



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

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SANTA FE, NEW MEXICO 87504
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ORDER NO. WFX-578

APPLICATION OF MURPHY OPERATING CORPORATION TO EXPAND ITS
WATERFLOOD PROJECT IN THE TODD LOWER SAN ANDRES ASSOCIATED POOL
IN ROOSEVELT COUNTY, NEW MEXICO

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Order No. R-6677, Murphy Operating Corporation has made application to the Division on January 30, 1989 for permission to expand its Todd Lower San Andres Unit Waterflood Project in the Todd Lower San Andres Associated Pool in Roosevelt County, New Mexico.

NOW, on this 22nd day of February, 1989, 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 water 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, Murphy Operating Corporation, be and the same is hereby authorized to inject water into the Lower San Andres formation at approximately 4235 feet to approximately 4286 feet (or the correlative interval) through 2 3/8-inch epoxy lined tubing set in a packer located within 100 feet of the uppermost injection perforation in the wells shown on Exhibit "A" attached to this order 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.

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Prior to commencing injection operations into the wells, 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 in each well 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 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 wells that such higher pressure will not result in migration of the injected fluid from the 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 disposal equipment and of the mechanical integrity test 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-6677 and Rules 702-706 of the Division Rules and Regulations not inconsistent herewith.

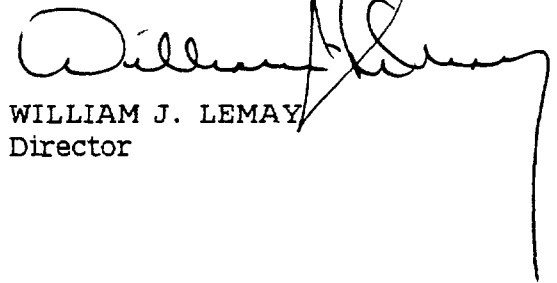
PROVIDED FURTHER THAT, jurisdiction of this cause is hereby retained by the Division for such further order or orders as any seem necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of the operator to conduct operations in a manner which will ensure 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.

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The operator shall submit monthly reports of the disposal operations in accordance with Rule 706 and 1120 of the Division Rules and Regulations.

Approved at Santa Fe, New Mexico, on this 22nd day of February, 1989.

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A handwritten signature in black ink, appearing to read 'William J. Lemay', is written over the printed name and title. The signature is fluid and cursive, with a long vertical line extending downwards from the end of the signature.

WILLIAM J. LEMAY
Director

S E A L

EXHIBIT "A"
MURPHY OPERATING CORPORATION
WFX-578

<u>WELL NAME AND LOCATION</u>	<u>MAXIMUM SURFACE INJECTION PRESSURE</u>
TLSAU Well No. 31-5 1980 FNL & 661 FEL (Unit E) Section 31, T-7 South, R-36 East	849 PSIG
TLSAU Well No. 31-12 1980 FSL & 608 FWL (Unit L) Section 31, T-7 South, R-36 East	854 PSIG
TLSAU Well No. 35-7 1980 FNL & 1980 FEL (Unit G) Section 35, T-7 South, R-35 East	850 PSIG
TLSAU Well No. 35-9 1980 FSL & 660 FEL (Unit I) Section 35, T-7 South, R-35 East	857 PSIG
TLSAU Well No. 36-2 990 FNL & 2310 FEL (Unit B) Section 36, T-7 South, R-35 East	847 PSIG
TLSAU Well No. 36-5 1980 FNL & 660 FWL (Unit E) Section 36, T-7 South, R-35 East	850 PSIG
TLSAU Well No. 36-9 1980 FSL & 660 FEL (Unit I) Section 36, T-7 South, R-35 East	861 PSIG
TLSAU Well No. 36-10 2110 FSL & 1980 FEL (Unit J) Section 36, T-7 South, R-35 East	855 PSIG

All in Roosevelt County, New Mexico.