.1-billion

for the operators.

The bottom line, of course, is that it is a profitable venture in terms of cash profit after taxes. Continued operations we see here at about $226 or $227-million as opposed to $1.1-billion for operators if the waterflood is installed.

Gulf provided, I would note, the results of our study to all Technical Committee members and working interest owners. They also had benefit of the financial measures which we inputted into our own model and we encouraged them to do their own economic analysis so they could evaluate their own position using whatever model they chose to use.

In summary, the Technical Committee agreed that the formation of the unit was found to be a profitable venture based on these models.

Q Approximately when was this information disposed to and shared with the working interest owners? Do you recall?

A It would have been roughly the end of 1982 before the publication of the Technical Committee report and the numbers that you see today are basically an update.

Q Section 70-7-6, Subparagraph 3 of the statute on statutory unitization requires as a condition precedent to the issuance of a Commission order that the estimated additional costs, if any, of conducting such opera-

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO

8 November 1984

COMMISSION HEARING

VOLUME II OF II VOLUMES

IN THE MATTER OF:

Application of Gulf Oil Corporation for statutory unitization, Lea County, New Mexico.	CASE 8397
Application of Gulf Oil Corporation for a waterflood project, Lea County, New Mexico.	CASE 8398
Application of Gulf Oil Corporation for pool extension and contraction, Lea County, New Mexico.	CASE 8399

BEFORE: Richard L. Stamets, Chairman
Commissioner Ed Kelley

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation Commission: Jeff Taylor
Attorney at Law
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

Q In addition to distributing in this package of exhibits Exhibit Thirty-two, I've also distributed the next exhibit, which is 33-A.

A Yes, sir.

Q All right, would you identify that for us?

A It lists data on the proposed operation of the injection system for the waterflood project in the Eunice Monument South Unit.

Q All right, sir, would you describe for us what the proposed method of operation is for the unit?

A Okay. As shown on Exhibit Number Thirty-three-A, our average daily rates and maximum daily rates are 400 and 500 barrels of water per day, respectively. The system is going to be a closed system. The proposed average and maximum injection pressures will be 350 psi and 740 psi, respectively.

This will be until we can determine a fracture gradient and obtain proper approval from the OCD Director for possibly injecting at higher injection pressures.

To monitor and control the rates and pressures at the wellhead, our plans are to install pressure rate controllers on each injection well.

There are currently plans to drill approximately nine water supply wells to provide make-up water from the San Andres formation. This make-up water will be

used initially as the primary source of injection water and once we have the unit fully developed, we will be switching over to using produced water as our primary source of injection water.

Q Do you have any estimates now of the percentages between make-up water and produced water that will be used by the project?

A Not at this time. Our present plans are that initially we'll be using approximately 60,000 barrels of water per day for 133 injection wells.

Q And what is the source of produced water in the unit?

A It will be from the unitized intervals, the Grayburg formation, principally.

Q Do you anticipate that the maximum injection pressure at any individual injection well will be based upon the .2 psi per foot of depth gradient established as matter of practice by the Commission until you have other data available to justify a higher rate?

A Yes, sir, that's our plan.

Q All right, sir, it you'll turn to Exhibit Number Thirty-three-B, I believe, is the next one, and describe that one for us.

A Thirty-three-B is a water compatibility analysis performed on the make-up water and the produced water and it illustrates that there is no incompatibility evident by the mixing of these two waters.

ation. We can plug a lot of that into the computer to check you to see that -- on your reports -- to see that you're really following that. That's a lot of calculations for all of us to try and figure out what individual pressure limits are.

I'm wondering if it would be possible to establish groupings of pressures in this reservoir, say perhaps 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, for the east side, so that we wouldn't have, what, 149 different pressures; we might have, say, five or six different pressure limits within the limits of the pool we would have to process.

A With the installation of those pressure rate controllers we'd be able to control pressures and rates on an individual injection well basis.

Where we may want a well to take -- take more water, inject more water into a well, it might require different pressures, other situations.

Q It's just a suggestion. We can look into it and if it works out, we'll try and do it.

A Okay, sir.

Q Now I understand that you will be injecting only into the Grayburg and the Penrose and not the San Andres, is that correct?

A That is correct.

