

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-824

APPLICATION OF STEPHENS & JOHNSON OPERATING COMPANY TO EXPAND ITS WATERFLOOD PROJECT IN THE EAST MILLMAN YATES-SEVEN RIVERS--QUEEN-GRAYBURG-SAN ANDRES POOL IN EDDY COUNTY, NEW MEXICO

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Order No. R-6177, as amended, Stephens & Johnson Operating Company has made application to the Division on October 13, 2006 for permission to expand its East Millman Queen Grayburg Unit Waterflood Project in the East Millman Yates-Seven Rivers-Queen-Grayburg-San Andres Pool in Eddy County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

(1) The application was filed in due form.

(2) Satisfactory information was 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 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.

IT IS THEREFORE ORDERED THAT:

The applicant, Stephens & Johnson Operating Company, is hereby authorized to inject water into the Queen and Grayburg formations (East MillmanYates-Seven Rivers-Queen-Grayburg-San Andres Pool), through the gross interval from approximately 1,656 feet to 2,234 feet using 2-3/8-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:

East Millman Pool Unit Well No. 2 (API No. 30-015-02238)

660' FNL & 660' FWL (Unit D) Section 13, Township 19 South, Range 28 East, NMPM Perforated Interval: 1,656 feet to 2,148 feet Maximum Surface Injection Pressure: 331 psi

East Millman Pool Unit Well No. 4 (API No. 30-015-02239)

660' FSL & 660' FWL (Unit M) Section 13, Township 19 South, Range 28 East, NMPM Perforated Interval: 1,784 feet to 2,214 feet Maximum Surface Injection Pressure: 357 psi

East Millman Pool Unit Well No. 6 (API No. 30-015-10105)

990' FSL & 1980' FWL (Unit N) Section 13, Township 19 South, Range 28 East, NMPM Perforated Interval: 2,115 feet to 2,218 feet Maximum Surface Injection Pressure: 423 psi

East Millman Pool Unit Well No. 1 (API No. 30-015-02219)

 330' FSL & 1980' FWL (Unit N) Section 12, Township 19 South, Range 28 East, NMPM Perforated Interval: 1,776 feet to 2,234 feet Maximum Surface Injection Pressure: 355 psi

East Millman Pool Unit Well No. 2 (API No. 30-015-02220)

330' FSL & 660' FWL (Unit M) Section 12, Township 19 South, Range 28 East, NMPM Perforated Interval: 1,676 feet to 2,212 feet Maximum Surface Injection Pressure: 335 psi

East Millman Pool Unit Well No. 1 (API No. 30-015-02234)

1980' FNL & 1980' FWL (Unit F) Section 13, Township 19 South, Range 28 East, NMPM Perforated Interval: 1,722 feet to 2,123 feet Maximum Surface Injection Pressure: 344 psi

East Millman Pool Unit Well No. 2 (API No. 30-015-02235)

1980' FNL & 660' FWL (Unit E) Section 13, Township 19 South, Range 28 East, NMPM Perforated Interval: 1,733 feet to 2,185 feet Maximum Surface Injection Pressure: 347 psi

East Millman Pool Unit Well No. 4 (API No. 30-015-02231)

2310' FSL & 660' FWL (Unit L) Section 13, Township 19 South, Range 28 East, NMPM Perforated Interval: 1,734 feet to 2,200 feet Maximum Surface Injection Pressure: 347 psi Administrative Order No. WFX-824 Stephens & Johnson Operating Company November 2, 2006 Page 3

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 well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure to 0.2 psi per foot of depth to the uppermost injection perforations or open-hole interval in each of the wells.

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 Queen-Grayburg formation. Such proper showing shall consist of a valid steprate 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: i) of the installation of injection equipment in each of the injection wells; and ii) of the mechanical integrity tests so that these operations 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 wells shall be governed by all provisions of Division Order No. R-6177 and Rules 702-706 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 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 2nd day of November, 2006.

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> STATE OF NEW MEXICO OIL CONSERVATION DIVISION

MARK E. FESMIRE, P.E. Division Director

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cc: Oil Conservation Division – Artesia Bureau of Land Management - Carlsbad Case File No. 6477