

GREENHILL PETROLEUM CORPORATION RECEVED

12777 JONES ROAD, SUITE 375 FAX (713) 955-5105

Incorporated in Delaware, U.S.A.

'90 AUG 20 AM 9 24

C-4-175-365

August 14, 1990

Oil Conservation Division State of New Mexico Energy, Minerals and Natural Resources Dept. P. O. Box 2088 Santa Fe, New Mexico 87504-2088

Mike Stogner Attn:

Re: Unorthodox Location and Drilling Permit Proposed Well No. 71 West Lovington Unit Lea County, New Mexico

Greenhill Petroleum Corporation respectfully requests the State of New Mexico Oil Conservation Division grant approval of the proposed unorthodox location and the attached permit to drill Well Number 71 in the West Lovington Unit, located in Lea County, New Mexico.

The West Lovington Unit is presently developed and being waterflooded utilizing a 40-acre well density. It is believed that infill development using a 20-acre well density will improve waterflood sweep efficiency and will increase secondary oil recovery. The proposed location for Well Number 71 is located in the interior of the unit and is not competitive with offset wells outside the unit. Information gathered as a result of drilling this infill well will be utilized in evaluating additional infill development potential in the unit and ultimately may be used to evaluate the feasibility of tertiary recovery.

Greenhill Petroleum Corporation wishes to commence drilling operations on the proposed well as soon as possible and would appreciate a response to this request at your earliest convenience.

Respectfully yours,

GREENHILL PETROLEUM CORPORATION

Richael I. hupent

Michael J. Newport Landman

MJN:ntd Enclosures WLU040

TOWNSEND-WOLFCAMP POOL (Pilot Waterflood) Lea County, New Mexico

Order No. R-2053, Authorizing Shell Oil Company to Institute a Pilot Waterflood Project in the Townsend-Wolfcamp Pool, Lea County, New Mexico, September 7, 1961.

Application of Shell Oil Company for a Pilot Waterflood Project in the Townsend-Wolfcamp Pool, Lea County, New Mexico.

CASE NO. 2359 Order No. R-2053

ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9 o'clock a.m., on August 30, 1961, at Santa Fe, New Mexico, before Elvis A. Utz, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 7th day of September, 1961, the Commission, a quorum being present, having considered the application, the cvidence adduced, and the recommendations of the Examiner, Elvis A. Utz, and being fully advised in the premises,

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

That the applicant, Shell Oil Company, seeks permis-(2) sion to institute a pilot waterflood project in the Townsend-Wolfcamp Pool in an area comprising Section 10, Township 16 South, Range 35 East, NMPM, Lea County, New Mexico, by the injection of water into the Wolfcamp formation in the interval from 10,552 feet to 10,592 feet in Texas Pacific Coal & Oil Company's State "J" Well No. 2, located in the NE/4 SW(4 control Section 10) SW/4 of said Section 10.

(3) That all of the wells in the pilot waterflood area have reached an advanced state of depletion and may properly be classified as "stripper" wells for this depth.

(4) That the proposed waterflood project should be authorized and should be governed by the provisions of Rule 701 of the Commission Rules and Regulations, including those provisions regarding allocation of allowables and expansion of the project area.

IT IS THEREFORE ORDERED:

(1) That the applicant, Shell Oil Company, is hereby authorized to institute a pilot waterflood project in the Townsend-Wolfcamp Pool in an area comprising Section 10, Town-ship 16 South, Range 35 East, NMPM, Lea County, New Mexico, by the injection of water into Texas Pacific Coal & Oil Company's State "J" Well No. 2, located in the NE/4 SW/4 of said Section 10.

(2) That the operation of the waterflood project shall be governed by the provisions of Rule 701 of the Commission Rules and Regulations, including those provisions regarding allocation of allowables and expansion of the project area.

(3) That monthly progress reports on the waterflood project shall be submitted to the Commission in accordance with Rule 701 and Rule 1119 of the Commission Rules and Regulations.