EXHIBIT 2

EUNICE MONUMENT SOUTH SECONDARY RECOVERY UNIT

(Royalty Owners Overview)
LEA COUNTY, NEW MEXICO

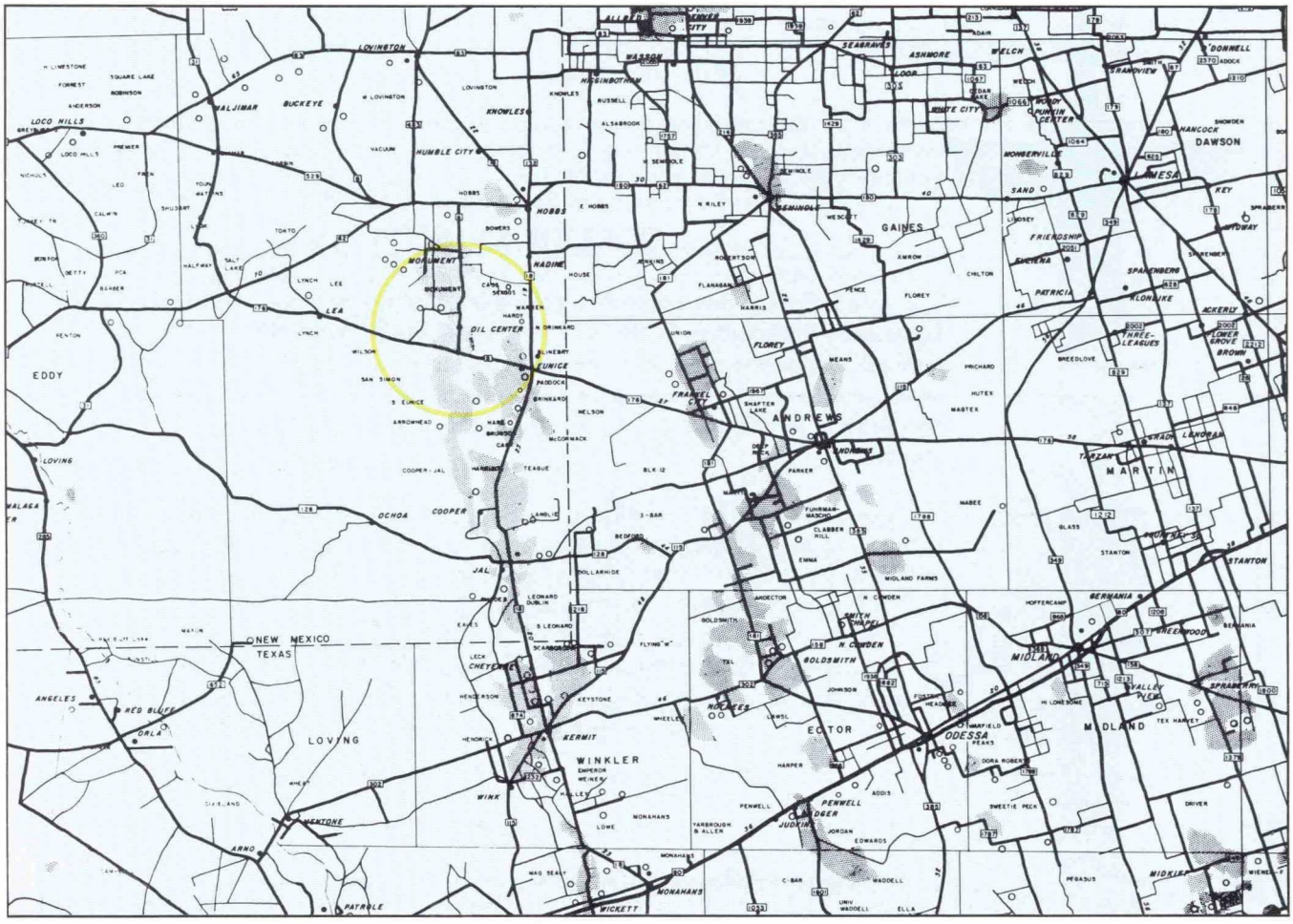
INTRODUCTION

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.

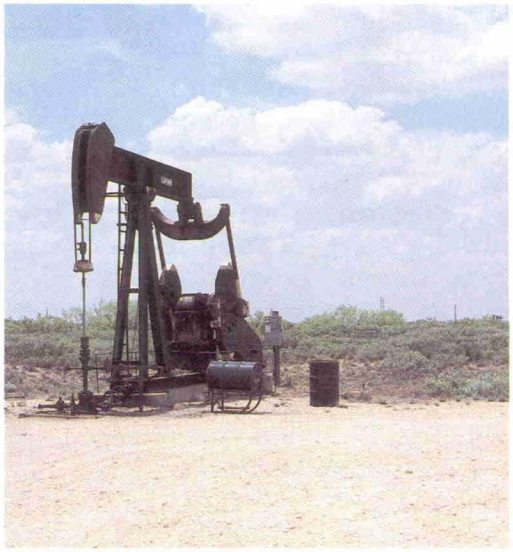
The oil field was developed on 40-acre spacing with the majority of wells being drilled and completed during the three-year period from 1934 through 1937. Peak oil production from the collective wells occurred in May of 1937 when the monthly production was 791,800 barrels of oil, or 25,542 barrels per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

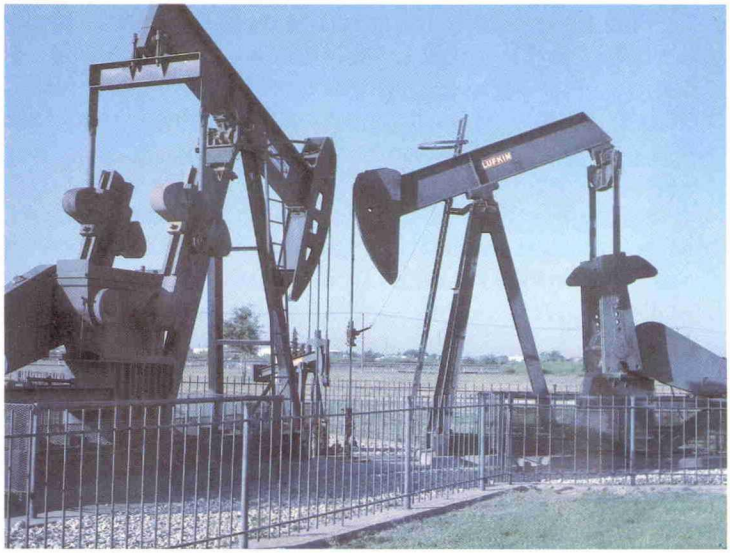
Since May of 1937, oil production within the unit has steadily declined. Twenty-three companies have drilled and completed 344 oil wells, but because of production decline, only 200 oil wells are active. The remaining wells have been temporarily abandoned, plugged, or recompleted in other zones. The oil production is now approximately 60,000 barrels of oil per month, or 7½% of the peak (1937) monthly production.

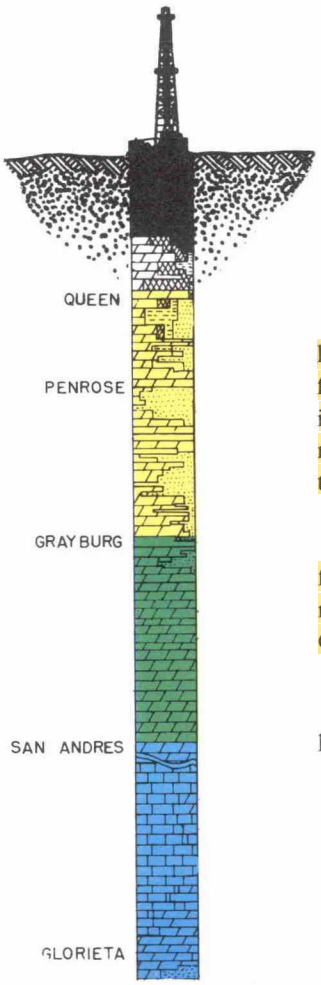


HOW CAN WE EXTEND THE LIFE OF THIS FIELD — 1929 TO _____

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.







WATER INJECTION

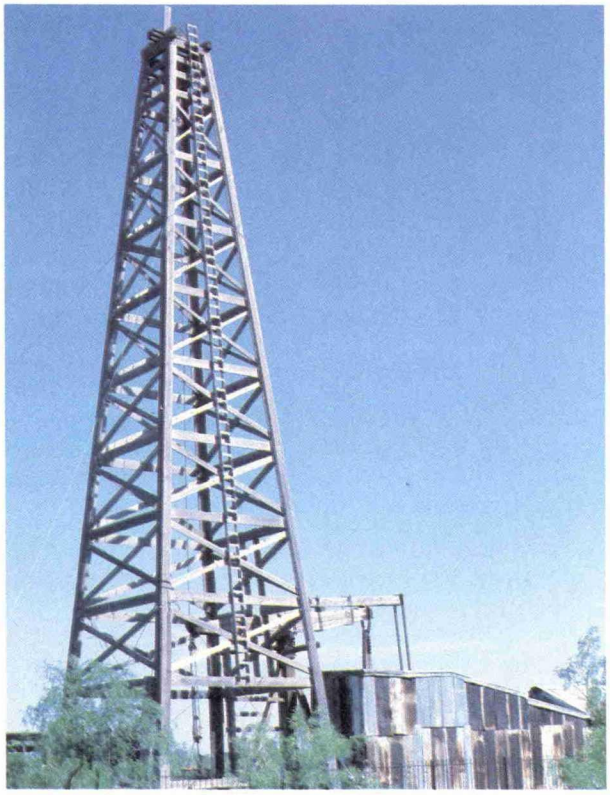
After the various company geologists and engineers completed their laboratory and reservoir studies, they concluded that a unit should be formed to inject water into the oil producing formations to force oil trapped in the rocks to the pumping units of the producing wells. This method of recovery is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

For this proposed unit, salt water from the non-productive San Andres 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.

