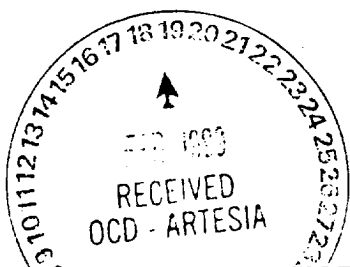




NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

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



CORRECTED ADMINISTRATIVE ORDER NO. WFX-746

***APPLICATION OF NORTHLAND OPERATING COMPANY TO EXPAND ITS
WATERFLOOD PROJECT IN THE CAPROCK-QUEEN POOL IN CHAVES
COUNTY, NEW MEXICO.***

**ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION**

Under the provisions of Division Order R-1128, as amended, Northland Operating Company has made application to the Division on November 30, 1998 for permission to reinstate and expand its Drickey Queen Sand Unit Waterflood Project in the Caprock-Queen Pool in Chaves 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 waterflood project will not cause waste nor impair correlative rights.
- (6) The application should be approved.

IT IS THEREFORE ORDERED THAT:

The applicant, Northland Operating Company, be and the same is hereby authorized to inject water into the Queen formation at approximately 3052 feet (true vertical depth) through 3 1/2-inch plastic lined tubing set in a packer located as deep as possible in the vertical section of the hole (approximately 2800 feet) in the following described wells for purposes of secondary recovery to wit:

Drickey Queen Unit Well No.54
API No. 30-005-21156
200' FSL & 330' FEL – Unit 'P'
Injection Interval: 3052 feet – TVD
Lateral Open Hole Completion from
Approximately 3500 feet to 5990 feet MVD
Packer Setting: 2800 feet
Maximum Injection Pressure: 610 psig

Drickey Queen Unit Well No.56
API No. 30-005-21153
140' FNL & 380' FWL – Unit 'D'
Injection Interval: 3052 feet – TVD
Lateral Open Hole Completion from
Approximately 3500 feet to 5990 feet MVD
Packer Setting: 2800 feet
Maximum Injection Pressure: 610 psig

Drickey Queen Unit Well No.55
API No. 30-005-21157
140' FSL & 330' FWL – Unit 'M'
Injection Interval: 3052 feet – TVD
Lateral Open Hole Completion from
Approximately 3500 feet to 5990 feet MVD
Packer Setting: 2800 feet
Maximum Injection Pressure: 610 psig

Drickey Queen Unit Well No.57
API No. 30-005-21154
140' FNL & 330' FEL – Unit 'A'
Injection Interval: 3052 feet – TVD
Lateral Open Hole Completion from
Approximately 3500 feet to 5990 feet MVD
Packer Setting: 2800 feet
Maximum Injection Pressure: 610 psig

All wells located in Section 15, Township 14 South, Range 31 East, Chaves County, New Mexico.

IT IS FURTHER ORDERED THAT:

Prior to commencing with drilling operations, the operator shall obtain all necessary permits for locating the wells and horizontal completions within the subject wellbores.

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, 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 on the injection wells to no greater than .2 psi per foot of depth to the true vertical depth of the completion.

The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluid from the Grayburg 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 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 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-1128, 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 11th day of February, 1999.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



LORI WROTENBERY
Director

S E A L

LW/BES/kv

cc: Oil Conservation Division - Artesia /
Case File No.1356