

**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 TO EXPAND THE  
WATERFLOOD PROJECT AND TERTIARY RECOVERY PROJECT FOR THE  
ROCK QUEEN UNIT, AND TO QUALIFY THE EXPANDED PROJECT FOR  
THE RECOVERED OIL TAX RATE, CHAVES AND LEA COUNTIES, NEW  
MEXICO**

**CASE NO. 14942  
ORDER NO. R-1541-C**

**ORDER OF THE DIVISION**

**BY THE DIVISION:**

This case came on for hearing at 8:15 a.m. on December 13, 2012, and again on January 24, 2013 and February 21, 2013, at Santa Fe, New Mexico before Examiner David K. Brooks.

NOW, on this 8<sup>th</sup> day of April, 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) Celero Energy II, LP ("Celero" or "applicant"), seeks approval to expand its tertiary (CO<sub>2</sub> injection) recovery project within its Rock Queen Unit and qualify the expanded project for the Enhanced Oil Tax Rate.
- (3) The case was first heard on December 13, 2012 without presentation of form C-108. On January 24, 2013, Celero presented form C-108 asking for permission to inject CO<sub>2</sub> into 14 previously approved water injection wells (Exhibit A to this Order). Celero appeared again on February 21, 2013 to present proof of the notice requirements.
- (4) The applicant has notified the other working interest owners within the Rock Queen Unit and all parties affected by the proposed injection wells and received no objections. No other parties appeared in this case or otherwise opposed this application.

(5) The Unit Agreement and Waterflood project for the Rock Queen Unit were first approved November 30, 1959 by the Oil Conservation Commission by Order No. R-1541 issued in Case No. 1798. On November 27, 1990, the Division issued Order No. R-9361 in Case No. 10088 expanding the waterflood project.

(6) On November 9, 2010, the Division issued Order No. R-1541-A in Case Nos. 14504 and 14505, approving an amended Unit Agreement and Unit Operating Agreement and Statutory Unitization. In addition said order approved a pilot tertiary recovery (CO2 injection) project with initial injection of CO2 and water into 12 wells, and qualified the project for the recovered oil tax rate.

(7) Case No. 14505 (pertaining to injection) was reopened and Order No. R-1541-B was issued on December 13, 2010, approving pressures of 800 psi for water injection and 1200 psi for CO2 injection for existing and future injection wells within this project. In addition Order No. R-1541-B authorized the use of 17 wells within the Unit for monitoring purposes, with those wells specifically not subject to Division inactive well, plug and abandonment requirements.

(8) Since the issuance of Order No. R-1541-B, the Division has administratively approved the following five WFX administrative permits for the Rock Queen Unit:

WFX-892	10/28/11	4 water injection wells
WFX-891	10/19/11	3 CO2 injection wells (as substitutes for 3 P&A CO2)
WFX-885	5/4/11	2 water injection wells
WFX-883	3/24/11	1 water injection and 3 CO2 injection wells
WFX-880	1/31/11	5 water injection and 6 CO2 injection wells

(9) Celero Energy II, LP (OGRID 247128) is the operator of this unit and is in compliance with Division Rule 19.15.5.9 NMAC and therefore eligible for approval of injection permits.

(10) Celero presented exhibits and testimony indicating the following:

(a) Celero purchased this property in 2006 and has since spent 80 million dollars on environmental cleanup, working on 130 wells, upgrading and building 10 tank batteries, and construction of 18 miles of six-inch CO2 line extending from Kinder Morgan's Cortez CO2 supply pipeline.

(b) The Queen formation pay interval is only approximately 16 feet in net and gross thickness, located at 3050 feet deep, has 20 percent porosity and 50 to 500 millidarcies permeability. The reservoir pressure after recent injection is approximately 1600 psi which is above the 1069 psi minimum miscibility pressure.

(c) The existing CO2 pilot has proven profitable with projected additional recovery of 10 percent of original oil in place. The pilot is relatively

large at 1360 acres and after adding the proposed 3560 acres, the total project will be 4920 acres in size.

(d) Celero has just added additional compression to re-inject produced gas and anticipates this to substantially increase oil production within the project. The reservoir oil is only slightly sour.

