



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

CW
Donner
Paul

July 14, 1997

Texaco Exploration & Production, Inc.
205 East Bender Blvd.
Hobbs, New Mexico 88240
Attention: Tim Miller

Administrative Order DD-187(H)
High Angle/Horizontal

Dear Mr. Miller:

Reference is made to your application dated June 10, 1997 for authorization to institute high angle/horizontal directionally drilling in the Vacuum-Glorieta Pool within the Vacuum Glorieta West Unit Waterflood Project Area in Lea County, New Mexico.

The Division Director Finds That:

- (1) The application of Texaco Exploration & Production, Inc. ("Texaco") as Unit operator of the Vacuum Glorieta West Unit (approved by Division Order No. R-9710, issued in Case 10515 and dated August 25, 1992) has been duly filed under the provisions of Rule 111.D and E of the General Rules and Regulations of the New Mexico Oil Conservation Division ("Division"), revised by Division Order No. R-10388, issued by the Oil Conservation Commission in Case 11,274 on June 13, 1995;
- (2) Division Order No. R-9714, issued in Case 10516 and dated September 3, 1992, established the Vacuum Glorieta West Unit Waterflood Project, comprising the following described area in Lea County, New Mexico, by the injection of water into the Vacuum-Glorieta Pool:

TOWNSHIP 17 SOUTH, RANGE 34 EAST, NMPM

Section 24: SW/4 NW/4, SW/4, and SW/4 SE/4
Section 25: All
Section 26: E/2 SE/4
Section 35: NE/4, N/2 SE/4, and SE/4 SE/4
Section 36: All

TOWNSHIP 17 SOUTH, RANGE 35 EAST, NMPM

Section 30: Lots 1, 2, 3, and 4 (W/2 W/2 equivalent)
Section 31: Lots 1, 2, 3, and 4 (W/2 W/2 equivalent)

TOWNSHIP 18 SOUTH, RANGE 34 EAST, NMPM

Section 1: Lots 1, 2, 3, and 4 (N/2 N/2 equivalent) and S/2 NE/4

Section 2: Lot 1 (NE/4 NE/4 equivalent)

TOWNSHIP 18 SOUTH, RANGE 35 EAST, NMPM

Section 6: Lots 1, 2, 3, 4, and 5, SE/4 NW/4, and S/2 NE/4 (N/2 equivalent).

- (3) The Vacuum-Glorieta Pool within the Vacuum Glorieta West Unit Waterflood Project Area is subject to the statewide rules and regulations for oil wells, as promulgated by **Rules 104.C(1) and F(1)** of the General Rules and Regulations of the New Mexico Oil Conservation Division ("Division"), revised by Division Order No. R-10533, issued by the Oil Conservation Commission in Case 11,351 on January 18, 1996, which provides for 40-acre oil spacing and proration units, or drilling units, and requires that wells be located no closer than 330 feet to the outer boundary of the lease or unitized area (pressure maintenance/waterflood project area), nor closer than 10 feet to any quarter-quarter section line or subdivision inner boundary;
- (4) Texaco at this time is seeking to commence high angle/horizontal directional drilling in the Vacuum-Glorieta Pool within its Vacuum Glorieta West Unit Waterflood Project Area, as described above in order to further enhance oil recovery from this existing secondary recovery project;
- (5) The "project area", pursuant to Division General Rule 111.A(7), for said high angle/horizontal drilling should coincide with that area described above as the Vacuum Glorieta West Unit Waterflood Project Area;
- (6) It is Texaco's intent to recomplete its Vacuum Glorieta West Unit Well No. 86 (**API No. 30-025-20179**), located at a standard oil well location 2310 feet from the South and West lines (Unit K) of said Section 36 by milling a window in the 5-1/2 inch production casing string at an approximate depth of 5,830 feet, kick-off in a south-southwesterly direction, and drill a high-angle hole a lateral distance of approximately 1050 feet through the Upper Paddock Limestone interval of the Vacuum Glorieta Pool;
- (7) The applicable drilling window or "producing area", pursuant to Division General Rule 111.A(8), for said wellbore should include that area within the above-described Vacuum Glorieta West Unit Waterflood Project Area and coinciding high angle/horizontal directional drilling project area that is no closer than 330 feet to its outer boundary; and,
- (8) It appears the applicant has satisfied all of the appropriate requirements prescribed in said Rule 111.D and E, the subject application should be approved and the well should be governed by the provisions contained within this order and all other applicable provisions of Division General Rule 111.

