

**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:**

**CASE NO. 14612  
ORDER NO. R-13387**

**APPLICATION OF CELERO ENERGY II, LP FOR APPROVAL OF A  
COOPERATIVE WATERFLOOD PROJECT, AND TO QUALIFY THE  
PROJECT FOR THE RECOVERED OIL TAX RATE, LEA COUNTY, NEW  
MEXICO.**

**ORDER OF THE DIVISION**

**BY THE DIVISION:**

This case came on for hearing at 8:15 a.m. on March 31, 2011, at Santa Fe, New Mexico, before Examiner Terry Warnell.

NOW, on this 5<sup>th</sup> day of May, 2011, 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 ("Celero" or "Applicant"), seeks authority to institute a cooperative waterflood project in a portion of the Denton-Devonian Pool (16910) by injection of produced Devonian water. The Applicant is the operator in the Devonian formation of the three leases described below, insofar as they cover the following described 320 acres of fee lands:

**TOWNSHIP 14 SOUTH, RANGE 37 EAST, NMPM**

Section 25: S/2 SW/4	(Buckley Lease)
Section 36: W/2 NE/4	(W.T. Mann Lease)
Section 36: NW/4	(T.D. Pope 36 Lease)

3. The applicant further requests approval to inject Devonian produced water into the following two proposed injection wells in Lea County, New Mexico:

<u>Well Name &amp; Number</u>	<u>API No.</u>	<u>Well Location</u>
W.T. Mann A Well No. 2	30-025-05204	Unit B, Section 36, T-14 South, R-37 East
T.D. Pope 36 Well No. 10	30-025-39999	Unit D, Section 36, T-14 South, R-37 East

4. Applicant further requests that the project be called the Denton Devonian Waterflood Project.

5. Celero further seeks provisions allowing for the administrative approval of additional injection wells and seeks to qualify the proposed project as an "Enhanced Oil Recovery Project" pursuant to the "Enhanced Oil Recovery Act" (NMSA 1978 Sections 7-29A-1 through 7-29A-5, as amended).

6. The proposed 320-acre project area is fully contained within the Denton-Devonian Pool.

7. No other parties entered an appearance in this case or otherwise indicated opposition to the cooperative waterflood project.

8. Celero presented the testimony of land director Jim Grisham as follows:

- (a) Celero seeks to institute a cooperative waterflood project consisting of three fee leases.
- (b) Celero also requests approval to inject produced Devonian formation water into two Devonian wells.
- (c) Celero is the operator of these three fee leases in the Devonian formation and has Devonian working interest in all three leases.
- (d) Surface owner of the entire 320-acre project area is Mr. Donald Spears.

9. Celero presented the testimony of petroleum geologist John Baker as follows:

- (a) The primary stratigraphic interval of interest in the proposed Denton Devonian Waterflood Project is the Celero Devonian, which is continuous across the project area. The low porosity highly fractured Devonian aged rock contains hydrocarbons and is a good candidate for water injection.
- (b) The cross-section from West to East across the project area shows the consistency of the reservoir. When the Type Log and the Structure Map are compared, it is clear that the portion of the reservoir that is the proposed waterflood is reasonably defined by development.

- (c) The project area shows good continuity, the entire proposed unit area should contribute enhanced recovery reserves, and it is well suited for secondary recovery operations.
  - (d) The entire project area reservoir is capped by the Woodford Shale and there is no Woodford Shale production in the area.
10. Celero presented the testimony of petroleum engineer John Anderson as follows:
- (a) The secondary recovery operation will be initiated with two injection wells and six production wells.
  - (b) Each of the two proposed injection wells is expected to take an average of 10,000 barrels of produced Devonian water per day, with a maximum of about 20,000 barrels per well per day.
  - (c) Injection pressures are expected to initially be low and will likely start on a vacuum. The proposed maximum surface injection pressure for each injection well is based on 0.2 psig per foot of depth to the top of the injection interval. If a higher pressure is needed, Celero will justify the pressure increase with a step rate test.
  - (d) There are four plugged and abandoned wells in the two areas of review that penetrated into the Devonian formation.
  - (e) There is no evidence of inadequately cemented wellbores between the proposed waterflood interval and protectable waters. The proposed injection operation will not pose a threat to any freshwater supplies.
  - (f) The fresh ground water in this area consists of the Ogallala formation that produces from intervals approximately 193 feet in depth.
11. Celero estimates that it will cost approximately \$4.3 million dollars to implement waterflood operations within the proposed project area. Estimated value of incremental production on a cash value basis is approximately \$13 million.
12. Celero estimates that implementation of the proposed secondary recovery project will result in the recovery of an additional 200,000-250,000 barrels of oil that would otherwise not be recovered, thereby preventing waste.
13. The proposed waterflood project should be approved, and Celero should be authorized to utilize its W.T. Mann A Well No. 2 and T.D. Pope 36 Well No. 10 as injection wells within the project area.

14. The applicant further seeks to qualify the waterflood project as an “Enhanced Oil Recovery Project” pursuant to the “Enhanced Oil Recovery Act” (NMSA 1978 Sections 7-29A-1 through 7-29A-5).

15. The evidence presented demonstrates that:
- (a) the application for approval of the proposed secondary recovery project has not been prematurely filed either for economic or technical reasons;
  - (b) the area affected by the proposed project has been so depleted by primary operations that it is prudent to apply secondary recovery techniques to maximize the ultimate recovery of crude oil from the pool; and
  - (c) the proposed secondary recovery project meets all the criteria for certification by the Division as a qualified “Enhanced Oil Recovery Project” pursuant to the “Enhanced Oil Recovery Act” (NMSA 1978 Sections 7-29A-1 through 7-29A-5).

