



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

ADMINISTRATIVE ORDER NO. PMX-194

***APPLICATION OF SOUTHWEST ROYALTIES, INC. TO EXPAND ITS PRESSURE
MAINTENANCE 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-3229, Southwest Royalties, Inc. has made application to the Division on February 23, 1998 for permission to expand its Flying "M" San Andres Unit Pressure Maintenance Project in the Flying 'M' San Andres 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 wells are eligible for conversion to injection under the terms of Rule 701.
- (5) The proposed expansion of the above referenced pressure maintenance 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., be and the same is hereby authorized to inject water into the San Andres formation at approximately 4476 feet to approximately 4550 feet through 2 3/8-inch plastic lined tubing set in a packer located within 100 feet of the uppermost injection perforation in the wells described in Exhibit 'A' attached hereto for purposes of pressure maintenance.

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 a pressure limiting device which will limit the wellhead pressure on the injection wells to no more than .2 psi per foot to the uppermost injection perforation or open-hole interval.

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.

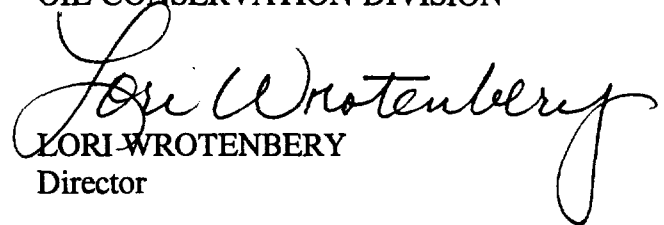
The subject wells shall be governed by all provisions of Division Order No. R-3229, as amended and Rules 702-706 of the Division Rules and Regulations not inconsistent herewith.

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 20th day of April, 1998.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


LORI WROTENBERY
Director

S E A L

LW/BES/lv

cc: Oil Conservation Division - Hobbs
Case File No.3555 ✓

EXHIBIT "A"
DIVISION ORDER NO. PMX-194
Flying 'M' San Andres Unit Pressure Maintenance Project
APPROVED INJECTION WELLS

<i>Well Name</i>	<i>Well No.</i>	<i>Location</i>	<i>S-T-R</i>	<i>Injection Interval</i>	<i>Packer Depth</i>	<i>Maximum Injection Pressure</i>
FL YING 'M' SAN ANDRES UNIT	6-1	2121' FNL & 1839' FWL	F-16-9S-33E	4484' – 4550'	4390'	897 psig
FL YING 'M' SAN ANDRES UNIT	17-1	2307' FSL & 2310' FEL	J-21-9S-33E	4476' – 4515'	4390'	895 psig
FL YING 'M' SAN ANDRES UNIT	27-1	2120' FSL & 2120' FEL	J-28-9S-33SE	4498' – 4530'	4400'	900 psig
FL YING 'M' SAN ANDRES UNIT	26-1	520' FNL & 2120' FEL	B-28-9S-33E	4492' – 4521'	4395'	898 psig
FL YING 'M' SAN ANDRES UNIT	25-1	850' FSL & 1987' FWL	N-27-9S-33E	4476' – 4522'	4380'	895 psig

All wells in Lea County, New Mexico



ADMINISTRATIVE ORDER NO. PMX-197

***APPLICATION OF SOUTHWEST ROYALTIES, INC. TO EXPAND ITS PRESSURE
MAINTENANCE 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-3229, Southwest Royalties, Inc. has made application to the Division on May 21, 1998 for permission to expand its Flying "M" San Andres Unit Pressure Maintenance Project in the Flying 'M' San Andres 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 wells are eligible for conversion to injection under the terms of Rule 701.
- (5) The proposed expansion of the above referenced pressure maintenance 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., be and the same is hereby authorized to inject water into the San Andres formation at approximately 4333 feet to approximately 4381 feet through 2 3/8-inch plastic lined tubing set in a packer located within 100 feet of the uppermost injection perforation in the following described wells purposes of pressure maintenance, to wit:

Flying 'M' Unit Well No.34-2
660' FSL & 660' FWL (Unit Letter 'M')
Injection Interval: 4333 feet to 4381 feet
Packer Setting: 4250 feet
Maximum Injection Pressure: 867 psig

McGuffin Well No.2
1980' FNL & 660' FWL (Unit Letter 'E')
Injection Interval: 4340 feet to 4364 feet
Packer Setting: 4250 feet
Maximum Injection Pressure: 868 psig

Located in Section 29, Township 9 South, Range 33 East, NMPM, 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 a pressure limiting device which will limit the wellhead pressure on the injection wells to no more than .2 psi per foot to the uppermost injection perforation or open-hole interval.

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-3229, as amended 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 30th day of July, 1998.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



LORI WROTENBERY
Director

S E A L

LW/BES/lv

cc: Oil Conservation Division - Hobbs
Case File No.3555 /