



**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. WFX-760*

***APPLICATION OF CHEVRON U.S.A. PRODUCTION COMPANY TO EXPAND ITS  
WATERFLOOD PROJECT IN THE ARROWHEAD-GRAYBURG POOL IN LEA  
COUNTY, NEW MEXICO***

**ADMINISTRATIVE ORDER  
OF THE OIL CONSERVATION DIVISION**

Under the provisions of Division Order No. R-9483, Chevron U.S.A. Production Company has made application to the Division on April 28, 2000 for permission to expand its Arrowhead Grayburg Waterflood Project in the Arrowhead Grayburg 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 waterflood project will not cause waste nor impair correlative rights.
- (6) The application should be approved.

**IT IS THEREFORE ORDERED THAT:**

The applicant, Chevron U.S.A. Production Company be and the same is hereby authorized to inject water into the Grayburg formation at approximately 3,436 feet to approximately 3,965 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 for purposes of secondary recovery to wit:

**AGU Well No. 133**

API No. 30-025-04939

1980 FSL & 660 FWL, Unit 'L'

Section 36, Township 21 South, Range 36 East, NMPM

Injection Interval: 3,755 feet to 3,800 feet

Maximum Injection Pressure: (.2 psi/ft) 751 psig

**AGU Well No. 151**

API No. 30-025-08738

660 FNL & 1980 FEL, Unit 'B'

Section 2, Township 22 South, Range 36 East, NMPM

Injection Interval: 3,436 feet to 3,965 feet

Maximum Injection Pressure: (.2 psi/ft) 687 psig

**AGU Well No. 159**

API No. 30-025-08723

1980 FNL & 1980 FWL, Unit 'F'

Section 1, Township 22 South, Range 36 East, NMPM

Injection Interval: 3,670 feet to 3,835 feet

Maximum Injection Pressure: (.2 psi/ft) 734 psig

Located in 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 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 uppermost injection perforations or casing shoe.

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 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-9483 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 15<sup>th</sup> day of May, 2000.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION



LORI WROTENBERY  
Director

LW/MWA/kv

cc: Oil Conservation Division --Hobbs  
Case File No. 10260