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).

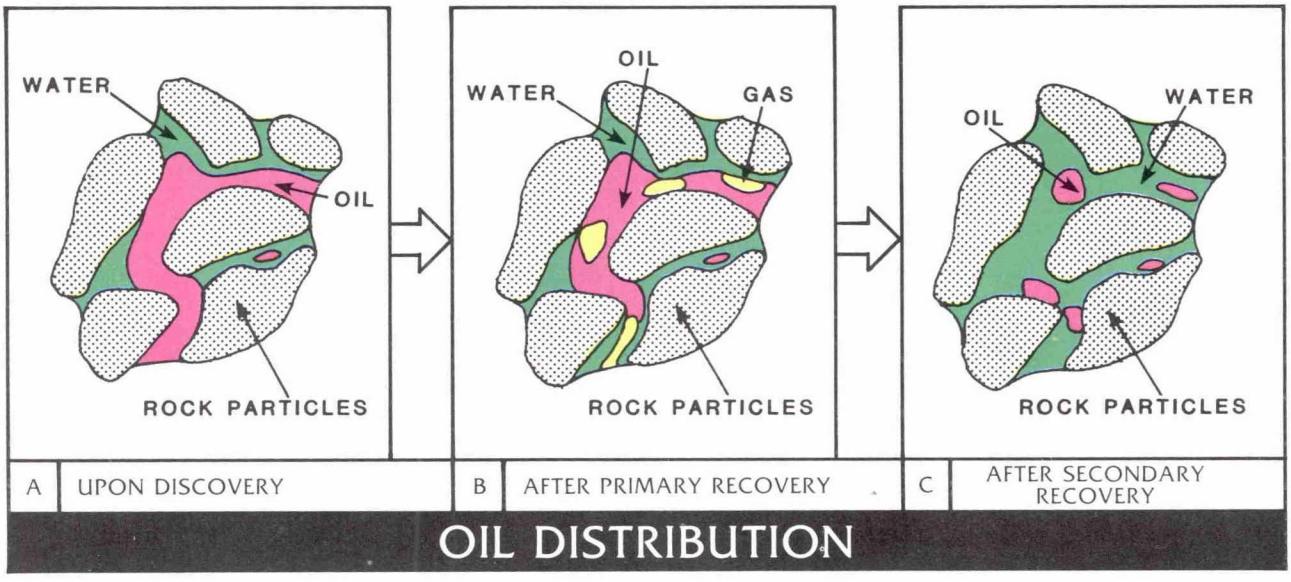


EXHIBIT 3

PROPOSED

EUNICE MONUMENT SOUTH UNIT

UNITIZATION AND WATERFLOOD PROJECT

UPDATED COST ESTIMATE

The cost estimate can be summarized into the following seven major categories.

Item	Tangibles	Intangibles
1. Production and Injection Facilities	$13,229,000	$ 6,697,000
2. Drill and Equip - 9 Water Supply Wells	3,090,000	2,000,000
3. Drill and Equip - 19 Producers	1,919,000	2,451,000
4. Drill and Equip - 16 Injectors	864,000	1,856,000
5. Remedial Work - 208 Wells	10,262,600	9,020,700
6. Coring Costs - 20 Wells		1,000,000
7. Pumping Unit Replacements	7,543,900	665,800
Sub-total	$36,908,500	$23,690,500
Grand Total	$60,599,000	

EXHIBIT NO. 25
Case No. 8397
November 7, 1984

EUNICE MONUMENT SOUTH UNIT
INVESTMENT DETAIL (GROSS)

ITEM TANGIBLES	TOTAL ($M)	1984 ($M)	1985 ($M)	1986 ($M)	1987 ($M)	1988 ($M)	1989 ($M)
Injection Distribution System	$ 4,440.0	$ 0	$ 2,840.3	$ 880.0	$ 719.7	$ 0	$ 0
Water Supply Lines	270.0	0	123.0	65.0	82.0	0	0
Production Lines	1,775.0	0	1,775.0	0	0	0	0
Satellite Batteries (12)	998.0	150.0	648.0	200.0	0	0	0
Central Production Battery	1,770.0	0	1,328.0	442.0	0	0	0
Injection Plant	2,176.0	0	1,632.0	544.0	0	0	0
Electrical Distribution System	1,800.0	0	1,200.0	600.0	0	0	0
Beam Pumping Units	7,543.9	0	0	0	2,092.9	2,635.6	2,815.4
SUBTOTAL SURFACE EQUIPMENT	20,772.9	150.0	9,546.3	2,731.0	2,894.6	2,635.6	2,815.4
D&C Water Supply Wells (9)	3,090.0	0	1,360.0	1,020.0	710.0	0	0
D&C Producing Wells (19)	1,919.0	0	1,010.0	909.0	0	0	0
D&C Injection Wells (16)	864.0	0	0	864.0	0	0	0
Remedial - Producers	3,695.4	50.0	1,061.7	2,583.7	0	0	0
Remedial - Injectors	6,567.2	0	0	4,651.0	1,916.2	0	0
SUBTOTAL WELLS	16,135.6	50.0	3,431.7	10,027.7	2,626.2	0	0
TOTAL TANGIBLES	$36,908.5	$200.0	$12,978.0	$12,758.7	$5,520.8	$2,635.6	$2,815.4
INTANGIBLES							
Injection Distribution System	$ 1,352.0	$ 0	$ 907.0	$ 270.0	$175.0	$ 0	$ 0
Water Supply Lines	225.0	0	141.0	54.0	30.0	0	0
Production Lines	1,320.0	0	1,320.0	0	0	0	0
Satellite Batteries (12)	480.0	50.0	380.0	50.0	0	0	0
Central Production Battery	400.0	0	350.0	50.0	0	0	0
Injection Plant	400.0	0	350.0	50.0	0	0	0
Electrical Distribution System	500.0	0	333.0	167.0	0	0	0
Road & Site Contruction	120.0	10.0	70.0	20.0	20.0	0	0
Retirement of Existing Facilities	1,100.0	0	0	800.0	300.0	0	0
ROW Damages	800.0	25.0	575.0	100.0	100.0	0	0
Installation of Pumping Units	665.8	0	0	0	180.0	236.3	249.5
SUBTOTAL SURFACE EQUIPMENT	7,362.8	85.0	4,426.0	1,561.0	805.0	236.3	249.5

