

## ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

**OIL CONSERVATION DIVISION** 

GARREY CARRUTHERS GOVERNOR POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEX-CO 87504 (505) 827-5800

#### ORDER NO. WFX-587

APPLICATION OF HONDO OIL AND GAS COMPANY TO EXPAND ITS WATERFLOOD PROJECT IN THE GRAYBURG JACKSON SEVEN RIVERS QUEEN GRAYBURG SAN ANDRES POOL IN EDDY COUNTY, NEW MEXICO

#### ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Order No. R-2268 as amended, Hondo Oil and Gas Company has made application to the Division on July 26-August 2, 1989 for permission to expand its Keel West Waterflood Project in the Grayburg Jackson Seven Rivers Queen Grayburg San Andres Pool in Eddy County, New Mexico.

NOW, on this 26th day of September, 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, Hondo Oil and Gas Company, be and the same is hereby authorized to inject water into the Grayburg San Andres formation through 2 or 2 3/8-inch plastic lined tubing set in a packer located as near as practical to the injection perforations in the wells shown on Exhibit "A" attached to this order for purposes of secondary recovery.

#### IT IS FURTHER ORDERED THAT:

Administrative Order WFX-587 Hondo Oil and Gas Company September 26, 1989 Page 2

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 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 shown on Exhibit "A".

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 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 Artesia 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 Artesia 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-2268 and Rules 701-708 of the Division Rules and Regulations not inconsistent herewith.

<u>PROVIDED FURTHER THAT</u>, 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. Administrative Order WFX-587 Hondo Oil and Gas Company September 26, 1989 Page 3

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

Approved at Santa Fe, New Mexico, on this 26th day of September, 1989.

STATE OF NEW MEXICO OIL CONSERVATION DIX

WILLIAM J. LEMAY Director

SEAL

Exhibit "A" Hondo Oil and Gas Company WFX-587

Injection Pressure 688 PSIG 696 PSIG 671 PSIG 668 PSIG Surface Maximum Injection Interval 3439-3973 3479-4046 3353-3937 3341-3802 (Feet) G-03-17S-31E A-03-17S-31E 0-10-17S-31E I-10-17s-31E U-S-T-R1980' FNL - 1980' FEL 660' FNL - 330' FEL 660' FSL - 1980' FEL 1980' PSL - 660' FEL **Footage Location** ĸ.\_ H.E. West "A" Well No. 15 H.E. West "B" Well No. 20 H.E. West "B" Well No. 34 H.E. West "A" Well No. 11 Well Name and Location

### ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



GARREY CARRUTHERS

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

#### ORDER NO. WFX-585

APPLICATION OF HONDO OIL AND GAS COMPANY TO EXPAND ITS WATERFLOOD PROJECT IN THE GRAYBURG JACKSON SEVEN RIVERS QUEEN GRAYBURG SAN ANDRES POOL IN EDDY COUNTY, NEW MEXICO

#### ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Order No. R-2268, as amended, Hondo Oil and Gas Company has made application to the Division on July 25-August 3, 1989 for permission to expand its Keel West Waterflood Project in the Grayburg Jackson Seven Rivers Queen Grayburg San Andres Pool in Eddy County, New Mexico.

NOW, on this 31st day of August, 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, Hondo Oil and Gas Company, be and the same is hereby authorized to inject water into the Grayburg San Andres formation through 2 or 2 3/8-inch plastic lined tubing set in a packer located as near as practical to the injection perforations in the wells shown on Exhibit "A" attached to this order for purposes of secondary recovery.

#### IT IS FURTHER ORDERED THAT:

Administrative Order WFX-585 Hondo Oil and Gas Company September 25, 1989 Page 2

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 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 shown on Exhibit "A".

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 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 Artesia 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 Artesia 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-2268 and Rules 701-708 of the Division Rules and Regulations not inconsistent herewith.

<u>PROVIDED FURTHER THAT</u>, 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. Administrative Order WFX-385 Hondo Oil and Gas Company September 25, 1989 Page C

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

Approved at Santa Fe, New Mexico, on this 31st day of August, 1989.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

•

WILLIAM J. LEMAY Director

SEAL

# Exhibit "A" Hondo Oil and Gas Company WFX-585

Well Name and Location		Footage Location	U-S-T-R	Injection Interval (Feet)	Maximum Surface Injection Pressure
H. E. West "B" Well No. 12		1980' FNL - 1980' FEL	G-09-17S-31E	3260 - 3628	628 652 PSIG
H. E. West "B" Well No.	13	1980' FNL - 660' FWL	E-10-17S-31E	3312 - 3696	662 PSIG
H. E. West "A" Well No. 14	. 14	720' FSL - 1980' FEL	0-04-17S-31E	3214 - 3826	643 PSIG
H. E. West "B" Well No.	15	1980' FNL - 1980' FEL	G-10-17S-31E	3368 - 3916	674 PSIG
H. E. West "B" Well No.	. 16	660' FSL - 660' FWL	M-03-17S-31E	3333 - 3742	667 PSIG
H. E. West "B" Well No.	. 18	660' FSL - 1980' FEL	0-03-17S-31E	3386 - 3994	677 PSIG
H. E. West "B" Well No	No. 21	660' FSL - 660' FWL	M-10-17S-31E	3294 - 3917	659 PSIG
H. E. West "B" Well No	No. 22Y	660' FSL - 1990' FEL	0-09-17S-31E	3239 - 3856	648 PSIG
H. E. West "B" Well No	No. 43	660' FSL - 760' FWL	M-09-17S-31E	3141 - 3673	628 PSIG

.