

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division
ADMINISTRATIVE ORDER NO. WFX-766

APPLICATION OF STEPHENS & JOHNSON OPERATING COMPANY TO EXPAND ITS WATERFLOOD PROJECT IN THE DENTON WOLFCAMP POOL IN LEA COUNTY, NEW MEXICO.

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Order No. R-3001, Stephens & Johnson Operating Company has made application to the Division on October 23, 2000 for permission to expand its Denton North Wolfcamp Unit Waterflood Project in the Denton-Wolfcamp Pool in Lea County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

- (1) The application has been filed in due form.
- (2) Satisfactory information has been provided that all offset operators have been duly notified of the application.
- (3) No objection has been received within the waiting period as prescribed by Rule 701(B).
- (4) The proposed injection well(s) 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. Stephens & Johnson Operating Company, be and the same is hereby authorized to inject water into the Wolfcamp formation at approximately 9170 feet to approximately 9300 feet through 2 3/8-inch internally plastic or fiberglass lined tubing set in a packer located within 100 feet of the uppermost injection perforations in the following described well(s) for purposes of secondary recovery to wit:

Denton North Wolfcamp Unit Well No. 633

API No. 30-025-33090 1458 FNL & 1347 FEL, Unit 'G', Section 35 Township 14 South, Range 37 East, NMPM Injection Interval: 9,170 feet to 9,300 feet Maximum Injection Pressure: (.2 psi/ft) 1834

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 well(s), 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(s) or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well(s) to no greater than .2 psi per foot of depth to the uppermost injection perforations.

The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well(s) that such higher pressure will not result in migration of the injected fluid from the Wolfcamp 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 Hobbs district office of the Division of the date and time of the installation of injection equipment and of the 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 well(s) and shall take such steps as may be timely and necessary to correct such failure or leakage.

The subject well(s) shall be governed by all provisions of Division Order No. R-3001, as amended and Rules 702-706 of the Division Rules and Regulations not inconsistent herewith.

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PROVIDED FURTHER THAT, jurisdiction of this cause is hereby retained by the Division for the entry of such further order or orders as may be deemed necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of the operator to conduct operations in a manner which will ensure the protection of fresh water or in a manner inconsistent with the requirements set forth in this order, 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 well(s), 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 8th day of November, 2000.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

SEAL

cc:

Oil Conservation Division - Hobbs Case File No.3340 (Order No. R-3001)

BEFORE THE OIL CONSERVATION COMMISSION OF

NEW MEXICO

IN THE MATTER OF THE APPLICATION OF SOCONY-MOBIL OIL COMPANY, INC. FOR AUTHORITY TO INSTITUTE A WATERFLOOD PROJECT WITHIN THE DENTON NORTH WOLFCAMP UNIT AREA, CONTAINING 2,640 ACRES, MORE OR LESS, IN LEA COUNTY, NEW MEXICO, SAID WATERFLOOD PROJECT TO BE OPERATED IN ACCORDANCE WITH RULE 701 OF THE COMMISSION.

Case No. 3340

APPLICATION

- 1. Socony-Mobil Oil Company, Inc. hereby makes application for authority for the injection of water into the Wolfcamp formation underlying the Denton North Wolfcamp Unit Area in Lea County, New Mexico. Attached to this Application as Exhibit 1 is a plat showing the location of proposed injection wells and the location of all other wells within a radius of two (2) miles of the proposed injection wells and the formation from which said wells are producing. The plat also shows lessees within said two-mile radius.
- 2. There is attached as Exhibit 3 to this Application a typical log of proposed injection wells. Also attached as Exhibits 4, A through L, are diagrammatic sketches of proposed injection wells showing casing strings and other pertinent information as required by Rule 701 of this Commission.
- 3. It is proposed that the interval to be effected by the proposed water injection is that found between the top of the Wolfcamp formation at 9,180 feet subsurface and the base of that formation found at 9,860 feet subsurface, as shown on the electric log dated July 29, 1953 of applicant's T. D. Pope #10 Well, located

660 feet from the East line and 660 feet from the South line of Section 26, Township 14 South, Range 37 East, Lea County, New Mexico.

- 4. Water will be obtained from the Denton Salt Water Disposal System, which presently disposes of produced salt water from the Devonian and the Denton Wolfcamp Reservoirs. Initial injection rate is proposed at a total volume of 18,000 barrels of water per day.
- 5. It is contemplated that additional wells will be converted along the North and the South portion of the Unit area at a later date, for which administrative approval and authorization is requested pursuant to Rule No. 701 E 5 of the Commission.
- 6. A copy of this Application, complete with Exhibits, has been sent to the Office of the State Engineer, Santa Fe, New Mexico.

Applicant respectfully requests that the Commission issue its Order granting approval to the institution of the waterflood project proposed above.

By

Respectfully submitted,

SOCONY-MOBIL OIL COMPANY, INC.

Modrall, Seymour, Sperling, Roehl & Harris
Its Attorneys

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