STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS
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ORDER NO. WFX-594

APPLICATION OF HIXON DEVELOPMENT COMPANY TO EXPAND ITS WATERFLOOD PROJECT IN THE BISTI LOWER GALLUP OIL POOL IN SAN JUAN COUNTY, NEW MEXICO

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Order No. R-6172, Hixon Development Company has made application to the Division on February 9, 1990, for permission to expand its Carson Unit Waterflood Project in the Bisti-Lower Gallup Oil Pool in San Juan County, New Mexico.

NOW, on this 15th day of March, 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 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, Hixon Development Company, be and the same is hereby authorized to inject water into the Lower Gallup formation through the gross perforated interval from approximately 4860 feet to approximately 4984 feet through 2 3/8-inch plastic lined tubing set in a packer located approximately within 100 feet of the uppermost injection perforation in the wells described in Exhibit A attached to this order.

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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 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 as described above.

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 Lower Gallup 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 Aztec 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.

The operator shall immediately notify the supervisor of the Aztec 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-6172 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.

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Approved at Santa Fe, New Mexico, on this 15th day of March, 1990.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

WILLIAM J. LEMAY

Director

SEAL

Exhibit "A" Administrative Order WFX-594 Hixon Development Company

WELL AND LOCATION	MAXIMUM INJECTION SURFACE PRESSURE
Carson Unit Well No. 21-13 660' FNL & 1880' FWL (Unit C) Section 13, T-25 North, R-12 West, NMPM	972 PSIG
Carson Unit Well No. 23-13 1980' FSL & 1980' FWL (Unit K) Section 13, T-25 North, R-12 West, NMPM	974 PSIG
Carson Unit Well No. 24-13 660' FSL & 1980' FWL (Unit N) Section 13, T-25 North, R-12 West, NMPM	973 PSIG

All locations in San Juan County, New Mexico.