(e) Expanding the project by adding CO2 injection first south, and then north of the existing pilot will almost certainly add additional oil production and will be profitable.

(11) The proposal to expand the relatively large pilot to the remainder of the Rock Queen Unit is feasible and should result in the recovery of additional oil and gas that would not otherwise be recovered.

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

(13) The proposed project will prevent waste, protect correlative rights, and should be approved and called the Rock Queen Unit CO2 Tertiary Recovery Project. The area to be affected by these operations (the project area) should consist of the entire Rock Queen Unit area.

(14) Celero should be approved to inject water into the proposed wells at depths within the Queen formation specified in its application. Provisions should be made for the operator of the Unit to apply administratively for additional or alternative CO2 and water injection wells as needed.

(15) Celero proposed during the hearing for the pilot program that produced gas would be re-injected. The proposal in that case was approved by the Division. In this case, Celero has clearly shown its operation to recycle produced gas is necessary and essential to profitability.

(16) Approval to scale up this project should also include a requirement to work with District personnel as to frequency of MIT testing and providing charts of annulus and tubing pressures and rates obtained from the automation system. In addition, the H2S contingency plan should be in place prior to commencing scale up of the project.

(17) Celero presented exhibits containing the information required by Division rules to qualify this project under the Enhanced Oil Recovery Act.

(18) The evidence establishes that the project meets all the criteria for certification by the Division as a qualified "Enhanced Oil Recovery (EOR) Project" pursuant to the "Enhanced Oil Recovery Act" (NMSA 1978 Sections 7-29A-1 through 7-29A-5). The certified project area should consist of the entire Rock Queen Unit area.

(19) The EOR project area and/or the producing wells within this area eligible for the recovered oil tax rate may be contracted or expanded depending upon the evidence presented by the applicant in its demonstration of the occurrence of a positive production response.

**IT IS THEREFORE ORDERED THAT:**

(1) Celero Energy II, LP ("Operator") [OGRID 247128] is hereby authorized to implement tertiary recovery operations within the entire Rock Queen Unit ("RQU") by injection into the Queen formation, Caprock-Queen Pool (Pool Codes 8551 and 8553).

(2) Operator is permitted to inject water, CO<sub>2</sub>, and produced gases into the Queen formation unitized interval of the Rock Queen Unit for tertiary recovery purposes into the wells and (perforated or open hole) injection intervals shown on Exhibit A to this Order – all through lined tubing set within 100 feet of the top of the injection intervals.

(3) The Rock Queen Unit (CO<sub>2</sub>) Tertiary Recovery Project is hereby approved and shall consist of the entire Rock Queen Unit area and contained vertically within that Unitized interval.

(4) Prior to commencing CO<sub>2</sub> injection or re-injection of produced gas within any well in this project, the operator shall have an approved H<sub>2</sub>S contingency plan in place that includes that well.

(5) The Division Director may administratively authorize alternative or additional injection wells within this Unit as provided in 19.15.26.8 NMAC.

(6) The operator shall take all steps necessary to ensure that the injected fluids enter only the permitted injection intervals and are not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.

(7) Injection into any approved injection well within this project shall be accomplished through plastic-lined tubing installed in a packer located within 100 feet of the uppermost injection perforation. The casing-tubing annulus shall be filled with an inert fluid, and a gauge or approved leak-detection device shall be attached to the annulus in order to detect any leakage in the casing, tubing, or packer.

(8) The injection well or pressurization system shall be equipped with a pressure control device or acceptable substitute that will limit the maximum surface injection pressure to 800 psi while injecting water or 1200 psi while injecting CO<sub>2</sub> or produced gases.

(9) The Division Director may administratively authorize a pressure limitation in excess of the above, upon a showing supported by approved Step Rate Tests that such higher pressure will not result in the fracturing of the injection formation or confining strata or damage to the reservoir.