ITEM INTANGIBLES	TOTAL ($M)	1984 ($M)	1985 ($M)	1986 ($M)	1987 ($M)	1988 ($M)	1989 ($M)
D&C Water Supply Wells (9)	2,000.0	0	880.0	660.0	460.0	0	0
D&C Producing Wells (19)	2,451.0	0	1,290.0	1,161.0	0	0	0
D&C Injection Wells (16)	1,856.0	0	0	1,856.0	0	0	0
Coring Costs	1,000.0	0	500.0	450.0	50.0	0	0
Remedial - Producers	1,040.0	50.0	990.0	0	0	0	0
Remedial - Injectors	7,980.7	0	521.1	4,581.6	2,878.0	0	0
SUBTOTAL WELLS	16,327.7	50.0	4,181.1	8,708.6	3,388.0	0	0
TOTAL INTANGIBLES	$23,690.5	$135.0	$8,607.1	$10,269.6	$4,193.0	$ 236.3	$ 249.5
GRAND TOTAL	$60,599.0	$335.0	$21,585.1	$23,028.3	$9,713.8	$2,871.9	$3,064.9

EXHIBIT 4

EUNICE MONUMENT SOUTH UNIT
SUMMARY OF PROFITABILITY

	Base Case w/o waterflood	Incremental Case w/waterflood
FINANCIAL MEASURE (AFTER TAXES)		
Discounted Cash Flow ROR - %	N/A	42.9
Growth ROR @ 15% - %	N/A	37.6
Net Present Value @ 15% - $M	42,102.3	183,971.6
Undiscounted PI Ratio	0	19.6
Discounted PI Ratio (15%)	0	3.0
Payout from Start Up - yrs.	--	6.1
R.O.C.E. - %	N/A	180.9
OPERATING MEASURES		
Oil Production - M Barrels	14,043	64,200
Gas Production - BCF	51	83
Investments - $M	0	60,599
Operating Expenses		
Fed. Excise Taxes - $M	170,931	669,075
State Prod. & Prop. Taxes - $M	104,690	371,135
U.S. Income Taxes - $M	208,224	1,089,784
TOTAL Cash Profit After Tax - $M	226,714	1,186,442

EXHIBIT NO. 26
Case No. 8397
November 7, 1984

EXHIBIT 5

OCD Permitting

Home Searches Wells Well Details

30-025-04484 EUNICE MONUMENT SOUTH UNIT #001 [330840]

General Well Information

Operator:	[330679] Empire New Mexico LLC		
Status:	Active	**Direction:**	Vertical
Well Type:	Salt Water Disposal	**Multi-Lateral:**	No
Work Type:	New	**Mineral Owner:**	Federal
		Surface Owner:	Private
Surface Location:	W-04-21S-36E Lot: O 660 FSL 1980 FEL		
Lat/Long:	32.502449,-103.268158 NAD83		
GL Elevation:	3584		
KB Elevation:		**Sing/Mult Compl:**	Single
DF Elevation:		**Potash Waiver:**	False

Proposed Formation and/or Notes

SAN ANDRES

Depths

Proposed:	6350	**True Vertical Depth:**	6350
Measured Vertical Depth:	6350	**Plugback Measured:**	0

Formation Tops

Formation	Top	Producing	Method Obtained

Event Dates

Initial APD Approval:	03/02/1987		
Most Recent APD Approval:	07/23/2021	**Current APD Expiration:**	03/02/1989
APD Cancellation:			
APD Extension Approval:			
Spud:	10/17/1962	**Gas Capture Plan Received:**	
Approved Temporary Abandonment:		**TA Expiration:**	
Shut In:			
Plug and Abandoned Intent Received:		**PNR Expiration:**	
		Last MIT/BHT:	05/19/2025
Well Plugged:			
Site Release:			
Last Inspection:	05/19/2025		

History

Effective Date	Property	Well Number	Operator	C-101 Work Type	Well Type	Well Status	Apd Cancelled	Plug Date
07/23/2021	[330840] EUNICE MONUMENT SOUTH UNIT	#001	[330679] Empire New Mexico LLC	New	Salt Water Disposal	Active		
08/01/2004	[300717] EUNICE MONUMENT SOUTH UNIT	#001	[5380] XTO ENERGY, INC	New	Salt Water Disposal	Active		

Qui
- Gene
- Histor
- Comn
- Opera
- Pits
- Casin
- Well C
- Finan
- Comp
- Natur
- Order
- Produ
- Trans
- Points
- Actior

Ass
- Well F
- Well L
- Well A

New
- New F
- New I
- New C
- New F
- New S
- New T
- New V

Comments

ORIGINAL SPUD DATE 10-17-1962

Added on 04/13/1995 by Sylvia Dickey

Pits

No Pits Found

Casing

			Boreholes, Strings and Equipment Specifications			Specifications for Strings and Tubing			Strings Cemented and Intervals			Cement and Plug Description		
String/Hole Type	Taper	Date Set	Diameter	Top	Bottom (Depth)	Grade	Length	Weight	Bot of Cem	Top of Cem	Meth	Class of Cement	Sacks	Pressure Test (Y/N)
Hole 1	1		8.625	0	1310		0	0.0	0	0			0	No
Surface Casing	1		8.625	0	1310		1310	24.0	1310	0		Class C Cement	600	No
Hole 2	1		5.500	0	5495		0	0.0	0	0			0	No
Production Casing	1		5.500	0	5495		5495	14.0	5495	0		Class C Cement	720	No
Packer	1		5.500	5966	5971		5	0.0	0	0			0	No
Tubing 1	1		2.500	0	5966		5966	0.0	0	0			0	No

Well Completions

[96121] SWD; SAN ANDRES

Status: Active
Last Produced: 03/01/2025
Bottomhole Location: W-04-21S-36E Lot: O 660 FSL 1980 FEL
Lat/Long:
Acreage:
DHC: No
Consolidation Code:
Production Method:

Well Test Data

Production Test:
Test Length: 0 hours
Flowing Tubing Pressure: 0 psi
Flowing Casing Pressure: 0 psi
Choke Size: 0.000 inches
Testing Method:
Gas Volume: 0.0 MCF
Oil Volume: 0.0 bbls
Gas-Oil Ratio: 0 Kcf / bbl
Oil Gravity: 0.0 Corr. API
Disposition of Gas:
Water Volume: 0.0 bbls

