



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

GARREY CARRUTHERS  
GOVERNOR

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87504  
(505) 827-5800

*AMENDED ADMINISTRATIVE ORDER NO. PMX-157*

*APPLICATION OF SHELL WESTERN EXPLORATION AND PRODUCTION INC. TO  
EXPAND ITS PRESSURE MAINTENANCE PROJECT IN THE HOBBS GRAYBURG SAN  
ANDRES POOL IN LEA COUNTY, NEW MEXICO*

**ADMINISTRATIVE ORDER  
OF THE OIL CONSERVATION DIVISION**

Under the provisions of Division Order No. R-6199, Shell Western Exploration and Production, Inc. has made application to the Division on June 8, 1990 for permission to expand its North Hobbs Grayburg San Andres Unit Pressure Maintenance Project in the Hobbs Grayburg San Andres Pool in Lea County, New Mexico.

NOW, on this 30th day of July, 1990, 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 is eligible for conversion to water 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.

*Amended Administrative Order PMX-157  
Shell Western Exploration & Production, Inc.  
August 16, 1990  
Page 2*

**IT IS THEREFORE ORDERED THAT:**

The applicant, Shell Western Exploration and Production, Inc., be and the same is hereby authorized to inject water into the Grayburg San Andres formation at approximately 4150 feet to approximately 4300 feet through 2 7/8-inch plastic lined tubing set in a packer at approximately 4100 feet in the following described well for purposes of pressure maintenance to wit:

North Hobbs Unit Section 27 Well No. 221  
2267' FNL & 505' FWL (Unit E) - Surface Location  
2635' FNL & 1350' FWL (Unit F) - Bottomhole Location  
Section 27, Township 18 South, Range 38 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 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 well to no more than 830 psi or 0.2 psi/ft. of depth to the uppermost perforation.

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 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 test so that the same may be inspected and witnessed.

*Amended Administrative Order PMX-157  
Shell Western Exploration & Production, Inc.  
August 16, 1990  
Page 3*

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 well and shall take such steps as may be timely and necessary to correct such failure or leakage.

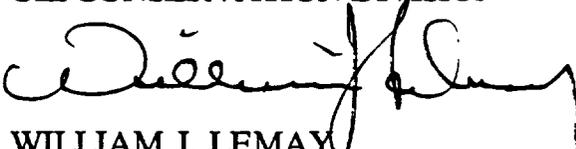
The subject well shall be governed by all provisions of Division Order No. R-6199 and Rules 701-708 of the Division Rules and Regulations not inconsistent herewith.

PROVIDED FURTHER THAT, jurisdiction of this cause is hereby retained by the Division for the entry of such further order or orders as may be deemed necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of the operator to conduct operations in a manner which will ensure the protection of fresh water or in a manner inconsistent with the requirements set forth in this order, the Division may, after notice and hearing, terminate the injection authority granted herein.

The operator shall submit monthly progress reports of the project in accordance with Rules 706 and 1115 of the Division Rules and Regulations.

Approved at Santa Fe, New Mexico, on this 30th day of July, 1990.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

  
WILLIAM J. LEMAY  
Director

S E A L