

**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 CELERO ENERGY II, LP FOR STATUTORY
UNITIZATION, CHAVES AND LEA COUNTIES, NEW MEXICO**

**CASE NO. 14914
ORDER NO. R-13673**

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on October 18, 2012 and again on November 29, 2012, at Santa Fe, New Mexico, before Examiner David K. Brooks.

NOW, on this 29th day of January, 2013, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner,

FINDS THAT:

(1) Due public notice has been given and the Division has jurisdiction of this case and its subject matter.

(2) The applicant, Celero Energy II, LP ("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 Caprock Celero Queen Unit, comprising 2,846.66 acres, more or less, of state and fee lands, being a portion of the Caprock-Queen Pool (Pool Codes 8551 and 8553) for the purpose of instituting secondary and tertiary recovery operations in the Queen formation, and approval of a Unit Agreement and Unit Operating Agreement, which were submitted as Applicant's Exhibit Nos. 2 and 5, respectively, in this case.

(3) The proposed Unit Area consists of the following described lands:

Township 12 South, Range 31 East, NMPM, Chaves County

Section 36: S/2 NE/4, SE/4 SW/4, and SE/4

Township 12 South, Range 32 East, NMPM, Lea County

Section 30: S/2 SE/4

Section 31: Lots 3, 4, E/2, NE/4 NW/4, and E/2 SW/4
Section 32: SW/4 NE/4, W/2, and NW/4 SE/4

Township 13 South, Range 32 East, NMPM, Lea County

Section 5: Lots 3, 4, SW/4 NW/4, and NW/4 SW/4
Section 6: Lots 1-7, S/2 NE/4, SE/4 NW/4, E/2 SW/4, and SE/4 (All)
Section 7: E/2 and E/2 W/2
Section 8: NW/4 NW/4, S/2 NW/4, and SW/4

(4) For purposes of hearing, this case was consolidated with Case No. 14915, *Application of Celero Energy II, LP to Institute a Waterflood Project and a Tertiary Recovery Project for the North Caprock Celero Queen Unit Area, Chaves and Lea Counties, New Mexico*. A separate order will be entered in Case No. 14915.

(5) As per the Unit Agreement dated October 26, 2012, the vertical extent of the proposed Unitized Formation is the Queen Sand, a member of the Queen formation of the Permian Guadalupe Series, and being the stratigraphic equivalent of that interval from 3,002 feet to 3,116 feet on the Gamma Ray Log of the Thunderbird Oil Company North Caprock Queen Unit Tract 27 Well No. 5Y (API No. 30-025-24155), located 2635 feet from the North line and 1315 feet from the West line (Unit letter E) of Section 8, Township 13 South, Range 32 East, NMPM, Lea County, New Mexico.

(6) All owners of interests within the proposed Unit were notified of the application and of the hearing. No party appeared to oppose the application.

(7) Applicant appeared at the hearing through counsel and presented the following land testimony:

- (a) The proposed Unit Area was previously unitized as the North Caprock Queen Unit by Order No. R-1145, issued in Case No. 1395 on April 3, 1958, and a waterflood project was conducted on that prior unit. However, production from the prior unit ceased, and all leases in the unit terminated. Applicant subsequently acquired new leases on all lands in the proposed Unit Area.
- (b) The Commissioner of Public Lands has given preliminary approval of the Unit Agreement.
- (c) There is one working interest owner in the Unit Area. There are two royalty owners, and 11 overriding royalty owners. Parties owning 100% of the working interest have ratified the proposed Unit Agreement. Assuming final approval by the Commissioner of Public Lands, parties owning at least 84.1452% of the production or proceeds thereof that will be credited to

interests which are free of cost will have ratified the proposed Unit Agreement. Applicant expects additional royalty and overriding royalty interest owners will ratify the proposed Unit Agreement.

- (d) Applicant has requested that it be designated operator of the Unit.
- (8) Applicant presented the following geological testimony:
- (a) The Queen reservoir which constitutes the Unitized Formation, as defined in the Unit Agreement, is continuous throughout the Unit Area, and has been reasonably defined by development.
 - (b) The Ogallala aquifer overlies the Unit Area, and is found at a depth of approximately 150 feet below the surface.
 - (c) There are no apparent faults connecting the proposed unitized interval to the Ogallala or any other fresh water bearing formation.
- (9) Applicant presented the following engineering testimony:
- (a) All wells previously utilized for secondary recovery operations within the Unit Area are plugged and abandoned. There are presently no producing wells in the proposed Unit Area. Cumulative production from the proposed Unit Area to date is 6.5 million barrels of oil. Total primary and secondary recovery to date is estimated at 35% percent of original oil in place.
 - (b) Applicant has spent tens of millions of dollars on the proposed Unit Area and on nearby unit areas (i) re-activating, temporarily abandoning, or plugging and abandoning wells, (ii) constructing or improving tank batteries and related facilities, (iii) constructing an 18-mile long, six-inch Carbon Dioxide (CO₂) pipeline to the nearby Rock Queen Unit, operated by Applicant, and (iv) conducting environmental clean-up.
 - (c) Applicant seeks, in its simultaneously filed application in Case No. 14915, Division approval to inject water into the Unitized Formation by means of initially one water injection well, with four associated producing wells. Applicant intends to convert eight additional wells to water injection over the next three years. Applicant will seek to permit additional injection wells by subsequent administrative application.