(10) As per Division Rule 19.15.26.11A NMAC, the operator shall test any injection well on this project for mechanical integrity ("MIT") prior to commencing injection into that well and prior to resuming injection each time the packer is unseated. All MIT testing procedures and schedules shall follow the requirements in Division Rule 19.15.26.11A. NMAC including any added provisions as may be required by the District office of the Division, such as continuous data gathering of tubing and casing pressures, temperatures, and injection rates. The Division Director retains the right to require at any time wireline verification of completion and packer setting depths in any injection well.

(11) The operator shall provide notice, 72 hours in advance, to the supervisor of the Division's district office of the date and time of the installation of injection equipment and of any mechanical integrity test so that the same may be inspected and witnessed.

(12) The operator shall provide written notice of the date of commencement of injection to the Division's district office. In accordance with Division rules, the operator shall submit monthly reports of the disposal operations on Division Form C-115.

(13) Without limitation on the duties of the operator as provided in Division rules, or otherwise, the operator shall immediately notify the Division's district office of any failure of the tubing, casing or packer in the well, or of any leakage or release of water, oil or gas from or around any produced or plugged and abandoned well in the area, and shall take such measures as may be timely and necessary to correct such failure or leakage.

(14) The Rock Queen Unit CO2 Tertiary Recovery Project is hereby certified to the New Mexico Taxation and Revenue Department 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 area to be affected by the enhanced oil recovery project shall consist of the area within the Rock Queen Unit. The area and/or the producing wells eligible for the enhanced oil recovery (EOR) tax rate may be contracted or expanded based upon the evidence presented by the unit operator in its demonstration of a positive production response.

(16) At such time as a positive production response occurs, and within five years from the date the project was certified to the New Mexico Taxation and Revenue Department, the unit operator must apply to the Division for certification of a "positive production response." This application for "positive production response" shall identify the area benefiting from enhanced oil recovery operations and the specific wells eligible for the EOR tax rate.

(17) 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.

(18) 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.

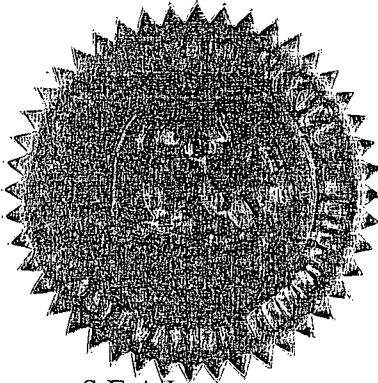
(19) The Division may revoke any injection permit after notice and hearing if the operator is in violation of 19.15.5.9 NMAC.

(20) One year after all injection of any fluid into the Rock Queen Unit has ceased (or last reported), the Division shall consider the project abandoned, and the authority to inject will terminate *ipso facto*. The Division, upon written request mailed by the operator prior to that termination date, may grant an extension thereof for good cause.

(21) 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.

(22) 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 (1) to protect fresh or protectable waters or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing (or without prior 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.



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STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

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

JAMI BAILEY  
Director

**EXHIBIT A     Hearing Order R-1541-C, Case 14942****Rock Queen Unit     CELERO ENERGY II, LP**

Approved CO2 Injection Wells (Under this Order)

API	Well No	InjTop Feet	InjBot Feet	Location	Water Inj Permit
30-005-00819	028	3037	3090	P/22/13S/31E	R-1541
30-005-00887	034	3024	3037	P/27/13S/31E	WFX-55
30-025-00304	068	3056	3084	B/30/13S/32E	WFX-119
30-005-00938	083	3067	3080	B/36/13S/31E	WFX-106
30-005-00936	087	3057	3100	F/36/13S/31E	WFX-168
30-005-00932	091	3056	3070	L/36/13S/31E	WFX-126
30-005-00934	093	3064	3069	N/36/13S/31E	WFX-126
30-005-00929	097	3022	3041	D/35/13S/31E	WFX-84
30-025-00284	106	3048	3059	N/19/13S/32E	WFX-106
30-005-29158	308	3035	3056	N/23/13S/31E	WFX-880
30-005-29154	309	3047	3068	P/23/13S/31E	WFX-880
30-005-29155	310	3066	3080	N/24/13S/31E	WFX-880
30-005-29156	311	3044	3065	P/24/13S/31E	WFX-880
30-005-29162	704	3056	3070	C/36/13S/31E	WFX-883