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

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

APPLICATION OF FAE II OPERATING, LLC FOR STATUTORY UNITIZATION, LEA COUNTY, NEW MEXICO

CASE NO. 24606 ORDER NO. R-23638

ORDER OF THE DIVISION

This case came in for hearing before the Oil Conservation Division ("OCD") at 8:30 a.m. on August 29, 2024, in Santa Fe, New Mexico.

The OCD Director, having considered the testimony, the record, the recommendations of Hearing Examiners, these findings of fact, and conclusions of law issues this Order.

FINDINGS

- 1. Due public notice has been given and the OCD has jurisdiction of this case and its subject matter.
- 2. The applicant, FAE II Operating, LLC ("Applicant"), seeks statutory unitization, pursuant to NMSA 1978 Sections 70-7-1 through 70-7-21, as amended (the "Statutory Unitization Act"), of the North Jal Unit, comprising 3,154.37 acres, more or less, of federal, state and fee lands, being a portion of the JALMAT; TAN-YATES-7 RVRS (OIL) Pool [pool code 33820] and the LANGLIE MATTIX; 7 RVRS-Q-GRAYBURG Pool [pool code 37240] and for the purpose of instituting enhanced oil recovery operations in the Yates, Seven Rivers and Queen formations, and approval of a Unit Agreement and Unit Operating Agreement, which were submitted as Applicant's Exhibit Nos. A-5 and A-6, respectively, in this case.
- 3. The proposed Unit Area consists of the following described lands in Lea County, New Mexico:

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Township 24 South, Range 36 East, NMPM

 Section 25:
 S/2

 Section 26:
 E/2SE/4

 Section 35:
 E/2NE/4

 Section 36:
 All

Township 24 South, Range 37 East, NMPM

Section 19: E/2

Section 20: SW/4, SW/4NW/4

 Section 29:
 W/2

 Section 30:
 NE/4, S/2

 Section 31:
 N/2NW/4

Township 25 South, Range 36 East, NMPM

Section 1: All

- 4. For purposes of hearing, this case was consolidated with Case No. 24605, *Application of FAE II Operating, LLC for Approval of an Enhanced Oil Recovery Project and to qualify the Project for the Recovered Oil Tax Rate, Lea County, New Mexico.* A separate order will be entered in Case No. 24605.
- 5. As per the Unit Agreement, submitted as Applicant's Exhibit A-5, the vertical extent of the proposed Unitized Formation is from the top of the Yates formation to a lower limit at the base of the Queen formation; the geologic markers having been previously found to occur at 2879 feet and 3691 feet, respectively, in Skelly Oil Company's Sherrill Well No. 7 (current well name Langlie Jal Unit Well No. 17; API Number 30-025-11301), located at 1980 feet from the South line and 1930 feet from the East Line of Section 31, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico, as recorded on the Frontier Perforators, Inc., Gamma Ray-Neutron Log run taken on September 1, 1957, said log being measured from a Kelly Bushing elevation of 3241 feet above sea level.
- 6. On June 21, 2024, OXY USA, Inc., OXY USA WTP LP, and Kerr McKee Oil & Gas Onshore, LP all entered an appearance in these cases and notice of objection to proceeding by affidavit.
- 7. In response to the objection, a status conference for both cases was held on July 11, 2024. Following the conference, the OCD Hearing Examiner issued a pre-hearing order that set the hearing date as August 29, 2024, and the requirements for submission of case documents and procedures for conducting the hearing.
- 8. Subsequently on August 22, 2024, OXY USA, Inc., OXY USA WTP LP, and Kerr McKee Oil & Gas Onshore, LP withdrew both their entry of appearance and objection to the matter proceeding by affidavit. No other party appeared or otherwise opposed these applications.
- 9. Applicant appeared at the hearing through counsel and presented the following

testimony in support of the proposed Unit:

- a. Applicant made a good faith effort to identify and notify all owners of the mineral estate within the Unit Area.
- b. Applicant proposed participation parameters and made a good faith effort to present and explain those parameters and the Unit Agreement and Unit Operating Agreement to the tract owners. Applicant formally proposed the Unit and the Unit Agreement to the working and overriding royalty interests.
- c. At the time of the hearing, Applicant had obtained approval of the Unit by more than the required 75 percent of the cost bearing interests.
- d. The lands are divided in mineral ownership (more or less) as follows: 640 acres of State Trust, 800.12 acres of federal lands, and 1,714.25 acres of fee lands. Both the Commissioner of Public Lands for the State Trust and the Authorized Officer of the Bureau of Land Management ("BLM") for the federal lands must give final approval before the non-cost bearing interests will exceed the required 75 percent. At the time of the hearing, the State Land Office and the BLM had given preliminary approval for the Unit with copies of the approval correspondence from each agency included in Applicant's Exhibit A-9.
 - e. Applicant has requested that it be designated operator of the Unit.
- f. Applicant is interested in multiple producing intervals for enhanced oil recovery within the Yates, Seven Rivers, and Queen formations. The combined gross thickness of the proposed unit is approximately 850 feet at depths between 2,700 and 3800 feet. All three main targets are continuous across the proposed Unit area and considered prospective for enhanced recovery through secondary and tertiary methods.
- g. The log of the type well for the Unitized Formation is available on the OCD Imaging website and available for public review.
- h. A total of 52 million barrels of original oil in place is contained in the Yates-Seven Rivers-Queen interval within the Unit. The cumulative production (at the time of the application) is 4.46 million barrels with an estimated secondary reserves of 4.62 million barrels for the proposed Unit Area. Applicant also notes an estimated 1.44 million barrels of undeveloped primary reserves in unperforated sections of the Unitized Formation and in undrilled acreage of the prior primary well pattern.
- i. The revenue from the project is expected to exceed the costs plus a reasonable profit. The waterflood is expected to increase production in existing wells, and those wells should qualify for the recovered oil tax rate.
- j. Unitized management of this reservoir is necessary to effectively carry out enhanced recovery operations.

- k. In their development plan for the Unit, Applicant proposed a well pattern and operation for the Unit boundaries adjacent to existing secondary recovery projects that will protect correlative rights of those recovery projects.
- 1. The tract allocation formula is a single phase and is shown in Section 13 of the Unit Agreement, as follows:
 - i. Current production rate from the Unitized Formation by Tract at 10 percent; and
 - ii. Amount of Remaining Recoverable Oil in Place at 90 percent.
 - iii. Agreement allows for modification of the calculation for tract participation in the event less than all tracts are qualified on the effective date.
- m. The proposed enhanced oil recovery operation is economically and technically feasible.

CONCLUSIONS OF LAW

- 1. Unitized management, operation, and development of the Unit Area are necessary to effectively conduct enhanced recovery operations and increase the ultimate recovery of oil from the Unit Area.
- 2. The proposed method of enhanced recovery operations within the Unit Area, as described in the Plan of Unit Operations is feasible, will prevent waste, and will result, with reasonable probability, in the recovery of substantially more hydrocarbons from the Unitized Area than would otherwise be recovered.
- 3. The estimated additional costs of the proposed operations will not exceed the estimated value of the additional hydrocarbons recovered plus a reasonable profit.
- 4. Unitization and implementation of enhanced recovery operations in the Unit Area, as described in the Unit Agreement will benefit the working interest and royalty and overriding royalty interest owners within the proposed Unit Area, and will protect the correlative rights of all parties.
- 5. Applicant has made a good faith effort to secure voluntary unitization of the Unitized Formation within the Unit Area.
- 6. The provisions of the proposed Unit Agreement and Unit Operating Agreement are fair, reasonable, and equitable, contain satisfactory provisions with respect to all of the matters required by NMSA 1978 Section 70-7-7, as amended, and should be incorporated by reference into this order. The participation formula contained in the Unit Agreement allocates the produced and saved, unitized hydrocarbons to the separately owned tracts in the Unit Area on a fair, reasonable, and equitable basis.
- 7. Creating a Unit comprising the Unit Area and providing for the unitization and unitized

operation of the Unit Area upon the terms and conditions approved herein is necessary to protect and safeguard the rights and obligations of the working interest owners and the royalty and overriding interest owners in the Unit Area.