Perforations

Notes

Event Dates

Initial Effective/Approval:	03/24/1987		
Most Recent Approval:	07/23/2021	**TA Expiration:**	
Confidential Requested On:		**Confidential Until:**	
Test Allowable Approval:		**Test Allowable End:**	
TD Reached:		**DHC:**	
Deviation Report Received:	No	**Rig Released:**	
Directional Survey Run:	No	**Logs Received:**	No
Directional Survey Received:	No	**Closure Pit Plat Received:**	
First Oil Production:		**First Gas Production:**	
First Injection:			
Ready to Produce:		**Completion Report Received:**	
C-104 Approval:		**New Well C-104 Approval:**	
Plug Back:			
Authorization Revoked Start:		**Revoked Until:**	

Well Completion History

Effective Date	Property	Well Number	Operator	Completion Status	TA Expiration Date
07/23/2021	[330840] EUNICE MONUMENT SOUTH UNIT	#001	[330679] Empire New Mexico LLC	Active	
08/01/2004	[300717] EUNICE MONUMENT SOUTH UNIT	#001	[5380] XTO ENERGY, INC	Active	
03/24/1987	[2616] EUNICE MONUMENT SOUTH UNIT	#001	[4323] CHEVRON U S A INC	Active	

Financial Assurance

Please login to review the financial assurance associated with this well.

Compliance

Note that Financial Assurance and Inactive Well Compliance are documented in separate reports (Inactive Well Report, Financial Assurance Report).

Also note that some compliance issues are addressed at the operator level so not listed under each well.

cSAD0807926463

Violation Source:	Field Inspection		
Date of Violation:	03/13/2008		
Compliance Required:	06/16/2008	**Resolved:**	

Notes

Converted compliance record had no comment!

Actions/Events

Event Date	Category	Type
03/19/2008	Enforcements	Mechanical Integrity
03/13/2008	Notifications	Other Notification

EXHIBIT 6

OCD Permitting

30-025-46577 N 11 #001 [335215]

General Well Information

Operator:	[331305] Permian Line Service, LLC		
Status:	New	**Direction:**	Vertical
Well Type:	Salt Water Disposal	**Multi-Lateral:**	No
Work Type:	New	**Mineral Owner:**	State
		Surface Owner:	State
Surface Location:	N-11-21S-36E 243 FSL 2455 FWL		
Lat/Long:	32.486839,-103.236689 NAD83		
GL Elevation:	3586		
KB Elevation:		**Sing/Mult Compl:**	Single
DF Elevation:		**Potash Waiver:**	False

Proposed Formation and/or Notes

Depths

Proposed:	5100	**True Vertical Depth:**	0
Measured Vertical Depth:	0	**Plugback Measured:**	0

Formation Tops

Formation	Top	Producing	Method Obtained

Event Dates

Initial APD Approval:	12/10/2019		
Most Recent APD Approval:	01/23/2024	**Current APD Expiration:**	12/10/2021
APD Cancellation:			
APD Extension Approval:			
Spud:	06/29/2020	**Gas Capture Plan Received:**	
Approved Temporary Abandonment:		**TA Expiration:**	
Shut In:			
Plug and Abandoned Intent Received:		**PNR Expiration:**	
		Last MIT/BHT:	08/14/2024
Well Plugged:			
Site Release:			
Last Inspection:	08/14/2024		

History

Effective Date	Property	Well Number	Operator	C-101 Work Type	Well Type	Well Status	Apd Cancelled	Plug Date
01/23/2024	[335215] N 11	#001	[331305] Permian Line Service, LLC	New	Salt Water Disposal	New		
10/10/2019	[326513] N 11	#001	[19174] RICE OPERATING COMPANY	New	Salt Water Disposal	New		

Quic
- Gene
- Histor
- Comn
- Opera
- Pits
- Casin
- Well C
- Finan
- Comp
- Order
- Produ
- Trans
- Points
- Actior

Asso
- Well F
- Well L
- Well A

New
- New F
- New I
- New C
- New F
- New S
- New T
- New V

Pits

No Pits Found

Casing

No Casing Found

Well Completions

[96121] SWD; SAN ANDRES

Status:	New, Not Drilled	**Last Produced:**	06/01/2025
Bottomhole Location:	N-11-21S-36E 243 FSL 2455 FWL		
Lat/Long:	32.471831,-103.247858 NAD83		
Acreage:			
DHC:		**Consolidation Code:**	
		Production Method:	

Well Test Data

Production Test:		**Test Length:**	0 hours
Flowing Tubing Pressure:	0 psi	**Flowing Casing Pressure:**	0 psi
Choke Size:	0.000 inches	**Testing Method:**	
Gas Volume:	0.0 MCF	**Oil Volume:**	0.0 bbls
Gas-Oil Ratio:	0 Kcf / bbl	**Oil Gravity:**	0.0 Corr. API
Disposition of Gas:		**Water Volume:**	0.0 bbls

Perforations

Date	Top Measured Depth (Where Completion Enters Formation)	Bottom Measured Depth (End of Lateral)	Top Vertical Depth	Bottom Vertical Depth

Notes

Event Dates

Initial Effective/Approval:	12/10/2019		
Most Recent Approval:	01/23/2024	**TA Expiration:**	
Confidential Requested On:		**Confidential Until:**	
Test Allowable Approval:		**Test Allowable End:**	
TD Reached:		**DHC:**	
Deviation Report Received:	No	**Rig Released:**	
Directional Survey Run:	No	**Logs Received:**	Yes
Directional Survey Received:	No	**Closure Pit Plat Received:**	
First Oil Production:		**First Gas Production:**	
First Injection:			
Ready to Produce:		**Completion Report Received:**	
C-104 Approval:		**New Well C-104 Approval:**	
Plug Back:			
Authorization Revoked Start:		**Revoked Until:**	

Well Completion History

Effective Date	Property	Well Number	Operator	Completion Status	TA Expiration Date
01/23/2024	[335215] N 11	#001	[331305] Permian Line Service, LLC	New, Not Drilled	

OCD Permitting

30-025-46579 P 15 #001 [332145]

General Well Information

Operator:	[308339] OWL SWD OPERATING, LLC		
Status:	Active	**Direction:**	Vertical
Well Type:	Salt Water Disposal	**Multi-Lateral:**	No
Work Type:	New	**Mineral Owner:**	State
		Surface Owner:	State
Surface Location:	P-15-21S-36E 58 FSL 988 FEL		
Lat/Long:	32.471831,-103.247858 NAD83		
GL Elevation:	3576		
KB Elevation:		**Sing/Mult Compl:**	Single
DF Elevation:		**Potash Waiver:**	False

Proposed Formation and/or Notes

Depths

Proposed:	5100	**True Vertical Depth:**	0
Measured Vertical Depth:	0	**Plugback Measured:**	0

