New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez Governor

John H. Bemis Cabinet Secretary-Designate

Brett F. Woods, Ph.D. Deputy Cabinet Secretary

June 13, 2011

Jami Bailey Division Director Oil Conservation Division



Administrative Order WFX-888 Application No. pTGW1116057074

Mr. Keith B. Masters as Agent for Resaca Operating Company 1331 Lamar St., Ste. 1450 Houston, TX 77010

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Order R-4019 and R-4020, Resaca Operating Company (OGRID No. 263648) has made application to the Division for permission to add injection wells to its Cooper Jal Unit Waterflood Project located within the Tansill, Yates, Seven Rivers and Queen formations, Langlie Mattix Pool (37240) and Jalmat Pool (33820) in Lea County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

The application was filed in due form. BLM originally objected to the proposed expansion but after a June 7, 2011 meeting with Resaca BLM withdrew all their objections. No other objections have been filed within the waiting period prescribed by Division Rule 19.15.26.8 (C)NMAC. The proposed wells are eligible for conversion to injection under the terms of Rule 19.15.26.8. The operator is in compliance with Rule 19.15.5.9.

It is our understanding that these wells were previously approved for injection as dually completed wells by Division Order No. R-4019 and R-4020 and that analysis reveals no evidence of any incompatibility between the Jalmat (upper zone) and the Langlie Mattix (lower zone).

The proposed expansion of the above-referenced waterflood project will not cause waste nor impair correlative rights and should be approved.

IT IS THEREFORE ORDERED THAT:

Resaca Operating Company is hereby authorized to inject water into the unitized interval (2950'-3750'), through plastic-lined tubing set in packers located within 100 feet of the top of the injection intervals in the following-described wells for purposes of secondary recovery:

7 Additional Injection Wells

WELL NAME	API	N-S	E-W	Unit	Sec	Tsp	Rge	Unitized Interval	Maximum Injection Pressure
Cooper Jal Unit Well 108	30-025-11142	1980 FSL	660 FWL	L	18	24S	37E	3000-3750	600
Cooper Jal Unit Well 109	30-025-11133	1980 FSL	1980 FWL	K	18	24S	37E	2972-3268	600
Cooper Jal Unit Well 114	30-025-09559	330 FSL	2310 FEL	0	13	24S	36E	2978-3540	600
Cooper Jal Unit Well 148	30-025-09642	2310 FSL	2310 FEL	J	24	24S	36E	3018-3720	600
Cooper Jal Unit Well 206	30-025-09621	1980 FNL	330 FEL	Н	24	24S	36E	2983-3750	600
Cooper Jal Unit Well 213	30-025-09623	1980 FSL	660 FEL		24	24S	36E	2995-3730	600
Cooper Jal Unit Well 230	30-025-09649	1650 FNL	2310 FWL	`F	25	24S	36E	2976-3195	600

The subject wells are hereby further authorized to be unitized as downhole commingled injections wells in the Jalmat and Langlie-Mattix Pools, providing that all conditions contained in the order remain the same and there have been no additional wells drilled or plugged in the area of review.

All 7 wells are located in Lea County, New Mexico.

IT IS FURTHER ORDERED THAT:

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.

Prior to commencing injection operations into the wells, the casing shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

The casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing or packer.

The injection wells or system shall be equipped with pressure limiting devices which will limit the wellhead pressure to the maximum surface injection pressure described above.

The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said wells that such higher pressure will not result in migration of the injected fluid from the permitted injection interval. Such proper showing shall consist of valid step-rate tests run in accordance with and acceptable to this office.

The operator shall notify the supervisor of the Hobbs District Office of the Division of the date and time of the installation of injection equipment and of all mechanical integrity tests so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Hobbs District Office of the Division of the failure of the tubing, casing or packer in said wells and shall take such steps as may be timely and necessary to correct such failure or leakage.

The subject wells shall be governed by all provisions of Division Order No. R-6856, as amended, and Rules 19.15.26.9 through 19.15.26.13 NMAC of the Division Rules and Regulations not inconsistent herewith.

<u>PROVIDED FURTHER THAT</u>, 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 water or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the injection authority granted herein.

The injection authority granted herein shall terminate one year 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 one year deadline, may grant an extension thereof for good cause shown.

Jami-Bailev

Division Director

JB/tw cc: New Mexico Oil Conservation Division – Hobbs