



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-816

***APPLICATION OF SOUTHWEST ROYALTIES, INC. TO EXPAND ITS WATERFLOOD
PROJECT IN THE FLYING "M"-SAN ANDRES POOL IN LEA COUNTY, NEW MEXICO.***

**ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION**

Under the provisions of Division Order No. R-6171, Southwest Royalties, Inc. has made application to the Division on September 30, 2005 for permission to expand its Flying "M" San Andres Unit Waterflood Project in the Flying "M"-San Andres Pool in Lea 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 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.
- (6) The application should be approved.

IT IS THEREFORE ORDERED THAT:

The applicant, Southwest Royalties, Inc. is hereby authorized to inject water into the San Andres formation, Flying "M"-San Andres Pool, through the gross interval from 4,327 feet to 4,412 feet using 2-3/8-inch plastic-lined tubing set in a packer located within 100 feet of the uppermost injection perforation in each of the following-described wells for purposes of secondary recovery to

wit:

McGuffin Well No. 2
API No. 30-025-24693
1980' FNL & 660' FWL, Unit E,
Section 29, Township 9 South, Range 33 East
Injection Interval: 4,327'-4,396' Perforated
Maximum Surface Injection Pressure: 865 PSIG

Flying "M" San Andres Unit Well No. 241
API No. 30-025-24692
1980' FSL & 1980' FWL, Unit K,
Section 29, Township 9 South, Range 33 East
Injection Interval: 4,342'-4,412' Perforated
Maximum Surface Injection Pressure: 868 PSIG

Flying "M" San Andres Unit Well No. 342
API No. 30-025-29488
660' FSL & 660' FWL, Unit M,
Section 29, Township 9 South, Range 33 East
Injection Interval: 4,333'-4,381' Perforated
Maximum Surface Injection Pressure: 867 PSIG

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 in each well shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

The casing-tubing annulus in each well 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 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 San Andres 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 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-6171, 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 26th day of October, 2005.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



MARK E. FESMIRE, P.E.
Director

cc: Oil Conservation Division – Hobbs
Bureau of Land Management-Carlsbad
State Land Office-Oil & Gas Division