Formation Tops

Formation	Top	Producing	Method Obtained

Event Dates

Initial APD Approval:	12/10/2019		
Most Recent APD Approval:	01/31/2022	**Current APD Expiration:**	12/10/2021
APD Cancellation:			
APD Extension Approval:			
Spud:	07/12/2020	**Gas Capture Plan Received:**	
Approved Temporary Abandonment:		**TA Expiration:**	
Shut In:			
Plug and Abandoned Intent Received:		**PNR Expiration:**	
		Last MIT/BHT:	08/07/2024
Well Plugged:			
Site Release:			
Last Inspection:	08/07/2024		

History

Effective Date	Property	Well Number	Operator	C-101 Work Type	Well Type	Well Status	Apd Cancelled	Plug Date
01/31/2022	[332145] P 15	#001	[308339] OWL SWD OPERATING, LLC	New	Salt Water Disposal	Active		
12/10/2019	[326509] P 15	#001	[19174] RICE OPERATING COMPANY	New	Salt Water Disposal	New		

Quic
- Gene
- Histor
- Comn
- Opera
- Pits
- Casin
- Well C
- Finan
- Comp
- Order
- Produ
- Trans
- Points
- Actior

Asso
- Well F
- Well L
- Well A

New
- New F
- New I
- New C
- New F
- New S
- New T
- New V

Pits

No Pits Found

Casing

No Casing Found

Well Completions

[96121] SWD; SAN ANDRES

Status:	Active	**Last Produced:**	06/01/2025
Bottomhole Location:	P-15-21S-36E 58 FSL 988 FEL		
Lat/Long:	32.471831,-103.247858 NAD83		
Acreage:			
DHC:	No	**Consolidation Code:**	
		Production Method:	

Well Test Data

Production Test:		**Test Length:**	0 hours
Flowing Tubing Pressure:	0 psi	**Flowing Casing Pressure:**	0 psi
Choke Size:	0.000 inches	**Testing Method:**	
Gas Volume:	0.0 MCF	**Oil Volume:**	0.0 bbls
Gas-Oil Ratio:	0 Kcf / bbl	**Oil Gravity:**	0.0 Corr. API
Disposition of Gas:		**Water Volume:**	0.0 bbls

Perforations

Date	Top Measured Depth (Where Completion Enters Formation)	Bottom Measured Depth (End of Lateral)	Top Vertical Depth	Bottom Vertical Depth

Notes

Event Dates

Initial Effective/Approval:	12/10/2019		
Most Recent Approval:	01/31/2022	**TA Expiration:**	
Confidential Requested On:		**Confidential Until:**	
Test Allowable Approval:		**Test Allowable End:**	
TD Reached:	07/20/2020	**DHC:**	
Deviation Report Received:	No	**Rig Released:**	07/24/2020
Directional Survey Run:	No	**Logs Received:**	Yes
Directional Survey Received:	No	**Closure Pit Plat Received:**	
First Oil Production:		**First Gas Production:**	
First Injection:	09/24/2020		
Ready to Produce:		**Completion Report Received:**	
C-104 Approval:		**New Well C-104 Approval:**	
Plug Back:			
Authorization Revoked Start:		**Revoked Until:**	

Well Completion History

Effective Date	Property	Well Number	Operator	Completion Status	TA Expiration Date
01/31/2022	[332145] P 15	#001	[308339] OWL SWD OPERATING, LLC	Active	

EXHIBIT 8

FORM C-108 Technical Review Summary [Prepared by reviewer and included with application; V17]

DATE RECORD: First Rec:_____ **Admin Complete:** _____ **or Suspended:** _____ Add. Request/Reply:_____

ORDER TYPE: _____ Number: _____ Order Date: _____ Legacy Permits/Orders: _____

Well No._____ Well Name(s):_____

API : 30-0 _____ Spud Date: _____ New or Old (EPA): _____ (***UIC Class II Primacy 03/07/1982***)

Footages _____ Lot____ or Unit ____ Sec _____ Tsp _____ Rge _____County_____

Lattitude: _____ Longitude_____ Pool:_____ Pool No.:_____

Operator: _____OGRID: _____Contact: _____ Email:

COMPLIANCE RULE 5.9: Total Wells:_____ Inactive:_____ **Fincl Assur:**_____ Compl. Order?_____ **IS 5.9 OK?**____ **Date:**_____

WELL FILE REVIEWED Current Status: _____

WELL DIAGRAMS: NEW: Proposed ◯ or **RE-ENTER:** Before Conv. ◯ After Conv. ◯ Logs in Imaging: _____

Planned Rehab Work to Well: _____

Well Construction Details	**Sizes (in) Borehole / Pipe**	**Setting Depths (ft)**		**Cement Sx or Cf**	**Cement Top and Determination Method**
Planned ____or Existing ____**Surface**			**Stage Tool**		
Planned___or Existing ___ **Interm/Prod**					
Planned___or Existing ___**Interm/Prod**					
Planned___or Existing ___ **Prod/Liner**					
Planned____or Existing ____ **Liner**					
Planned____or Existing ___ **OH / PERF**			**Inj Length**		

Injection Lithostratigraphic Units:	**Depths (ft)**	**Injection or Confining Units**	**Tops**
Adjacent Unit: Litho. Struc. Por.			
Confining Unit: Litho. Struc. Por.			
Proposed Inj Interval TOP:			
Proposed Inj Interval BOTTOM:			
Confining Unit: Litho. Struc. Por.			
Adjacent Unit: Litho. Struc. Por.			

Completion/Operation Details:

Drilled TD _____ PBTD _____

NEW TD _____ NEW PBTD _____

NEW Open Hole NEW Perfs

Tubing Size _____ in. Inter Coated? _____

Proposed Packer Depth _____ ft

Min. Packer Depth _____ (100-ft limit)

Proposed Max. Surface Press. _____ psi

Admin. Inj. Press. _____ (0.2 psi per ft)

AOR: Hydrologic and Geologic Information

POTASH: R-111-P_____ *Noticed?*____ **BLM Sec Ord WIPP** *Noticed?* ____ **Salt/Salado** T:_____B:_____ **NW: Cliff House fm**____

USDW: Aquifer(s) _____ Max Depth_____ **HYDRO AFFIRM STATEMENT By Qualified Person** ____

NMOSE Basin:_____ **CAPITAN REEF:** thru____ adj ___ NA ___ **No. GW Wells in 1-Mile Radius?** _____ FW Analysis?_____

Disposal Fluid: Formation Source(s) _____ Analysis? _____ On Lease ◯ Operator Only ◯ Commercial ◯

Disposal Interval: Inject Rate (Avg/Max BWPD): _____ Protectable Waters?_____ Source:_____ System: **C**losed or **O**pen

