# STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

CASE NO. 9896 ORDER NO. R-9550

APPLICATION OF SIETE OIL AND GAS CORPORATION FOR A WATERFLOOD PROJECT, EDDY COUNTY, NEW MEXICO

### ORDER OF THE DIVISION

#### BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on March 21, 1990 at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this <u>22nd</u> day of July, 1991, the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

### FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) The applicant, Siete Oil and Gas Corporation, seeks authority to institute a pilot waterflood project on its Scottsdale Federal Lease comprising the NE/4 of Section 27, Township 18 South, Range 31 East, NMPM, Eddy County, New Mexico, by the injection of produced water into the Penrose interval of the Shugart Yates-Seven Rivers-Queen-Grayburg Pool through the perforated interval from approximately 3639 feet to 3707 feet in its Scottsdale Federal Well No. 2 located 330 feet from the North line and 990 feet from the East line (Unit A) of Section 27.
- (3) The wells in the proposed project area are in an advanced state of depletion and should therefore be properly classified as "stripper wells."
- (4) The proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

- (5) The operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape into other formations or onto the surface from injection, production or plugged and abandoned wells.
- (6) Injection should be accomplished through 2 3/8-inch plastic-lined tubing installed in a packer set at approximately 3600 feet; the casing-tubing annulus should be filled with an inert fluid; and a pressure gauge or approved leak-detection device should be attached to the annulus in order to determine leaks in the casing, tubing or packer.
- (7) Prior to commencing injection operations, the casing of the subject well should be pressure-tested throughout the interval, from the surface down to the proposed packer-setting depth, to assure integrity of such casing.
- (8) At the applicant's request, the injection well or injection pressurization system should be so equipped as to limit injection pressure at the wellhead to no more than 520 psi.
- (9) The Director of the Division should be authorized to administratively approve an increase in the injection pressure upon a proper showing by the operator that such higher pressure will not result in migration of the injected waters from the Penrose interval of said Shugart Pool.
- (10) The operator should give advance notification to 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 pressure-test in order that the same may be witnessed.
- (11) The subject application should be approved and the project should be governed by the provisions of Rules 701 through 708 of the Division Rules and Regulations.

### IT IS THEREFORE ORDERED THAT:

(1) The applicant, Siete Oil and Gas Corporation, is hereby authorized to institute a pilot waterflood project on its Scottsdale Federal Lease, as described below, by the injection of water into the Penrose interval of the Shugart Yates-Seven Rivers-Queen-Grayburg Pool through the perforated interval from approximately 3639 feet to 3707 feet in its Scottsdale Federal Well No. 2 located 330 feet from the North line and 990 feet from the East line (Unit A) of Section 27, Township 18 South, Range 31 East, NMPM, Eddy County, New Mexico:

# EDDY COUNTY, NEW MEXICO TOWNSHIP 18 SOUTH, RANGE 31 EAST, NMPM Section 27: NE/4

(2) Injection into said well shall be accomplished through 2 3/8-inch plastic-lined tubing installed in a packer set at approximately 3600 feet.

PROVIDED HOWEVER THAT, the casing-tubing annulus shall be filled with an inert fluid; and a pressure gauge shall be attached to the annulus or the annulus shall be equipped with an approved leak-detection device in order to determine leakage in the casing, tubing or packer.

<u>PROVIDED FURTHER THAT</u>, prior to commencing injection operations, the casing in the subject well shall be pressure-tested to assure the integrity of such casing in a manner that is satisfactory to the supervisor of the Division's Artesia District Office.

- (3) The injection well or system shall be equipped with a pressure-limiting switch or other acceptable device which will limit the wellhead pressure on the injection well to no more than 520 psi.
- (4) The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluid from the Penrose interval of the Shugart Pool
- (5) The operator shall notify the supervisor of the Artesia District Office of the Division in advance of the date and time of the installation of injection equipment and of the mechanical integrity pressure-test in order that the same may be witnessed.
- (6) The operator shall immediately notify the supervisor of the Division's Artesia District Office of the failure of the tubing, casing or packer in said well or the leakage of water from or around said well and shall take such steps as may be timely and necessary to correct such failure or leakage.
- (7) The subject waterflood project is hereby designated the Scottsdale Shugart Waterflood Project and shall be governed by the provisions of Rules 701 through 708 of the Division Rules and Regulations.
- (8) Monthly progress reports of the waterflood project herein authorized shall be submitted to the Division in accordance with Rules 706 and 1115 of the Division Rules and Regulations.

(9) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

WILLIAM J. LEMAY

Director

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