

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF SKELLY )  
OIL COMPANY FOR AN ORDER AUTHORIZING A )  
WATERFLOOD PROJECT IN THE FREN SEVEN-RIVERS )  
POOL, UNDERLYING THE SKELLY UNIT AREA COVER- )  
ING ALL OF SECTIONS 14, 15, 21, 22, 23, THE )  
NORTH HALF OF THE NORTHWEST QUARTER (N/2 )  
NW/4) OF SECTION 26, THE NORTHWEST QUARTER )  
(NW/4), THE WEST HALF OF THE NORTHEAST )  
QUARTER (W/2 NE/4), AND THE NORTHEAST )  
QUARTER OF THE NORTHEAST QUARTER (NE/4 )  
NE/4) OF SECTION 27, THE NORTH HALF (N/2), )  
AND THE NORTH HALF OF THE SOUTH HALF )  
(N/2 S/2) OF SECTION 28, TOWNSHIP 17 SOUTH, )  
RANGE 31 EAST, EDDY COUNTY, NEW MEXICO. )

CASE NO. 2-21

FILED \_\_\_\_\_

HEARING \_\_\_\_\_

10 }  
12 } inj Fren SR  
16 }  
54 }  
77 } inj Fren SR  
89 } Grayburg Jax  
76 prod Fren SR  
Grayburg Jax

A P P L I C A T I O N

Comes now Skelly Oil Company and alleges and states:

1. That it is a Delaware corporation authorized to do business in the state of New Mexico. That it operates the Skelly Unit Area covering the following described land:

All of Sections 14, 15, 21, 22, 23, the North Half of the Northwest Quarter (N/2 NW/4) of Section 26, the Northwest Quarter (NW/4), the West Half of the Northeast Quarter (W/2 NE/4), and the Northeast Quarter of the Northeast Quarter (NE/4 NE/4) of Section 27, the North Half (N/2), and the North Half of the South Half (N/2 S/2) of Section 28, Township 17 South, Range 31 East, Eddy County, New Mexico.

2. That Applicant proposes to conduct a waterflood project in the Fren Seven-Rivers Pool underlying said Skelly Unit Area by initiating a pilot flood operation involving a double five-spot pattern. It is proposed to effect this pattern by: (1) converting three wells (Nos. 10, 12 and 16) to water injection in the Fren Seven-Rivers zone, (2) dual completing three existing Grayburg-Jackson wells (Nos. 54, 77 and 89) for injection in both the Fren Seven-Rivers zone and the Grayburg-Jackson zone, and (3) dual completing one existing Grayburg-Jackson producing well (No. 76) as a producer in both the Grayburg-Jackson and the Fren Seven-Rivers intervals.

3. That attached hereto and made a part hereof as Exhibit 1 is a plat showing the location of the proposed injection wells.

4. That attached hereto and made a part hereof as Exhibits 2, 3 and 4 are the logs of the proposed injection wells, Nos. 54, 77 and 89. The logs are not available for Well Nos. 10, 12 and 16.

5. That attached hereto and made a part hereof as Exhibits 5, 6, 7, 8, 9 and 10 are well schematics of the proposed injection wells showing all casing strings, including diameter and setting depths, quantities used and tops of cement, perforated intervals, tubing strings, including diameter and setting depths, and type and location of packers.

6. That attached hereto and made a part hereof as Exhibits 11 and 12 are analyses of the water to be injected.

7. That Applicant anticipates that the initial volume of water to be injected will be at the rate of 200 to 400 barrels per well per day at 1,200 psi wellhead pressure.

8. That attached hereto and made a part hereof as Exhibit 13 is

the log on Skelly Unit Well No. 76.

9. That attached hereto and made a part hereof as Exhibit 14 is a well schematic depicting the proposed dual completion of Well No. 76 as a producer in both the Grayburg-Jackson and Fren Seven-Rivers intervals.

10. That attached hereto and made a part hereof as Exhibit 15 is a plat including the subject area, together with the properties within a two-mile radius from same.


11. That the wells in the project area are in an advanced state of depletion and could possibly be classified as "stripper" wells.

12. That the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

WHEREFORE, PREMISES CONSIDERED, Applicant prays that this Commission set this matter down for hearing, that notice hereof be given as required by law, and that at the conclusion of said hearing based on the evidence adduced the Commission enter its order granting Skelly Oil Company permission to conduct a waterflood project in the Fren Seven-Rivers Pool underlying the Skelly Unit Area by converting the Skelly Unit Well Nos. 10, 12 and 16 to water injection, and by dually completing Skelly Unit Well Nos. 54, 77 and 89 for injection into both the Fren Seven-Rivers interval and the Grayburg-Jackson interval, and to dually complete Well No. 76 as a producer from both the Grayburg-Jackson and the Fren Seven-Rivers intervals, and to further provide for administrative expansion of the project and conversion of additional wells by administrative means without the necessity of separate hearings, and for such other orders, rules and regulations as may be necessary in the premises.

Respectfully submitted,

SKELLY OIL COMPANY

By   
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