HC Potential: Producing Interval?_____Formerly Producing?_____Method:Logs /DST /P&A /Other_____ 2-Mi Radius Pool Map__

AOR Wells: **1/2-M** ____ **or ONE-M** ____**RADIUS MAP/WELL LIST: Total Penetrating Wells:** _____ [AOR Hor: ___ AOR SWDs:___]

Penetrating Wells: No. Active Wells____ No. Corrective?____on which well(s)?_____Diagrams?_____

Penetrating Wells: No. P&A Wells____ No. Corrective?____on which well(s)? _____Diagrams?_____

Induced-Seismicity Risk Assess: analysis submitted _____ historical/catalog review_____ fault-slip model _____ **probability** _____

NOTICE: 1/2-M ____ **or ONE-M** _____ **:** Newspaper Date_____ **Mineral Owner*** _____Surface Owner_____N. Date_____

RULE 26.7(A): Identified Tracts? _____ **Affected Persons*:**_____ N. Date_____

*** new definition as of 12/28/2018** [any the mineral estate of United States or state of New Mexico; SWD operators within the notice radius]

Order Conditions: **Issues:**_____

Additional COAs:_____

EXHIBIT 9

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

EMPIRE NEW MEXICO; NEW MEXICO'S OIL CONSERVATION DIVISION; RICE OPERATING COMPANY; PERMIAN LINE SERVICE, LLC; and PILOT WATER SOLUTIONS SWD, LLC,

Plaintiffs,

v.

GOODNIGHT MIDSTREAM PERMIAN, LLC,

Defendant.

Case Nos. 24123, 23614-17, 23775, 24018-20, 24025

HEARING

DATE: Monday, May 19, 2025

TIME: 9:01 a.m.

BEFORE: Honorable Rip Harwood, Hearing Officer
Gerasimos Razatos, Chairman

LOCATION: Pecos Hall
First Floor, Wendell Chino Building,
1220 South St. Francis Drive
Santa Fe, NM 87505

REPORTED BY: Mariana Novoa

JOB NO.: 7225935

MR. MCGUIRE: Well, it depends on how we're defining upper San Andres. But the top perfs of the Ryno are not taking fluid.

MR. WEHMEYER: With respect to this spinner survey, you can tell the commissioners that you know that all of the fluid that Goodnight is injecting in the Ryno is happening in those upper perfs, the upper third of perfs, isn't it?

MR. MCGUIRE: No, I think the vast majority of the water is going in right there where that -- that temperature deviation is 4845, as it's depicted on this -- on this graph. I think probably 90 percent of the water is going in those perfs.

MR. WEHMEYER: That's right here. You understand that? Where 4845 falls, that's right here on the dotted line?

MR. MCGUIRE: Forty-eight -- yeah, it's -- it's those perforations right there where your -- where your cursor is; right? I mean, I don't see the depth column -- yeah, so it's probably -- yeah, it's -- it's those two perfs right there. That's where that water is going.

MR. WEHMEYER: How do you know it's not going into the three above it?

MR. MCGUIRE: Because -- well, I know

it's not going in that top one because the spinner survey is constant across that one. There's probably some minor fluid going into the next two. And then the rest of the water is going into the -- the two perfs that are above the -- your dashed line there. And really, it looks like hardly any water, if any, is going into the perfs down in the -- in the lower part of this well.

MR. WEHMEYER: And to just put a bow around it, you can agree, on the Ryno -- as the commissioners see all these lower perfs -- in the Ryno, based on your spinner survey, you know that all of the water is going into the upper sets of perfs, not the lower sets of perfs; true?

MR. RANKIN: Objection, asked and answered.

MR. MCGUIRE: I guess I'd refer back to my testimony on that. It's -- it's going in those two perfs right there.

MR. WEHMEYER: It's not going into these perfs at all?

MR. MCGUIRE: There might be very, very minor amounts that are going in those perfs. There's none going in that top perf. Looks like very little waters going in those next two, and then the vast

STATE OF NEW MEXICO

ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION COMMISSION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION FOR THE PURPOSE OF CONSIDERING:

Case Nos. 23614, 23615, 23616, 23617, 23775, 24018, 24019, 24020, 24025, 24123

EVIDENTIARY HEARING

DATE: Tuesday, May 20, 2025

TIME: 9:03 a.m. MDT/10:03 a.m. CDT

BEFORE: Hearing Officer Rip Harwood

LOCATION: Remote Proceeding
1220 South Saint Francis Drive,
1st Floor
Santa Fe, NM 87505

REPORTED BY: John Shavers

JOB NO.: 7225938

But the way I read this, my understanding is that they do have the authority vested, you know, in this document that they have the right to produce. Even when it comes to storing, it sounds like they do have the right to do that. Do you agree with me on that?

THE WITNESS: I would -- I would disagree with that, given my understanding of how the unitization works.

DR. AMPOMAH: So have you seen -- and this question has been asked, but just for completeness, have you seen any operator or any company being allowed to inject into someone's unitized zone? Have you ever seen that?

THE WITNESS: Yes.

DR. AMPOMAH: Where?

THE WITNESS: EMSU, North Monument, AGU.

DR. AMPOMAH: So that is going to be the first, first one; is that correct?

THE WITNESS: Well, those -- those three, I -- I'm aware of -- of those three. Now, I haven't gone and -- and looked for this specific case all over the Permian Basin, but those are the three that I'm aware of.

DR. AMPOMAH: Mr. Rankin, if we can go

EXHIBIT 10

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

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

Case No. 22626

MOTION TO DISMISS

Empire New Mexico, LLC ("Empire"), through its undesigned counsel, hereby moves the Division for an order dismissing the application of Goodnight Midstream Permian, LLC ("Goodnight") for approval of a Salt Water Disposal Well. As grounds for this motion Empire states:

1. Empire is the operator of the Eunice Monument South Unit ("Unit") and operates a waterflood secondary recovery operation in the Unit.

2. In Order R-7765 the Oil Conservation Division approved the Unit pursuant to the Statutory Unitization Act for secondary recovery operations through waterflood operations.

3. Decretory Paragraph 3 of Order R-7765 defining the vertical limits of the Unit includes the San Andres formation. A copy of Order R-7765 is attached hereto as Exhibit A.

4. Goodnight's application calls for a commercial salt water disposal well for injection of produced water in the San Andres formation.

5. Goodnight does not have a working interest or any other interest which would allow it to operate a commercial salt water disposal well within the horizontal limits of the Unit or otherwise to operate a commercial salt water well to dispose of water in the San Andres formation.

6. Goodnight's proposed well is to be located in Unit K of Section 9, Township 21 South, Range 36 East, NMPM, Lea County, New Mexico which is covered by a federal oil and gas lease committed to the Unit.

