



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



BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

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

ADMINISTRATIVE ORDER NO. WFX-635

*APPLICATION OF GREENHILL PETROLEUM CORPORATION TO EXPAND ITS
WATERFLOOD PROJECT IN THE GRAYBURG - SAN ANDRES POOL IN LEA
COUNTY, NEW MEXICO*

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Order No. R-3786, Greenhill Petroleum Corporation has made application to the Division on May 26, 1992, for permission to expand its Eunice Monument Unit Waterflood Project in the Grayburg - 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 well is eligible for conversion to injection under the terms of Rule 701.
- (5) The proposed expansion of the above referenced Eunice Monument Unit Waterflood Project will not cause waste nor impair correlative rights.
- (6) The application should be approved.

IT IS THEREFORE ORDERED THAT:

The applicant, Greenhill Petroleum Corporation, be and the same is hereby authorized to inject water into the Grayburg and San Andres formations at approximately 3668 feet to approximately 3957 feet through 2 3/8 inch plastic line tubing set in a packer located within 100 feet of the uppermost injection perforations or casing shoe in the following wells shown on Exhibit "A" attached hereto for purposes of secondary recovery to wit.

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 in each well 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/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 wells that such higher pressure will not result in migration of the injected fluid from the Grayburg - 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 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.

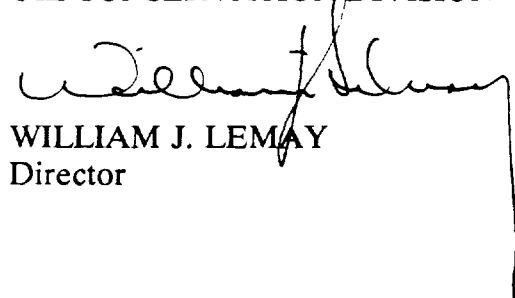
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The subject well shall be governed by all provisions of Division Order No. R-3786, as amended and Rules 702-706 of the Division Rules and Regulations not inconsistent herewith.

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.

DONE at Santa Fe, New Mexico, on this 24th day of June, 1992.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

A handwritten signature in dark ink, appearing to read 'William J. Lemay', is written over the printed name and title. The signature is fluid and cursive, with a long horizontal stroke extending to the right.

WILLIAM J. LEMAY
Director

S E A L

jc/

cc: Oil Conservation Division - Hobbs

EXHIBIT "A"
DIVISION ORDER NO. WFX-635
GRAYBURG - SAN ANDRES UNIT
APPROVED INJECTION WELLS

<i>Well Number</i>	<i>Location</i>	<i>Unit</i>	<i>S-T-R</i>	<i>Injection Perforations or Openhole Interval</i>	<i>Packer Depth</i>	<i>Tubing Size</i>	<i>Injection Pressure</i>
EMU No. 21	2310' FSL & 330' FWL	L	19-20S-37E	3668' to 3957' OH	3568'	2 3/8"	734 PSIG
EMU No. 28	330' FSL & 330' FWL	M	19-20S-37E	3710' to 3930' OH	3610'	2 3/8"	742 PSIG

Located in Lea County, New Mexico