16. At such time as a positive production response occurs, and within five years from the date of this order, the applicant must apply to the Division for certification of a positive production response. This application shall identify the area benefiting from enhanced oil recovery operations and the specific wells eligible for the EOR tax rate. The Division may review the application administratively or set it for hearing. Based upon the evidence presented, the Division will certify to the New Mexico Taxation and Revenue Department those wells that are eligible for the EOR tax rate.

**IT IS THEREFORE ORDERED THAT:**

1. Celero Energy II, LP is hereby authorized to institute a cooperative waterflood project that shall comprise the following described 320 acres, more or less, of fee lands located in Lea County, New Mexico:

**TOWNSHIP 14 SOUTH, RANGE 37 EAST, NMPM**

Section 25: S/2 SW/4	(Buckley Lease)
Section 36: W/2 NE/4	(W.T. Mann Lease)
Section 36: NW/4	(T.D. Pope 36 Lease)

2. Celero is further authorized to inject produced Devonian water into the Devonian formation, through the following two wells, in Lea County, New Mexico:

<b><u>Well Name &amp; Number</u></b>	<b><u>API No.</u></b>	<b><u>Well Location</u></b>	<b><u>Inject. Zone</u></b>
W.T. Mann A Well No. 2	30-025-05204	Section 36, T-14S, R-37E	12376-12900
T.D. Pope 36 Well No. 10	30-025-39999	Section 36, T-14S, R-37E	12175-12720

3. The operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.

4. Injection into the W.T. Mann A Well No. 2 and T.D. Pope 36 Well No. 10 shall be accomplished through 2 3/8 inch internally plastic-lined tubing installed in a packer located within 100 feet of the uppermost injection perforations. The casing-tubing annulus in each well shall be filled with an inert fluid and a gauge or approved leak-detection device shall be attached to the annulus in order to determine leakage in the casing, tubing, or packer.

5. The injection wells or pressurization system shall be equipped with a pressure control device or acceptable substitute that will limit the surface injection pressure to no more than 0.2 psi per foot of depth to the uppermost injection perforation.

6. The Division Director may administratively authorize a pressure limitation in excess of the above upon a showing by the operator that such higher pressure will not result in the fracturing of the injection formation or confining strata.

7. The Division Director may administratively authorize additional injection wells within the Unit Area as provided in Division Rule 19.15.26.8.A NMAC.

8. Prior to commencement of injection operations, and every five years, the casing in each well shall be pressure tested throughout the interval from the surface down to the proposed packer setting depth to assure the integrity of such casing.

9. The operator shall give advance notice to the supervisor of the Division's Hobbs District Office of the date and time (i) injection equipment will be installed, and (ii) the mechanical integrity pressure tests will be conducted on the injection wells, so that these operations may be witnessed.

10. The operator shall immediately notify the supervisor of the Division's Hobbs District Office of the failure of the tubing, casing or packer in any of the injection wells or the leakage of water, oil or gas from or around any producing or plugged and abandoned well within the project area, and shall promptly take all steps necessary to correct such failure or leakage.

11. The waterflood project is hereby designated the **Denton Devonian Waterflood Project**, and the applicant shall conduct injection operations in accordance with Division Rules No. 19.15.26.1 through 19.15.26.15 NMAC, and shall submit monthly progress reports in accordance with Division Rules No. 19.15.26.11.B and 19.15.7.8.D.

12. The injection authority granted herein for each of the two wells shall terminate two years after the date of this order if the operator has not commenced

injection operations into the well; provided, however, the Division, upon written request by the operator, may grant an extension for good cause.

13. The Denton Devonian Waterflood Project is hereby certified as an "Enhanced Oil Recovery Project." The project area shall initially comprise the area described in Ordering Paragraph No. (1), provided however, the project area and/or the producing wells eligible for the enhanced oil recovery (EOR) tax rate may be contracted and reduced based upon the evidence presented by the applicant in its demonstration of a positive production response.

14. At such time as a positive production response occurs, and within five years from the date of this order, the applicant must apply to the Division for certification of a positive production response. This application shall identify the area benefiting from enhanced oil recovery operations and the specific wells eligible for the EOR tax rate. The Division may review the application administratively or set it for hearing. Based upon the evidence presented, the Division will certify to the New Mexico Taxation and Revenue Department those wells that are eligible for the EOR tax rate.

15. The injection authority granted under this order is not transferable except upon Division approval. The Division may require the operator to demonstrate mechanical integrity of any injection well that will be transferred prior to approving transfer of authority to inject.

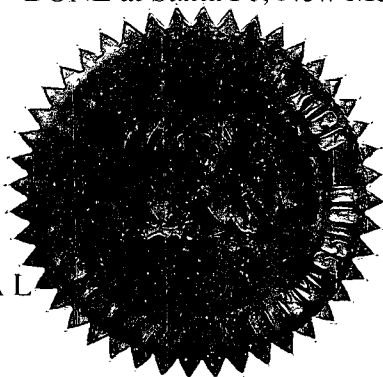
16. The Division may revoke the injection authority for any well after notice and hearing if the operator is in violation of 19.15.5.9 NMAC.

17. Compliance with this order does not relieve the operator of the obligation to comply with other applicable federal, state or local laws or rules, or to exercise due care for the protection of fresh water, public health and safety and the environment.

18. Jurisdiction is retained by the Division 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 (i) to protect fresh or protectable waters or (ii) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, or without notice and hearing in case of emergency, terminate the injection authority granted herein.

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

SEAL



STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

JAMI BAILEY  
Director