IT IS THEREFORE ORDERED THAT:

(1) Texaco Exploration & Production, Inc. ("Texaco") as Unit operator of the Vacuum Glorieta West Unit (approved by Division Order No. R-9710, issued in Case 10515 and dated August 25, 1992), is hereby authorized to commence high angle/horizontal directional drilling within the Vacuum-Glorieta Pool in Lea County, New Mexico, by recompleting its Vacuum Glorieta West Unit Well No. 86 (API No. 30-025-20179), located at a standard oil well location 2310 feet from the South and West lines (Unit K) of Section 36, Township 17 South, Range 34 East, NMPM, Lea County, New Mexico by milling a window in the 5-1/2 inch production casing string at an approximate depth of 5,830 feet, kick-off in a south-southwesterly direction, and drill a high-angle hole a lateral distance of approximately 1050 feet through the Upper Paddock Limestone interval of the Vacuum Glorieta Pool.

PROVIDED HOWEVER THAT prior to commencing directional drilling operations in said wellbore, the applicant shall establish the location of the kick-off point by means of a directional survey acceptable to the Division.

PROVIDED FURTHER THAT during or upon completion of said directional drilling operations, the applicant shall conduct an accurate wellbore survey from the kick-off point to total depth in order that the subsurface bottomhole location, as well as the wellbore's true depth and course, may be determined.

(2) The applicant shall notify the supervisor of the Hobbs District office of the Division of the date and time said wellbore survey is to be conducted so that they may be witnessed. The applicant shall further provide a copy of said wellbore survey to the Santa Fe and Hobbs offices of the Division upon completion. ✓

(3) The "project area", pursuant to Division General Rule 111.A(7), for said high angle/horizontal drilling should coincide with the Vacuum Glorieta West Unit Waterflood Project (approved by Division Order No. R-9714, issued in Case 10516 and dated September 3, 1992) comprising the following described area in Lea County, New Mexico:

TOWNSHIP 17 SOUTH. RANGE 34 EAST. NMPM

Section 24: SW/4 NW/4, SW/4, and SW/4 SE/4
Section 25: All
Section 26: E/2 SE/4
Section 35: NE/4, N/2 SE/4, and SE/4 SE/4
Section 36: All

TOWNSHIP 17 SOUTH. RANGE 35 EAST. NMPM

Section 30: Lots 1, 2, 3, and 4 (W/2 W/2 equivalent)
Section 31: Lots 1, 2, 3, and 4 (W/2 W/2 equivalent)

TOWNSHIP 18 SOUTH. RANGE 34 EAST. NMPM

Section 1: Lots 1, 2, 3, and 4 (N/2 N/2 equivalent) and S/2 NE/4
Section 2: Lot 1 (NE/4 NE/4 equivalent)

TOWNSHIP 18 SOUTH, RANGE 35 EAST, NMPM

Section 6: Lots 1, 2, 3, 4, and 5, SE/4 NW/4, and S/2 NE/4 (N/2 equivalent).

(4) The applicable drilling window or "producing area", pursuant to Division General Rule 111.A(8), for said wellbore should include that area within the above-described Vacuum Glorieta West Unit Waterflood Project Area and coinciding high angle/horizontal directional drilling project area that is no closer than 330 feet to its outer boundary.

(5) The operator shall comply with all requirements and conditions set forth in Division General Rule 111.E(2) and any applicable requirements in 111.D and F, and Order No. R-9714.

(6) Form C-105 shall be filed in accordance with Division Rule 1105 and the operator shall indicate thereon true vertical depth (TVD) in addition to measured depths (MVD).

(7) 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

S E A L

cc: Oil Conservation Division - Hobbs
New Mexico State Land Office - Santa Fe