



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

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

ORDER NO. WFX-571

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 April 27, 1988 for permission to expand its Todd Lower San Andres Unit Waterflood Project in the Todd Lower San Andres Pool in Roosevelt County, New Mexico.

NOW, on this 26th day of May, 1988, 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 San Andres formation at approximately 4200 feet to approximately 4350 feet through 2 3/8 or 2 1/16-inch ceramic lined tubing set in a packer located approximately within 100 feet of the uppermost injection perforations in the wells listed on Exhibit "A" attached to this order for the purposes of secondary recovery.

IT IS FURTHER ORDERED:

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 pressured 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 .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.

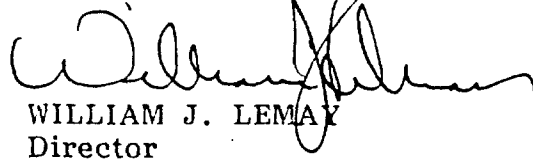
The operator shall immediately notify the supervisor of the Hobbs district office of the Division of the failure of tubing, casing, or packer in said wells and shall take such steps as may be timely and necessary to correct such failure or leakage.

The subject wells shall be governed by all provisions of Division Order No. R-6677 and Rule 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 may 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.

DONE at Santa Fe, New Mexico, on this 26th day of May, 1988.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY
Director

S E A L

EXHIBIT "A"

ORDER NO. WFX-571

WELL NAME AND NUMBER	FOOTAGE LOCATION	LOCATION	MAXIMUM SURFACE INJECTION PRESSURE
TLSAU Well No. 29-15	660' FSL & 1980' FEL	O-29-T7S-R36E	853
TLSAU Well No. 30- 2	660' FNL & 1980' FEL	B-30-T7S-R36E	848
TLSAU Well No. 30- 6	1980' FNL & 1873' FWL	F-30-T7S-R36E	846
TLSAU Well No. 30-12	1980' FSL & 611' FWL	L-30-T7S-R36E	846
TLSAU Well No. 31-11	2120' FSL & 2023' FWL	K-31-T7S-R36E	876
TLSAU Well No. 32- 7	1780' FNL & 1980' FEL	G-32-T7S-R36E	864
TLSAU Well No. 35- 1	990' FNL & 990' FEL	A-35-T7S-R35E	847
TLSAU Well No. 35- 5	1980' FNL & 660' FWL	E-35-T7S-R35E	856
TLSAU Well No. 36- 1	990' FNL & 990' FEL	A-36-T7S-R35E	847