State of New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez Governor

David Martin Cabinet Secretary-Designate

Brett F. Woods, Ph.D. Deputy Cabinet Secretary Jami Bailey, Division Director Oil Conservation Division



Administrative Order WFX-919 May 2, 2014

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Order R-1541 as amended, Celero Energy II, LP ("applicant") has made application to the Division for permission to add three (3) new injection wells and to convert two (2) existing water injection wells to the "water alternating gas (WAG)" enhanced recovery method. The three new injection wells shall also be authorized to use the WAG method. All five wells are within the Rock Queen Unit (CO2) Tertiary Recovery Project which produces from the Caprock-Queen Pool (Pool Codes 8551 and 8553) in Chaves and Lea Counties, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

The application has been duly filed under the provisions of Division Rule 19.15.26.8B. NMAC and satisfactory information has been provided that affected parties as defined in said rule have been notified and no objections remain outstanding. The proposed new wells and the existing wells are eligible for conversion to injection under the terms of that rule. The applicant has presented satisfactory evidence that all requirements prescribed in Rule 19.15.26.8 NMAC have been met and the operator is in compliance with Rule 19.15.5.9 NMAC.

The applicant has also provided supplemental documents regarding the plug and abandonment efforts for the Rock Queen Unit (RQU) Well No. 14 (API 30-025-00299) which is within the Area of Review for three of the five wells. The information disclosed several attempts in 2009 for installation of a plug within the casing to seal perforations starting at 3057 feet in the Queen formation. Final abandonment of this well was approved by Division with a cement plug at the top of the 4 ½-inch production casing approximately 2525 feet above the Queen formation. Due to the final abandonment of this well, the authorization for injection for Rock Queen Unit Well No. 78 is conditional with implementation of the operating requirement specific to this Order.

The proposed expansion of the above-referenced enhanced recovery project, will prevent waste, is in the best interests of conservation, will not impair correlative rights, and should be approved.

IT IS THEREFORE ORDERED THAT:

Celero Energy II, LP (OGRID 247128), as operator, is hereby authorized, to inject water, carbon dioxide (CO₂), and produced gas into the Queen formation through perforations and open hole for purposes of enhanced recovery. The five wells with location and injection interval information proposed in the application are as follows:

API Number	Well Name	Unit	Sec	Twp	Rng	Footage N/S	Footage E/W	Injection Interval; Type of Interval
30-005-00862	Rock Queen Unit No. 66	Р	25	13 S	31 E	660 FSL	660 FEL	3052 ft to 3069 ft; perforations
30-025-00310	Rock Queen Unit No. 78	L	30	13 S	32 E	1980 FSL	660 FWL	3059 ft to 3075 ft; open hole
30-005-29210	Rock Queen Unit No. 319	J	36	13 S	31 E	2280 FSL	1906 FEL	3066 ft to 3081 ft; perforations
30-025-41527	Rock Queen Unit No. 320	F	30	13 S	32 E	2180 FNL	1980 FWL	3056 ft to 3071 ft; perforations
30-005-29211	Rock Queen Unit No. 321	В	36	13 S	31 E	960 FNL	1880 FEL	3068 ft to 3081 ft; perforations

RQU Wells No. 66 and No. 78 are existing water injection wells with new authorization for operation using WAG enhanced recovery method. RQU Wells No. 319, No. 320, and No. 321 are new completions to replace older wells that were plugged and abandoned.

The approved maximum surface tubing injection pressure shall be <u>800 psi while</u> injecting water and 1200 psi while injecting CO₂ or produced gas as established in Ordering Paragraph (8) of Division Order No. R-1541-C.

The operator shall inject through internally-coated, 2 3/8-inch tubing with the injection packer in individual wells no more than 100 feet above the shallowest perforation or the top of open hole for the injection interval.

New injections wells RQU Wells No. 319, No. 320, and No. 321 shall be constructed with cement circulated to surface for both surface and production casings.

Prior to commencing injection, the operator will have an approved hydrogen sulfide (H₂S) contingency plan in place that includes the wells in this Administrative Order as required in Ordering Paragraph (4) of Division Order No. R-1541-C.

This Order approves WAG injection in RQU Well No. 78 only with concurrent production in the three following RQU wells:

- 1. RQU Well No. 77 (API 30-025-00298), an existing production well to the east of RQU Well No. 78;
- 2. RQU Well No. 79 (API 30-025-00311), an existing production well to the south of RQU Well No. 78; and
- 3. **RQU Well No. 318 (API 30-025-41526)**, a proposed "relief" production well to the southeast of RQU Well No. 78 and northwest of plugged and abandoned RQU Well No. 14.

Injection into RQU Unit Well No. 78 shall not commence until the proposed well, RQU Well No. 318, is a producing well. Failure to produce from the three above-referenced wells while injection is occurring into RQU Well No. 78 will result in the loss of injection authority under this Order ipso facto.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the injected fluid enters only the approved injection interval and is not permitted to escape to other formations or onto the surface.

After installing tubing, the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge or an approved leak detection device in order to determine leakage in the casing, tubing, or packer. The casing shall be pressure tested from the surface to the packer setting depth to assure casing integrity.

The wells shall each pass an initial mechanical integrity test ("MIT") prior to initially commencing injection and prior to resuming injection each time any injection packer is unseated. All MIT procedures and schedules shall follow the requirements in Rule 19.15.26.11A. NMAC. The Division Director retains the right to require at any time wireline verification of completion and packer setting depths in this well.

The wellhead injection pressure on these wells shall be limited as listed above. In addition, the injection wells or header systems shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface tubing pressures to the maximum allowable pressures for these wells.

Subject to the limitations within the hearing order permitting this project, the Director of the Division may authorize an increase in tubing pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluids from the approved injection interval. Such proper showing shall be demonstrated by sufficient evidence including but not limited to an acceptable Step-Rate Test.

The operator shall notify the supervisor of the Division's District I office of the date and time of the installation of injection equipment and of any MIT so that the same may be inspected and witnessed. The operator shall provide written notice of the date of commencement of injection to the Division's District I office. The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Rules 19.15.26.13 and 19.15.7.24 NMAC.

Without limitation on the duties of the operator as provided in Rules 19.15.29 and 19.15.30 NMAC, or otherwise, the operator shall immediately notify the Division's District I office of any failure of the tubing, casing or packer in the approved injection wells, or of any leakage or release of water, oil or gas from around any produced or plugged and abandoned wells in the area, and shall take such measures as may be timely and necessary to correct such failure or leakage.

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.

The division may revoke this injection permit after notice and hearing if the operator is in violation of 19.15.5.9 NMAC.

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.

PROVIDED FURTHER THAT, 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, terminate the disposal authority granted herein. The subject wells shall be governed by all provisions of Division Order No. R-1541 as amended.

The injection authority granted herein shall terminate two (2) years after the effective date of this order if the operator has not commenced injection operations into at least one of the subject wells, provided however, the Division, upon written request by the operator received prior to the two-year deadline, may grant an extension thereof for good cause shown.

JAMIBAILEY

Director

JB/prg

cc: New Mexico Oil Conservation Division – Hobbs Office State Land Office – Oil, Gas and Minerals Division Bureau of Land Management – Carlsbad Field Office

Case File 14942

Well Files API No. 30-025-00298, API No. 30-025-00311, and API No. 30-025-41526