7. Upon information and belief, Goodnight has not obtained a right of way easement for a commercial salt water disposal well from the Bureau of Land Management.

8. Even if it has obtained a right of way easement for salt water disposal or other permit from the Bureau of Land Management as proposed, the Bureau of Land Management may not issue such an easement or permit which impairs the right to recover oil and gas from the Unit. In Penroc Oil Corp. et al., GFS(O&G) 8(1985) (Nov. 27, 1984), a copy of which is attached as Exhibit B, the Interior Board of Land Appeals reversed the BLM's grant of a right of way for salt water disposal well into a plugged well within a Unit. The IBLA states in part:

> *WL8 The decision to grant a right-of-way will not be affirmed if the right-of-way is inconsistent with the provisions of another applicable law. Section 504(c) of FLPMA, 43 U.S.C. § 1764(c) (1982), provides: 'Rights of way shall be granted, issued, or renewed pursuant to this subchapter under such regulations or stipulations, consistent with the provisions of this subchapter or any other applicable law * * *.' [Emphasis added.] 43 U.S.C. § 1764 (1982). This right-of-way is inconsistent with the lessee's rights under the Mineral Leasing Act. A right-of-way which entirely converts the lessee's oil and gas well to the exclusive use of a stranger to the lease, and which precludes any future exploratory or developmental work from that well by those who drilled it and continue to hold it under lease is inconsistent with lessees' rights under that Act.

Here, Goodnight is a stranger to the Unit and has no right to interfere with the rights issued under the oil and gas lease committed to the Unit. Empire has the right to further explore and develop the portion of the San Andres formation within Goodnight's proposed injection zone. Furthermore, injection rates and volumes undoubtedly affect Empire's waterflood operations and oil recovery operations.

WHEREFORE, Empire requests that Goodnight's application be dismissed

Respectfully submitted,

PADILLA LAW FIRM, P.A.

/s/ Ernest L. Padilla
Ernest L. Padilla
Post Office Box 2523
Santa Fe, New Mexico 87504
(505) 988-7577
padillalawnm@outlook.com

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the forgoing was served to counsel of record by electronic mail this 6th day of June, 2022, as follows:

Michael H. Feldewert	mfeldewert@hollandhart.com
Adam G. Rankin	agrankin@hollandhart.com
Julia Broggi	jbroggi@hollandhart.com

/s/ Ernest L. Padilla
ERNEST L. PADILLA

EXHIBIT 11

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

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

Case No. 22626

SELF-AFFIRMED STATEMENT OF EUGENE SWEENEY

Eugene Sweeney, for his self-affirmed statement states:

1. I am over the age of 18.

2. I have served as Vice President of Operations since May 2021 and was appointed Chief Operating Officer in February 2022 for Empire Petroleum Corp., parent of Empire New Mexico LLC. Previously, I served as VP of Well Interventions and Director of Well Interventions and Integrity for Cudd Energy Services, responsible for technical, safety and financial oversight of domestic and international business units. My prior experience includes, Central Operations and Engineering Leader for BP where I reviewed and assisted in well design and contingency planning for all high-risk wells; headed BP Advocacy for API committees and Offshore Safety Council. I am a Licensed Professional Engineer, SPE certified petroleum engineer and member of the Society of Petroleum Evaluation Engineers (SPEE). I am a graduate of MIT (BS-Mechanical Engineering), University of Michigan (MS-Industrial Engineering) and Texas A&M (MS-Petroleum Engineering). I have not previously testified before the New Mexico Oil Conservation Division and had my credentials accepted as a matter of record.

3. I am familiar with Empire New Mexico's operations in the Eunice Monument South Unit, which Empire purchased from ExxonMobil in Q2 2021.

4. I am also familiar with the application of Goodnight Midstream ("Goodnight").

The interval which Goodnight wants to inject a massive amount of water into is in our unitized formation. One of the best wells in this field (EMSU 200H) is currently open and producing in the San Andres interval. This was a high priority well in our purchase of this field, both for its current productivity, but also for the valuable information that it provides regarding the exploitation of the San Andres. Empire wants to continue to monitor this well's performance, to inform our future development plans. The proposed massive injection of water will destroy this analysis going forward. As operator, we are vehemently opposed to this.

Empire would never even consider injecting 20K+ barrels of water into a single injector at this point in our development and exploitation of this field and the San Andres, as Goodnight is proposing to do into Empire's unitized interval.

At the most basic and immediate level, the production from the 200H well, will be adversely affected, probably irredeemably due to the complex nature of the subsurface and the fact that waterflooding in this area has proven to be a delicate technical challenge. (see SPE and other exhibits regarding field history and waterflood conformance and channeling problems).

This field has proven to have poor waterflood conformance with high channeling even when it has been done systematically (i.e. with proper, industry-standard patterning and planning).

Empire purchased this property with the intent of exploring and ultimately fully developing the hydrocarbons in the San Andres portion of our unitized interval. This is still our intent, and we plan to do this systematically and in a manner consistent with best practices, which will best provide ultimate recovery of these hydrocarbons. This may or may not include waterflooding, but most likely will not due to the nature of this geology.

Rather, the development may be focused on other methods which Empire is studying, including dewatering (in direct contravention to what Goodnight is proposing on this Empire-operated formation) and/or CO2 flood (e.g., as

suggested by XTO when we were marketed the property and bought it based on this potential upside). We are only in the Appraise phase of the project, are still gathering the needed data, and plan to use information from the 200H as well as potential new penetrations, to inform the ultimate development.

Even if Empire were to determine that waterflooding is the best alternative, we would begin with industry standard patterning and not just a single, massive injection into one well. This flies in the face of all waterflooding best practices and is a virtual guarantee to destroy productivity and ultimate recovery. (To get a sense of the scale, which is being proposed for this single well, consider that across Empire's total NM acreage of roughly 70,000 acres and over 300+ wells, Empire currently only injects less makeup water than what is being proposed for this single well at a single point).

Again, no operator would ever consider an injection into the location that Goodnight is proposing at this massive rate of 20K+ barrels. Doing so will be an extreme burden which likely will result in significant loss of our production potential.

The following exhibits are some of the technically pertinent documents relevant to this application.

A. Proximity map of the proposed SWD and Empire's oil producing well, attached as Exhibit A.
B. Significant San Andres Play Emerging amid ROZ Fairways
C. Eunice Monument South Unit 200H
D. SPE 49201
E. XTO Eunice Executive Summary
F. EMSU and EMSU B and AGU Additional Upsides from Exxon
G. Residual Oil Zones Exploitation
H. Chevron ROZ Technical Presentation

Further Affiant Sayeth Naught.

EUGENE SWEENEY

Sworn and subscribed to before me by Eugene Sweeney on behalf of Empire New Mexico, LLC.

Notary Public

My Commission Expires_____