(4)That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

WEST LOVINGTON POOL (San Andres Waterflood) Lea County, New Mexico

Order No. R-2071, Approving the West Lovington Unit Agreement and Authorizing Texaco, Inc., to Institute a Waterflood Project in the San Andres Formation in the West Lovington Pool, Lea County, New Mexico, October 9, 1961.

Application of Texaco Inc. for approval of the West Lovington Unit Agreement and for an order authorizing a Waterflood Project in the West Lovington Pool, Lea County, New Mexico.

> CASE NO. 2385 Order No. R-2071

ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9 o'clock a.m. on September 20, 1961, at Santa Fe, New Mexico, before Daniel S. Nutter, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 9th day of October, 1961, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Daniel S. Nutter, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Texaco Inc., seeks approval of its proposed West Lovington Unit Agreement with the unit area comprising 2,472 acres, more or less, in Townships 16 and 17 South, Range 36 East, NMPM, Lea County, New Mexico.

(3) That the applicant proposes to institute a waterflood project in the West Lovington Pool on said West Lovington Unit by the injection of water into the San Andres formation through the following-described wells:

Humble State "P" Well No. 2, NW/4 NE/4 of Section 9; Humble State "P" Well No. 3, NW/4 NW/4 of Section 9; Humble State "Q" Well No. 2, NW/4 NE/4 of Section 8; Humble State "T" Well No. 1, NW/4 NE/4 of Section 8; Humble State "W" Well No. 1, NW/4 SE/4 of Section 7; Pan American State "E"-20 Well No. 13, NW/4 SE/4 of

Section 4;

Phillips Mexico Well No. 2, NW/4 NE/4 of Section 5; Rodman-Noel State "B" Well No. 2, NW/4 SW/4 of Section 4

Rodman-Noel State "B" Well No. 5, NW/4 SW/4 of Section 3;

tion 3; Mobil State "R" Well No. 6, NW/4 NE/4 of Section 4; Mobil State "R" Well No. 9, NW/4 SE/4 of Section 5; Texaco State "AH" Well No. 3, NW/4 NW/4 of Section 8; Texaco State "AH" Well No. 6, NW/4 NE/4 of Section 7; Texaco State "AH" Well No. 12, NW/4 SE/4 of Section 6; Texaco State "AJ" Well No. 4, NW/4 NW/4 of Section 7; Texaco State N.M. "CL" Well No. 1, NW/4 SE/4 of Sec-tion 8.

tion 8;

Tidewater State "O" Well No. 2, NW/4 SW/4 of Section 5; and

Turner State "C" Well No. 5, NW/4 NW/4 of Section 4; all in Township 17 South, Range 36 East, NMPM, Lea County, New Mexico.

(4) That approval of the proposed West Lovington Unit Agreement will in principle tend to promote the conservation of oil and gas and the prevention of waste.

· .

(WEST LOVINGTON (SAN ANDRES WATERFLOOD) POOL-Cont'd.)

That all of the producing wells in the unit have (5)reached an advanced state of depletion and are properly classified as "stripper" wells.

(6) That the proposed waterflood project should be authorized and the operation thereof should be governed by the provisions of Rule 701 of the Commission Rules and Regulations.

IT IS THEREFORE ORDERED:

(1) That the West Lovington Unit Agreement is hereby approved.

(2) That the Plan under which the unit area shall be operated shall be embraced in the form of a unit agreement for the development and operation of the West Lovington Unit Area and such plan shall be known as the West Lovington Unit Agreement Plan.

(3) That the West Lovington Unit Agreement Plan is hereby approved in principle as a proper conservation measure; provided, however, that notwithstanding any of the provisions contained in said unit agreement, this approval shall not be considered as waiving or relinquishing, in any manner, any right, duty or obligation which is now, or may hereafter be, vested in the Oil Conservation Commission of New Mexico relative to the supervision and control of operations for the exploration and development of any lands committed to the said West Lovington Unit, or relative to the production of oil and gas therefrom.

