



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop

Cabinet Secretary

Mark E. Fesmire, P.E.

Director

Oil Conservation Division

ADMINISTRATIVE ORDER NO. WFX-827

APPLICATION OF MARBOB ENERGY CORPORATION TO EXPAND ITS WATERFLOOD PROJECT IN THE GRAYBURG-JACKSON-YESO POOL IN EDDY COUNTY, NEW MEXICO.

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Order No. R-12255, Marbob Energy Corporation has made application to the Division on December 18, 2006 for permission to expand its Dodd Federal Unit Waterflood Project in the Grayburg-Jackson-Yeso Pool in Eddy County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

- (1) The application was filed in due form.
- (2) Satisfactory information was provided to demonstrate that all offset operators were provided notice of the application.
- (3) No objections have been filed within the waiting period prescribed by Division Rule 701(C).
- (4) The proposed injection wells are eligible for conversion to injection under the terms of Rule 701.
- (5) The proposed expansion of the above-referenced waterflood project will not cause waste nor impair correlative rights.
- (6) The application should be approved.

IT IS THEREFORE ORDERED THAT:

The applicant, Marbob Energy Corporation, is hereby authorized to inject water into the Yeso formation, Grayburg-Jackson-Yeso Pool, through either 2-3/8-inch or 2 7/8-inch plastic-lined tubing set in a packer located within 100 feet of the uppermost injection perforations in the following-described wells for purposes of secondary recovery to wit:

Dodd Federal Unit Well No. 22 (API No. 30-015-25341)

1225' FNL & 225' FEL, Unit A, Section 15, T-17 South, R-29 East, NMPM
Injection Interval: 4,092'-4,315' Perforated; Tubing: 2 7/8-inch p.c.
Packer Depth: 4,050 feet; Maximum Surface Injection Pressure: 818 PSIG

Dodd Federal Unit Well No. 23 (API No. 30-015-25790)

125' FNL & 25' FWL, Unit D, Section 14, T-17 South, R-29 East, NMPM
Injection Interval: 4,166'-4,301' Perforated; Tubing: 2 7/8-inch p.c.
Packer Depth: 4,125 feet; Maximum Surface Injection Pressure: 833 PSIG

Dodd Federal Unit Well No. 25 (API No. 30-015-25456)

75' FNL & 1295' FWL, Unit D, Section 14, T-17 South, R-29 East, NMPM
Injection Interval: 4,084'-4,301' Perforated; Tubing: 2 7/8-inch p.c.
Packer Depth: 4,040 feet; Maximum Surface Injection Pressure: 817 PSIG

Dodd Federal Unit Well No. 27 (API No. 30-015-02978)

660' FNL & 1980' FWL, Unit C, Section 14, T-17 South, R-29 East, NMPM
Injection Interval: 4,074'-4,307' Perforated; Tubing: 2 3/8-inch p.c.
Packer Depth: 4,025 feet; Maximum Surface Injection Pressure: 815 PSIG

Dodd Federal Unit Well No. 36 (API No. 30-015-25294)

1425' FNL & 2615' FWL, Unit F, Section 14, T-17 South, R-29 East, NMPM
Injection Interval: 4,141'-4,263' Perforated; Tubing: 2 7/8-inch p.c.
Packer Depth: 4,100 feet; Maximum Surface Injection Pressure: 828 PSIG

Dodd Federal Unit Well No. 37 (API No. 30-015-25175)

2310' FNL & 25' FWL, Unit E, Section 14, T-17 South, R-29 East, NMPM
Injection Interval: 4,062'-4,310' Perforated; Tubing: 2 7/8-inch p.c.
Packer Depth: 4,020 feet; Maximum Surface Injection Pressure: 812 PSIG

Dodd Federal Unit Well No. 43 (API No. 30-015-26198)

2180' FSL & 860' FWL, Unit L, Section 14, T-17 South, R-29 East, NMPM
Injection Interval: 4,162'-4,360' Perforated; Tubing: 2 7/8-inch p.c.
Packer Depth: 4,120 feet; Maximum Surface Injection Pressure: 832 PSIG

IT IS FURTHER ORDERED THAT:

Prior to commencing injection operations into the subject wells, the following-described existing perforations in each well shall be cement squeezed in order to effectively isolate these intervals:

<u>Well Name & Number</u>	<u>Perforations</u>	<u>Formation</u>
DFU Well No. 22	2,448'-3,408'	San Andres
DFU Well No. 23	2,789'-3,405'	San Andres
DFU Well No. 25	2,755'-3,402'	San Andres
DFU Well No. 27	2,795'-3,308'	San Andres
DFU Well No. 36	2,473'-3,322'	San Andres
DFU Well No. 37	2,424'-3,725'	San Andres
DFU Well No. 43	2,809'-3,426'	San Andres

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 well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure to the maximum surface injection pressures 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 Yeso formation. Such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office.

The operator shall notify the supervisor of the Artesia District Office of the Division of the date and time of the: i) installation of injection equipment; ii) squeeze cementing operations; and iii) mechanical integrity tests so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Artesia 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 well shall be governed by all provisions of Division Order No. R-12255, and Rules 702-706 of the Division Rules and Regulations not inconsistent herewith.

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 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 the subject wells, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

DONE at Santa Fe, New Mexico, on this 17th day of December, 2007.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

A handwritten signature in black ink, appearing to read 'Mark E. Fesmire', is written over the printed name and title.

MARK E. FESMIRE, P.E.
Director

cc: Oil Conservation Division – Artesia