- (d) Injection will be in an 80-acre, five-spot pattern.
- (e) Applicant intends to use the initial waterflood project to evaluate the Unit Area for CO2 tertiary recovery operations, and eventually inject CO2 into the Queen reservoir in the Unit Area.
- (f) The prior unit agreement used the following tract participation factors: cumulative production (75%), usable wellbores (12.5%), and acreage (12.5%). Because the lands within the Unit Area have been subject to primary and secondary recovery operations, and there are no wells currently producing from the Unit Area, Applicant proposes to use primary plus secondary production from each tract as the only participation parameter.
- (g) Unitized management of this pool is necessary to effectively implement and carry on the proposed enhanced recovery operations.
- (h) The proposed enhanced recovery operation is economically and technically feasible.
- (i) Incremental recovery through the proposed enhanced recovery (waterflood) operation is forecast to be 222,000 barrels of oil from the Unit Area. The estimated total value of incremental revenue will be approximately \$15.8 million. This will provide Applicant with a net \$1.4 million in revenue, for a 20% rate of return.
- (j) The estimated total project costs for the initial waterflood operations are approximately \$2.5 million.
- (k) The proposed enhanced recovery operation will result in recovery of substantially more hydrocarbons from the pool and the Unit than would otherwise be recovered, the value of which will exceed unit costs plus a reasonable profit, and will benefit both working interest and royalty and overriding royalty interest owners in the Unit Area.

The Division concludes as follows:

(10) Unitized management, operation, and further development of the Unit Area are reasonably necessary to effectively carry on enhanced recovery operations, in order to substantially increase the ultimate recovery of oil from the Unit Area.

(11) The proposed method of enhanced recovery operations within the Unit Area, as described in the Plan of Unit Operations and in this Order 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.

(12) The estimated additional costs of the proposed operations will not exceed the estimated value of the additional hydrocarbons recovered plus a reasonable profit.

(13) Unitization and implementation of enhanced recovery operations in the Unit Area, as described in the Unit Agreement and in this Order, 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.

(14) Applicant has made a good faith effort to secure voluntary unitization of the Unitized Formation within the Unit Area.

(15) 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.

(16) This Order 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 respective rights and obligations of the working interest owners and the royalty and overriding interest owners in the Unit Area.

(17) 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. 14915) will be the subject of a separate Division order.

(18) 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 Caprock Celero Queen Unit**.

(19) Celero Energy II, LP (OGRID No. 247128) should be designated as the operator of the Unit.

IT IS THEREFORE ORDERED THAT:

(1) The application of Celero Energy II, LP for the statutory unitization of 2,846.66 acres, more or less, of state and fee land in Chaves and Lea Counties, New Mexico, to be known as the **North Caprock Celero Queen Unit** (the 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:

Township 12 South, Range 31 East, NMPM, Chaves County

Section 36: S/2 NE/4, SE/4 SW/4, and SE/4

Township 12 South, Range 32 East, NMPM, Lea County

Section 30: S/2 SE/4

Section 31: Lots 3, 4, E/2, NE/4 NW/4, and E/2 SW/4

Section 32: SW/4 NE/4, W/2, and NW/4 SE/4

Township 13 South, Range 32 East, NMPM, Lea County

Section 5: Lots 3, 4, SW/4 NW/4, and NW/4 SW/4

Section 6: Lots 1-7, S/2 NE/4, SE/4 NW/4, E/2 SW/4, and SE/4 (All)

Section 7: E/2 and E/2 W/2

Section 8: NW/4 NW/4, S/2 NW/4, and SW/4

(3) As per the Unit Agreement dated October 26, 2012, the vertical extent of the proposed Unitized Formation is the Queen Sand, a member of the Queen formation of the Permian Guadalupe Series, and being the stratigraphic equivalent of that interval from 3,002 feet to 3,116 feet on the Gamma Ray Log of the Thunderbird Oil Company North Caprock Queen Unit Tract 27- Well No. 5Y (API No. 30-025-24155), located 2635 feet from the North line and 1315 feet from the West line (Unit letter E) of Section 8, Township 13 South, Range 32 East, NMPM, Lea County, New Mexico.

(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 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 Division 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 EXHIBIT NOS. 2 and 5, respectively, at the hearing of this case, are hereby approved and incorporated into this Order by reference.

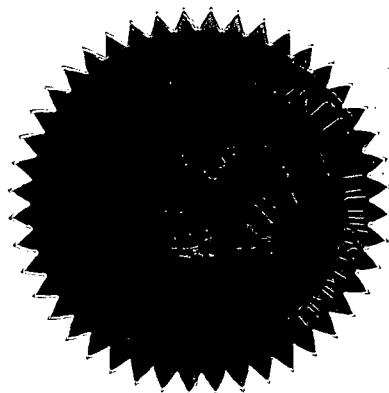
(6) Celero Energy II, LP [OGRID No. 247128] (Operator) is hereby designated the operator of the Unit.

(7) The Operator shall notify the Division 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 Unit established hereby shall terminate upon the plugging and abandonment of the last well in the Unit Area completed in the Unitized Formation.

(9) Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.



SEAL

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

A handwritten signature in cursive script, appearing to read "Jami Bailey".

JAMI BAILEY
Director