



# 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-768*

***APPLICATION OF MELROSE OPERATING COMPANY TO EXPAND ITS WATERFLOOD  
PROJECT IN THE ARTESIA QUEEN-GRAYBURG-SAN ANDRES POOL IN EDDY COUNTY,  
NEW MEXICO***

**ADMINISTRATIVE ORDER  
OF THE OIL CONSERVATION DIVISION**

Under the provisions of Division Orders No. R-3311, Melrose Operating Company has made application to the Division on October 16, 2000 for permission to expand its Artesia Unit Waterflood Project in the Artesia Queen-Grayburg-San Andres Pool in Eddy 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, Melrose Operating Company be and the same is hereby authorized to inject water into the Queen, Grayburg and San Andres formations at approximately 2,082 feet to approximately 2,467 feet through 2 3/8-inch plastic 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:

**Artesia Unit Well No. 23**

API No. 30-015-01746  
1980 FSL & 660 FWL, Unit 'L', Section 35  
Township 17 South, Range 28 East, NMPM  
Injection Interval: 2,082 feet to 2,378 feet (Perforated)  
Maximum Injection Pressure: (.2 psi/ft) 416 psig

**Artesia Unit Well No. 29**

API No. 30-015-01742  
990 FSL & 1650 FWL, Unit 'N', Section 35  
Township 17 South, Range 28 East, NMPM  
Injection Interval: 2,454 feet to 2,467 feet (Perforated)  
Maximum Injection Pressure: (.2 psi/ft) 491 psig

Eddy County, New Mexico.

IT IS FURTHER ORDERED THAT:

Prior to commencing injection operations into the subject well(s), the Artesia Unit Well No. 12, located 1980 feet from the North line and 660 feet from the West line of Section 35, Township 17 South, Range 28 East, NMPM, the operator shall cement squeeze the production casing from the top of cement, as determined by a cement bond log, to the surface.

Prior to commencing injection operations into the subject well(s), the Artesia Unit Well No. 13, located 1980 feet from the North line and 1980 feet from the West line of Section 35, Township 17 South, Range 28 East, NMPM, the operator shall either provide evidence that the surface casing is adequately cemented so as to effectively isolate and protect fresh water, or cement squeeze the production casing from the top of cement, as determined by a cement bond log, to the surface.

Prior to commencing injection operations into the subject well(s), the Empire Abo Unit G Well No. 38, located 2310 Feet from the South Line and 1650 Feet from the West Line of Section 35, Township 17 South, Range 28 East, NMPM, the operator shall either provide evidence that the top of cement in the 5 ½ production casing is above approximately 1700 feet, or the operator shall cement squeeze this well to obtain such results.

The Division's Artesia District Office shall be notified of the date and time that the cement bond logs are to be run. Copies of the logs shall be submitted to the Artesia District Office.

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 systems shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well(s) to .2 psi per foot of depth to the uppermost injection perforation.

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 Queen, Grayburg and San Andres formations. 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 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 Orders No. R-3311 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 well(s), provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

*Administrative Order WFX-768*

*Melrose Operating Company*

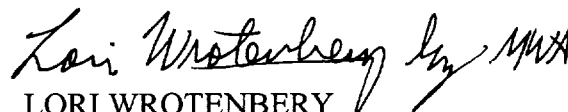
*November 28, 2000*

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DONE at Santa Fe, New Mexico, on this 28<sup>th</sup> day of November, 2000.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

  
LORI WROTENBERY  
Director

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LW/MWA/kv

cc: Oil Conservation Division - Artesia  
Case File No. 3653 (Order No. R-3311) /