- 8. It is prudent to apply enhanced recovery techniques to maximize the ultimate recovery of crude oil from the Unit Area. The enhanced recovery application (Case No. 24605) is the subject of a separate OCD order.
- 9. The Unit Area should be approved for statutory unitization in accordance with the Unit Agreement and Unit Operating Agreement and should be named the **North Jal (Yates-Seven Rivers-Queen) Unit**.
- 10. FAE II Operating, LLC (OGRID No. 329326) should be designated as the operator of the Unit.

IT IS THEREFORE ORDERED THAT:

- 1. The application of FAE II Operating, LLC for the statutory unitization of 3,154.37 acres (more or less) of Federal, State, and Fee lands in Lea County, New Mexico, to be known as the **North Jal (Yates-Seven Rivers-Queen) Unit** ("Unit"), is hereby approved pursuant to the Statutory Unitization Act (NMSA 1978, Sections 70-7-1 through 70-7-21).
- 2. The Unit Area shall consist of the following described lands in Lea County, New Mexico:

Township 24 South, Range 36 East, NMPM

 Section 25:
 S/2

 Section 26:
 E/2SE/4

 Section 35:
 E/2NE/4

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 Section 29:
 W/2

 Section 30:
 NE/4, S/2

 Section 31:
 N/2NW/4

Township 25 South, Range 36 East, NMPM

Section 1: All

3. As per the Unit Agreement, submitted as Applicant's Exhibit A-5, the vertical extent of the proposed Unitized Formation is from the top of the Yates formation to a lower limit at the base of the Queen formation; the geologic markers having been previously found to occur at 2879 feet and 3691 feet, respectively, in Skelly Oil Company's Sherrill Well No. 7

(current well name Langlie Jal Unit Well No. 17; API Number 30-025-11301), located at 1980 feet from the South line and 1930 feet from the East Line of Section 31, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico, as recorded on the Frontier Perforators, Inc., Gamma Ray-Neutron Log run taken on September 1, 1957, said log being measured from a Kelly Bushing elevation of 3241 feet above sea level.

- 4. This Order shall become effective on the first day of the month following the approval of plan of unit operations provided herein by the owners of at least seventy-five (75) percent of the production or proceeds thereof, that will be credited to interests which are free of cost, such as royalties and overriding royalties (NMSA 1978 Section 70-7-8). Any supplemental OCD order that the plan of unit operations has been so approved will be retroactive to that date.
- 5. The proposed Unit Agreement and the Unit Operating Agreement, admitted as Applicant's Exhibit Nos. A-5 and A-6, respectively, at the hearing of this case, are hereby approved and incorporated into this Order by reference.
- 6. FAE II Operating, LLC (OGRID No. 329326) is hereby designated the operator of the Unit.
- 7. The operator of the Unit shall notify the OCD in writing of its removal or the substitution of any other working interest owner within the Unit Area as operator, or of the transfer or assignment of its entire remaining working interest in the Unit Area.
- 8. The operator shall submit copies of all governmental reports (such as annual Plans of Development or Plans of Operation) required by the BLM and the State Land Office. These reports shall be submitted to the OCD through E-permitting for posting in the case file for Case No. 24606.
- 9. This Unit created for purposes of enhanced recovery shall terminate if the authority for injection within the Unit is terminated by the OCD.
- 10. Jurisdiction is retained by the OCD for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh or protectable waters or (2) consistent with the requirements in this order; whereupon the OCD may, after notice and hearing or prior to notice and hearing in event of an emergency, terminate the disposal authority granted herein.

Date: 1/13/2025

GERASIMOS RAZATOS Division Director (Acting)

GR/prg