(a) That the unit area shall be: (4)

NEW MEXICO PRINCIPAL MERIDIAN TOWNSHIP 16 SOUTH, RANGE 36 EAST Section 33: SW/4 SW/4

TOWNSHIP 17 SOUTH. RANGE 36 EAST

W/2 SW/4 Section 3:

- 4: Section
- 5: Section
- Section 6:
- W/2 SW/4Lots 2, 3 and 4, S/2 N/2 and S/2 Lots 1 and 2, S/2 N/2, and S/2 SE/4 NE/4, SE/4 SW/4, and SE/4 Lots 1 and 2, E/2 NW/4, NE/4 and N/2 SE/4 N/2, N/2 SW/4 and NW/4 SE/4 N/2 NW/4, NW/4 NE/4 Zero more to loca 7: Section
- Section 8:

Section 9:

comprising 2,472 acres, more or less.

(b) That the unit may be enlarged or contracted as pro-vided in said Plan; provided, however, that administrative ap-proval for expansion or contraction of the unit area must also be obtained from the Secretary-Director of the Oil Conservation Commission.

(5) That the unit operator shall file with the Commission an executed original or executed counterpart of the West Lovington Unit Agreement within 30 days after the effective date thereof. In the event of subsequent joinder by any party or expansion of the unit area, the unit operator shall file with the Commission within 30 days of such action counterparts of the unit agreement reflecting the subscription of those interests having joined or ratified.

: . . '

(6) That the portion of this order relating to the approval of the West Lovington Unit Agreement shall become effective upon the approval of said unit agreement by the Commissioner of Public Lands for the State of New Mexico and the Director of the United States Geological Survey and shall terminate ipso facto upon the termination of said unit agreement. The last unit operator shall notify the Commission immediately in writing of such termination.

(7) That the applicant is hereby authorized to institute the West Lovington Waterflood Project in the West Lovington Pool, Lea County, New Mexico, by the injection of water into the San

Lea County, New Mexico, by the injection of water into the Sa Andres formation through the following-described wells: Humble State "P" Well No. 2, NW/4 NE/4 of Section 9; Humble State "Q" Well No. 3, NW/4 NE/4 of Section 9; Humble State "Q" Well No. 2, NW/4 NE/4 of Section 9; Humble State "T" Well No. 1, NW/4 NE/4 of Section 8; Humble State "W" Well No. 1, NW/4 SE/4 of Section 7: Pan American State "E"-20 Well No. 13, NW/4 SE/4 of Section 4:

Section 4;

- Phillips Mexico Well No. 2, NW/4 NE/4 of Section 5; Rodman-Noel State "B" Well No. 2, NW/4 SW/4 of Section 4:
- Rodman-Noel State "B" Well No. 5, NW/4 SW/4 of Section 3;

tion 3; Mobil State "R" Well No. 6, NW/4 NE/4 of Section 4; Mobil State "R" Well No. 9, NW/4 SE/4 of Section 5; Texaco State "AH" Well No. 3, NW/4 NW/4 of Section 8; Texaco State "AH" Well No. 6, NW/4 NE/4 of Section 7; Texaco State "AH" Well No. 12, NW/4 SE/4 of Section 6; Texaco State "AJ" Well No. 4, NW/4 NW/4 of Section 7; Texaco State N.M. "CL" Well No. 1, NW/4 SE/4 of Sec-tion 8: tion 8;

Tidewater State "O" Well No. 2, NW/4 SW/4 of Section 5; and

Turner State "C" Well No. 5, NW/4 NW/4 of Section 4; all in Township 17 South, Range 36 East, NMPM, Lea County, New Mexico.

(8) That the operation of the West Lovington Waterflood Project shall be governed by the provisions of Rule 701 of the Commission Rules and Regulations.

(9) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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