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BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION

APPLICATION OF SHELL OIL COMPANY }
FOR APPROVAL OF A WATERFLOOD }
PROJECT, LANGLIE MATTIX POOL, }
LEA COUNTY, NEW MEXICO. }

Case No. 3081A P P L I C A T I O N

Comes now Shell Oil Company, by its attorneys, and requests approval by the New Mexico Oil Conservation Commission of a waterflood project in the Langlie Mattix Pool, Lea County, New Mexico, and in support of its application states:

1. Shell Oil Company is the owner and operator of the J. F. Black lease comprising the $W\frac{1}{2}SE\frac{1}{4}$ and the $SE\frac{1}{4}SW\frac{1}{4}$ of Section 21, T. 24 S., R. 37 E., N.M.P.M., Lea County, New Mexico.

2. The subject lease is presently developed by three wells in the Langlie Mattix Pool, as shown on the plat attached to and made a part of this application. Said wells are in an advanced stage of depletion and are properly designated "stripper" wells; Well No. 1 is temporarily abandoned, having declined to one barrel of oil per day on March 30, 1963; Well No. 2 is abandoned, having declined to less than one barrel of oil per day in April, 1948; Well No. 3 is presently producing at the rate of three barrels of oil per day.

3. As can be seen from the plat accompanying this application, the 160-acre lease adjoining the subject lease to the east is currently being waterflooded by the George L. Buckles Company on a 20-acre spacing pattern in the Langlie Mattix Pool, which project was commenced in April, 1964.

4. Shell Oil Company proposes to develop its Black lease on a continuation of the pattern established by the George L.

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Date 7/8/64
[Signature]

Buckles Company by the injection of water into four injection wells shown on the plat attached hereto and to be located as follows:

Shell WIW No. 4	20 feet from the south line 1340 feet from the west line
Shell WIW No. 5	1300 feet from the south line 1340 feet from the west line
Shell WIW No. 6	1300 feet from the south line 2660 feet from the west line
Shell WIW No. 7	2620 feet from the south line 2660 feet from the west line

all in Section 21, T. 24 S., R. 37 E., Lea County, New Mexico. Additional data concerning the proposed injection wells is shown on the attachment to this application entitled "Injection Well Detail."

5. Attached to this application and made a part hereof is a diagrametic sketch of a typical injection well. As shown on this sketch, injection will be through tubing and below a packer. Injection in this manner will confine injected water to the Langlie Mattix Pool and will protect fresh water and other producing formations in the area.

6. Shell Oil Company proposes to drill a well in the $W\frac{1}{2}SE\frac{1}{4}$ of Section 21, T. 24 S., R. 37 E., Lea County, New Mexico, to obtain water from the Santa Rosa formation for use in this waterflood project. It is estimated that 1400 barrels of water per day will be withdrawn from this source for injection into the four wells above described; total requirements for the project will be approximately one million barrels of water.

7. Approval of the subject application will permit Shell Oil Company to recover oil otherwise unrecoverable and will thereby prevent waste. Correlative rights will not be

impaired by the granting of this application.

WHEREFORE, Shell Oil Company requests that this application be set for hearing before the Commission or one of its examiners, and that the Commission enter its order approving the proposed waterflood project.

SETH, MONTGOMERY, FEDERICI & ANDREWS

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CERTIFICATE OF MAILING

The undersigned, being one of the attorneys for the applicant, hereby certifies that on this 29th day of June, 1964, a copy of this application, with exhibits attached thereto, has been mailed to Mr. Frank Irby, Chief, Water Rights Division, Office of the State Engineer, Capitol Building, Santa Fe, New Mexico, in accordance with Rule 701 of the Rules and Regulations of the New Mexico Oil Conservation Commission.

Richard J. Morris