



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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

April 16, 1997

**Texaco Exploration and Production, Inc.**  
**P. O. Box 3109**  
**Midland, Texas 79702**  
**Attention: C. Wade Howard**

*Administrative Order DD-168(H)*  
**High Angle/Horizontal**

Dear Mr. Howard:

Reference is made to your application dated February 27, 1997 for authorization to initiate a high angle/horizontal directionally drilling project in the North Vacuum-Abo Pool within Texaco's North Vacuum Abo West Unit/North Vacuum Abo West Unit Waterflood Project Area in portions of Sections 15, 21, 22, 27, 28, 33, and 34, Township 17 South, Range 34 East, NMPM, Lea County, New Mexico.

**The Division Director Finds That:**

- (1) The application of Texaco Exploration and Production, Inc. ("Texaco") as operator of the following described North Vacuum Abo West Unit ("project area") in Lea County, New Mexico (approved by Division Order No. R-6822, dated November 18, 1981) 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;

**TOWNSHIP 17 SOUTH, RANGE 34 EAST, NMPM**

Section 15:	W/2
Section 21:	S/2 NE/4, S/2 SW/4, and SE/4
Section 22:	W/2
Section 27:	W/2
Section 28:	N/2 and SE/4
Section 33:	N/2 SE/4
Section 34:	N/2 NW/4, SW/4 NW/4, and NW/4 SW/4;

- (2) The proposed high angle/horizontal directionally drilling project is within the applicant's North Vacuum Abo West Unit Waterflood Project Area (established by Division Order No. R-6857, as amended) and as such Division General Rule 701.G(4) applies, which states that wells within waterflood project areas are not subject to an oil allowable;
- (3) The North Vacuum-Abo Pool is subject to the "*Special Rules and Regulations for the North Vacuum-Abo (Oil) Pool*", as promulgated by Division Order No. R-2421, as amended, which provides for 80-acre oil spacing and proration units, or drilling units, and requires that wells be located within a 200 foot radius of the center of a governmental quarter-quarter section or lot, provided that the first well on the 80-acre unit is located in either the NW/4 or SE/4 of a governmental quarter section;
- (4) Texaco is seeking to initiate a high angle/horizontal directional drilling project within this portion of the North Vacuum-Abo Pool, which is a heterogeneous reservoir where vertical segregation is common, in an attempt to drain laterally discontinuous lenses that would not otherwise be exploited without dense vertical well spacing [see files for Division Administrative Orders DD-153(H) and DD-154(H)];
- (5) It is Texaco's intent at this time to drill its North Vacuum Abo West Unit Well No. 29 at a surface location 2080 feet from the North line and 660 feet from the West line (Unit E) of Section 22, Township 17 South, Range 34 East, NMPM, Lea County, New Mexico and to drill multiple laterals off of the vertical wellbore within the unitized Abo formation in such a manner that causes the drainholes to traverse section, quarter section, and quarter-quarter section lines within the project area;
- (6) The applicable drilling window or "producing area" for said wellbore should include that area within the above-described Unit provided that the horizontal or producing portion of any drainhole shall be located no closer than 560 feet from the outer boundary of the above-described "project area"
- (7) 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.

Administrative Division of the  
Mexaco Exploration & Production Co.  
April 16, 1997  
Page 5

IT IS THEREFORE REQUESTED THAT

(1) The design of the vacuum adsorption bed is optimized to maintain a high angle/horizontal ratio of the adsorption bed, which is about 1:1.5, and its North-South ratio is 1:1.5. The vacuum adsorption bed is a rectangular bed, comprising the following described parts:

(2) The proposed well is located on a 10-acre parcel of land, the North Vacuum Acre Wellhead, located in Section 28, Township 20N, Range 10E, and 660 feet from the West line of Section 21, Township 17S, Range 10E, in Garfield County, New Mexico. The proposed well is located on the unfractured shale formation.

PROVIDED, THAT the owner of the land on which the above section counter section and/or section is located and within the right of way order that the horizontal or profile plan of the proposed canal be located at least 100 feet from the water boundary of the adjacent water body.

PROVIDED, that the applicant has a sufficient number of pick-off points to enable it to exercise its shut-in provisions. Also, the applicant shall conduct operations in a way which maintains or improves the overall well-being during or after completion of the shut-in period.

(3) The applicant shall submit the following information to the Division on or before the date and time specified in the notice of the scheduled date and time for the hearing. The applicant shall file an affidavit with the Division and shall also submit a copy of the affidavit to the Division's office.

(4) The proposed rule is subject to the provisions of the Administrative Procedure Act, 5 U.S.C. 551 et seq., and the Freedom of Information Act, 5 U.S.C. 552, and the General Rule 155 of the Federal Rules of Civil Procedure, 28 U.S.C. 606.

Administrative Order DD-168(H)  
Texaco Exploration & Production, Inc.  
April 16, 1997  
Page 4

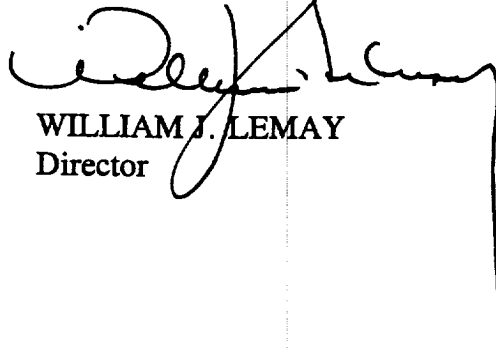
---

(5) 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).

(6) 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