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-634

APPLICATION OF CHEVRON U.S.A., INC. TO EXPAND ITS WATERFLOOD PROJECT IN THE ARROWHEAD POOL IN LEA COUNTY, NEW MEXICO

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Order No. R-9483, Chevron U.S.A., Inc. has made application to the Division on April 10, 1992, for permission to expand its Arrowhead Grayburg Unit Waterflood Project in the Arrowhead 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 wells are eligible for conversion to injection under the terms of Rule 701.

(5) The proposed injection wells are in lieu of previously proposed new-drill injection wells approved under the provisions of Division Order No. R-9483, shown on Exhibit "B" attached hereto.

(6) The proposed expansion of the above referenced Arrowhead Grayburg Unit Waterflood Project will not cause waste nor impair correlative rights.

(7) The application should be approved.

Administrative Order WFX-634 Chevron U.S.A., Inc. June 8, 1992 Page 2

IT IS THEREFORE ORDERED THAT:

The applicant, Chevron U.S.A., Inc., be and the same is hereby authorized to inject water into the Grayburg and San Andres formations at approximately 3680 feet to approximately 3900 feet through 2 3/8 inch plastic lined tubing set in a packer located within 100 feet of the uppermost injection perforations or openhole interval in the following wells shown on Exhibit "A" attached hereto for purposes of secondary recovery to wit.

IT IS FURTHER ORDERED THAT:

The proposal to drill the new injection wells, shown on Exhibit "B" attached hereto, and previously approved by Division Order No. R-9483, is hereby placed in abeyance until further notice. All other provisions of Division Order No. 9483 will remain in effect.

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 .2 psi/ft. of depth to the uppermost perforation or openhole interval.

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 and San Andres formations. Such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office. Administrative Order WFX-634 Chevron U.S.A., Inc. June 8, 1992 Page 3

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 well 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-9483, as amended and Rules 702-706 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.

DONE at Santa Fe, New Mexico, on this 8th day of June, 1992.

STATE OF NEW MEXICO **OIL CONSERVATION DIVISION** WILLIAM J. LEMA Director

SEAL

jc/

cc: Oil Conservation Division - Hobbs Case File No. 10260

EXHIBIT "A" DIVISION ORDER NO. WFX-634 ARROWHEAD GRAYBURG UNIT APPROVED INJECTION WELLS

736 PSIG	2 3/8"	3580'	3680' to 3900'	12-22S-36E	E	2310' FNL & 330' FWL	AGU No. 194 WIC
760 PSIG	2 3/8"	3700'	3800' to 3900'	36-21S-36E	G	1650' FNL & 2013' FEL	AGU No. 128 WIC
Injection Pressure	Tubing Size	Packer Depth	Injection Perforations or Openhole Interval	S-T-R	Unit	Location	Well Number
					· · ·		

Lea County, New Mexico

EXHIBIT "B" DIVISION ORDER NO. WFX-634 PROPOSED NEW-DRILL INJECTION WELL LOCATIONS IN ABEYANCE

AGU No. 194	AGU No. 128	Proposed Well Number
SE/4 NE/4	SE/4 NE/4	Location
т	G	Unit
12-22S-36E	36-21S-36E	S-T-R

Lea County, New Mexico